

FRANKLIN COUNTY, OHIO

**MULTI-
JURISDICTIONAL
HAZARD MITIGATION
PLAN**



Volume II

DECEMBER 2023

FINAL

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SECTION 8. PLANNING TEAM

This section provides a description of the Franklin County Hazard Mitigation Plan's (HMP) update Planning Team, their responsibilities throughout the planning process, and the jurisdictional annexes developed as a result of their plan update efforts.

8.1 BACKGROUND

The Federal Emergency Management Agency (FEMA) encourages multi-jurisdictional planning for hazard mitigation. All participating jurisdictions must meet the requirements of Chapter 44 of the Code of Federal Regulations (44 CFR):

"Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan" [Section 201.6a(4)]

Members of the Planning Team have the expertise to develop the plan and have their jurisdiction's authority to implement the mitigation strategy developed during the planning process. The Planning Team is responsible for developing and reviewing draft sections of the plan, updating their respective annex, creating the mitigation strategy for their jurisdiction, and adopting the final plan.

For the Franklin County HMP update, a Planning Team was formed to leverage resources and to meet requirements for the federal Disaster Mitigation Action of 2000 (DMA) for as many eligible governments as possible. Members of the Planning Team consisted of representatives from each jurisdiction. The DMA defines a local government as follows:

Any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.

Each participating Planning Team Member has prepared an annex to this plan. These annexes, as well as information on the process by which they were created, are contained in this volume.

8.2 INITIAL SOLICITATION

Franklin County solicited the participation of all its municipalities at the commencement of this project. Franklin County, 36 of its municipalities, and the Ohio State University participated in the update process and have met the minimum requirements of participation as established by the County and Core Planning Team.

8.3 PLANNING TEAM EXPECTATIONS

The Planning Team agreed to the following Planning Team Member expectations, which were outlined in the letter sent by Franklin County on October 20, 2022, and confirmed at the kick-off meeting held on November 18, 2022 (see Appendix C [Meeting Documentation] for details):

- Provide representation at regular planning group meetings and workshops.
- Be responsible for providing data and information as requested.
- Review and comment on data and information compiled by the contract consultant relevant to their jurisdiction.
- Be responsible for completing plan documents specific to your municipality, using provided templates with guidance and assistance by the contract consultant.
- Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
- Facilitate public outreach efforts with residents and local stakeholders within your community using materials provided by the contract consultant.
- Assist with the identification of strengths, weaknesses, opportunities, and obstacles to implementing natural hazard mitigation within your community.
- Assist with the identification of past, ongoing, and appropriate future mitigation strategies and activities within your municipality.
- Review and comment on plan documents, specifically the draft and final plans prior to submission to Ohio EMA and FEMA.

As described in Section 7 (Plan Maintenance), the Planning Team is intended to remain active beyond the regulatory update to support plan maintenance. Regarding the composition of the Core Planning Team and Planning Team, it is recognized that individual commitments change over time, and it will be the responsibility of each jurisdiction and its representatives to inform the HMP Coordinator of any changes in representation.

8.4 JURISDICTIONAL ANNEX PREPARATION PROCESS

New to the 2023 HMP, jurisdictional annexes were used to provide a unique, stand-alone guide to mitigation planning for each participating jurisdiction. The Franklin County HMP Update is organized so that there is an annex for Franklin County and for every participating jurisdiction. Section 9 (Annexes) includes an annex for every jurisdiction.

8.4.1 Data Collection

Each jurisdiction was paired with a contract consultant mitigation planner to work with the mitigation team to update their annexes. Each jurisdiction was asked to participate in a municipal kick-off meeting, held on November 18, 2022, to review participant expectations and the updated information needed to

support the annex update. It was made clear that the annexes are sections of the plan that can be enhanced if more information is available to further customize all aspects of mitigation planning.

8.4.2 Hazard Ranking Exercise

The presentation of the risk assessment and hazard ranking for each jurisdiction was conducted April 27, 2023. At this meeting, the consultant presented the overall risk assessment for the hazards of concern and distributed jurisdiction-specific handouts with risk assessment results relevant to each plan participant. In addition, each Planning Team Member was asked to review the ranked hazards specific to its jurisdiction. Refer to Section 4.4 (Hazard Ranking) for the methodology of the hazard ranking process. The calculated ranking was presented to each jurisdiction, and they were asked to review the ranking and revise based on history of events, probability of occurrence, and the potential impact on people, property, and the economy. In addition, each jurisdiction was asked to rank their adaptive capacity for each hazard. Refer to Appendix B (Participation Matrix) for the input submitted by each municipality. The objectives of this exercise were to familiarize the Planning Team with how to use the risk assessment as a tool to support other planning and hazard mitigation processes and to help prioritize types of mitigation actions that should be considered. Hazards that were ranked as “high” for each jurisdiction as a result of this exercise were considered to be priorities for identifying appropriate mitigation actions, although jurisdictions also identified actions to mitigate “medium” or “low” ranked hazards as appropriate.

8.4.3 Problem and Solutions Identification

After the draft risk assessment results were presented and hazard ranking exercise at the third Core Planning Team Meeting on April 14, 2023, attendees participated in a problem and solutions identification exercise to identify potential mitigation actions for the County’s hazards of concern. All problem and solutions identification exercise results were compiled and provided as a resource to plan participants at the Mitigation Strategy Workshop in April 2023. Refer to Appendix B (Participation Matrix) which provides the information captured via online survey by the participating jurisdictions.

8.4.4 Mitigation Strategy Workshop

A mitigation strategy workshop was conducted by the contracted planning consultant on April 27, 2023, for all participating jurisdictions to support the development of the updated mitigation strategy. To assist with the identification of implementable and action-oriented mitigation actions, the participating jurisdictions were provided with tools to help identify mitigation strategies: public survey responses, potential mitigation actions for each jurisdiction, and FEMA Mitigation Ideas. The purpose of this workshop was to guide the Planning Team in completing this portion of the planning process and discuss how projects that are well developed and documented are more quickly identifiable for selection when grants become available.

At the workshop, the Planning Team focused on developing problem statements based on the impacts of hazards in the County. The results of the updated risk assessment, problems and solutions identified during the capability assessment update and problem and solutions identification exercise, and

information gathered from the public survey were used to develop mitigation strategies. As a result, a mitigation workbook was compiled with potential mitigation actions for Franklin County and their participating jurisdictions. This workbook helped form a bridge between the hazard risk assessment, which quantifies impacts to each community, with the development of achievable mitigation strategies. Mitigation development worksheets were filled out by each jurisdiction to identify additional problem statements and draft action worksheets were developed.

8.4.5 Municipal Support Conference Calls

In addition to the municipal kick-off meeting, municipal support conference calls were held throughout the planning process. During these calls, the consultant worked one-on-one with Planning Team members to complete their jurisdictional annexes. Each section of the annex was discussed to ensure accuracy and completeness. This included, but not limited to, the following:

- Reviewing the calculated hazard ranking for the jurisdiction and provide input to adjust the ranking as necessary.
- Updating information regarding the jurisdiction’s capabilities and past integration of hazard mitigation concepts.
- Identify mitigation initiatives that have reasonable potential to be accomplished within the lifespan of the HMP (five years), including both FEMA-eligible projects and those projects using funds from non-FEMA sources.

8.4.6 Jurisdictional Annexes

While the jurisdictional annex format is designed to document and assure local compliance with the DMA 2000 regulations, its greater purpose and function includes:

- Providing a locally relevant synthesis of the overall mitigation plan that can be readily presented, distributed, and maintained,
- Facilitating local understanding of the community’s risk to natural hazards,
- Facilitating local understanding of the community’s capabilities to manage natural hazard risk, including opportunities to improve those capabilities,
- Facilitating local understanding of the efforts the community has taken, and plans to take, to reduce their natural hazard risk,
- Facilitating the implementation of mitigation strategies, including the development of grant applications, and
- Providing a framework by which the community can continue to capture relevant data and information for future plan updates.

It is recognized that each jurisdiction’s annex is a “living” document and will continue to be improved as resources permit. As such, its design is intended to promote and accommodate continued efforts to

maintain the annex to be current and to improve the effectiveness of the annex as the key tool, reference, and guiding document by which the jurisdiction will implement hazard mitigation locally.

The following provides a description of the various elements of the jurisdictional annex.

Section 9.X.1: Hazard Mitigation Planning Team: Identifies the hazard mitigation planning team who provided input during the planning process. Further detail is provided in Section 2 (Planning Process) and Appendix B (Participation Matrix).

Section 9.X.2: Jurisdictional Profile: Provides an overview and profile of the jurisdiction, including an identification of areas of known and anticipated future development and the vulnerability of those areas to the hazards of concern.

Section 9.X.3: Jurisdictional Capability Assessment and Integration: This subsection provides an inventory and evaluation of the jurisdiction's tools, mechanisms, and resources available to support hazard mitigation and natural hazard risk reduction. Within the municipal annexes, tables provide an inventory of the municipality's planning and regulatory, administrative, and technical, and fiscal, capabilities, respectively. Further, another table identifies the municipality's level of participation in state and federal programs designed to promote and incentivize local risk reduction efforts. Further information regarding Federal, State, and local capabilities may be found in the Capability Assessment portion of Section 5.

Section 9.X.4: National Flood Insurance Program (NFIP) Compliance: A tabular summary of the specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

Section 9.X.5: Growth/Development Trends: Identifies of areas of known and anticipated future development and the vulnerability of those areas to the hazards of concern.

Section 9.X.6: Jurisdictional Risk Assessment:

- **Hazard Extent and Location:** Each annex includes a map (or series of maps) illustrating identified hazard zones and critical facilities. Further, these maps show areas of known or anticipated future development, as available and provided by the jurisdiction.
- **Hazard Event History:** Identifies hazard events that have caused significant impacts within the jurisdiction, including a summary characterization of those impacts as identified by the jurisdiction. The documentation of events and losses is critical to supporting the identification and justification of appropriate mitigation actions, including providing critical data for benefit-cost analysis. It is recognized that this "inventory" of events and losses is a work-in-progress and may continue to be improved as resources permit. As such, the lack of data or information for a specific event does not necessarily mean that the jurisdiction did not suffer significant losses during that event.
- **Hazard Ranking and Vulnerabilities:** This subsection provides information regarding each plan participant's vulnerability to the identified hazards. Full data and information on the hazards of concern, the methodology used to develop the vulnerability assessments, and the results of those

assessments that serve as the basis of these local risk rankings may be found in Section 4 (Risk Assessment).

Section 9.X.7: Mitigation Strategy and Prioritization: This section discusses and provides the status of past mitigations actions and status, describes proposed hazard mitigation initiatives, and prioritization.

- **Past Mitigation Initiative Status:** Where applicable, a review of progress on the jurisdiction’s prior mitigation strategy is presented, identifying the disposition of each prior action, project, or initiative in the jurisdiction’s updated mitigation strategy. Other completed or on-going mitigation activities that were not specifically part of a prior local mitigation strategy may be included in this sub-section as well.
- **Additional Mitigation Efforts:** Other completed or on-going mitigation activities that were not specifically part of a prior local mitigation strategy may be included in this subsection as well.
- **Proposed Hazard Mitigation Initiatives for the Plan Update:** Table 9.X-16 presents the jurisdiction’s updated mitigation strategy. As indicated, applicable mitigation actions, projects and initiatives are further documented on an Action Worksheet which provides details on the project identification, evaluation, prioritization, and implementation process. Table 9.X-17 provides a summary of the local mitigation strategy prioritization process discussed in Section 6 (Mitigation Strategy).

8.4.7 Annex Review

Workshops and additional meetings (via email and/or teleconference) to complete the jurisdictional annexes were held with the Core Planning Team and Planning Team throughout the planning process. In preparation for the draft plan public review, each jurisdiction was asked to have their ‘mitigation team’ review their annex to ensure it was complete and accurate for posting to Franklin County Emergency Management and Homeland Security’s mitigation website. To demonstrate broad and comprehensive review and input, each jurisdiction collected signatures from these representatives. Refer to Appendix B (Participation Matrix) to review the annex signature pages.

In summary, all participating communities and the County completed the Planning Team Member expectations and annex-preparation process. Details regarding these meetings are described further in Section 2 (Planning Process) and Section 6 (Mitigation Strategy). Completed jurisdictional annexes are presented in Section 9 (Annexes).

8.5 COVERAGE UNDER THE PLAN

Franklin County, 36 of its jurisdictions, and the Ohio State University met the participation requirements specified by the Core Planning Team. Any non-participating local jurisdiction within Franklin County can “dock” to this plan in the future following the linkage procedures defined in Appendix H (Linkage Procedures).

Table 8-1 lists the status of each participating jurisdiction and their ultimate status in this plan update. Refer to Appendix B (Participation Matrix) and Appendix C (Meeting Documentation) for details on participation and meeting attendance.

Table 8-1. Jurisdictional Status

| Municipality | Attended Workshops and/or Meetings and Project Calls | Provided Update on Past Projects | Submitted Mitigation Actions for Current Plan | Seeking Approval for Adoption (meets all previous requirements) |
|---------------------------|--|----------------------------------|---|---|
| Franklin County | X | X | X | X |
| Bexley (C) | X | X | X | X |
| Blendon (Twp) | X | X | X | X |
| Brice (V) | - | - | - | - |
| Brown (Twp) | X | X | X | X |
| Canal Winchester (C) | X | X | X | X |
| Clinton (Twp) | X | X | X | X |
| Columbus (C) | X | X | X | X |
| Dublin (C) | X | X | X | X |
| Franklin (Twp) | X | X | X | X |
| Gahanna (C) | X | X | X | X |
| Grandview Heights (C) | X | X | X | X |
| Grove City (C) | X | X | X | X |
| Groveport (C) | X | X | X | X |
| Hamilton (Twp) | X | X | X | X |
| Harrisburg (V) | - | - | - | - |
| Hilliard (C) | X | X | X | X |
| Jackson (Twp) | X | X | X | X |
| Jefferson (Twp) | X | X | X | X |
| Lockbourne (V) | X | X | X | X |
| Madison (Twp) | X | X | X | X |
| Marble Cliff (V) | X | X | X | X |
| Mifflin (Twp) | X | X | X | X |
| Minerva Park (V) | X | X | X | X |
| New Albany (C) | X | X | X | X |
| Norwich (Twp) | X | X | X | X |
| Obetz (C) | X | X | X | X |
| Perry (Twp) | X | X | X | X |
| Plain (Twp) | X | X | X | X |
| Pleasant (Twp) | X | X | X | X |
| Prairie (Twp) | X | X | X | X |
| Reynoldsburg (C) | X | X | X | X |
| Sharon (Twp) | X | X | X | X |
| Truro (Twp) | X | X | X | X |
| Upper Arlington (C) | X | X | X | X |
| Urbancrest (V) | - | - | - | - |
| Valleyview (V) | - | - | - | - |
| Washington (Twp) | X | X | X | X |
| Westerville (C) | X | X | X | X |
| Whitehall (C) | X | X | X | X |
| Worthington (C) | X | X | X | X |
| The Ohio State University | X | X | X | X |

SECTION 9. JURISDICTIONAL ANNEX

9.1 FRANKLIN COUNTY

This section presents the jurisdictional annex for Franklin County that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the County, who in Franklin County participated in the planning process, an assessment of Franklin County’s risk and vulnerability, the different capabilities used in Franklin County, and an action plan that will be implemented to achieve a more resilient community.

9.1.1 Hazard Mitigation Planning Team

Franklin County identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many County departments, including Emergency Management and Homeland Security (FCEM&HS); Engineering; and Soil and Water Conservation. FCEM&HS and Franklin County Engineering represented the County on the Core Planning Team and Planning Partnership. They supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 9.1-1 summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.1-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--|---|----------------------------|---|
| Name/Title: | Jeff Young, EM&HS Director | Name/Title: | Connor Robb, EM&HS Specialist |
| Address: | 5300 Strawberry Farms Blvd. Columbus, OH 43230 | Address: | 5300 Strawberry Farms Blvd. Columbus, OH 43230 |
| Phone Number: | 614-794-0213 | Phone Number: | 614-794-0213 |
| FCEM&HSil: | jjyoung@franklincountyohio.gov | FCEM&HSil: | connor.robb@FranklinCountyOhio.gov |
| National Flood Insurance Program (NFIP) Floodplain Administrator | | | |
| Name/Title: | Matt Brown, Planning Administrator | | |
| Address: | 970 Dublin Road, Columbus, OH 43215 | | |
| Phone Number: | 614-525-3030 | | |
| FCEM&HSil: | mybrown@franklincountyohio.gov | | |

| Additional Contributors: | |
|--------------------------|--|
| Name/Title: | Darrel Koerber, EM&HS Deputy Director |
| Method of Participation: | Served on the Core Planning Team; attended meetings; provided input throughout the planning process; identified mitigation actions for the County; reviewed the County's annex |
| Name/Title: | Carter Smith, IT Manager |
| Method of Participation: | Provided GIS data to use in updating the HMP; attended meetings; provided input throughout the planning process |

9.1.2 Municipal Profile

Please refer to Section 3 (County Profile), Volume 1 of this HMP for details on Franklin County's population, location, climate, history, growth, and development.

9.1.3 Jurisdictional Capability Assessment and Integration

Franklin County performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of County capabilities:

- Planning, legal, and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For the County to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and county staff were surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Franklin County to identify opportunities for integration of mitigation concepts that can be incorporated into County procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Franklin County and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.1-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction Has This? (yes/no) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual/ Department/ Agency Responsible |
|---|---------------------------------|--|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Ohio Building Code & Residential Code of Ohio | County | Authority for adopting is Franklin County Board of Commissioners. Administered by Economic Development & Planning Department (EDP) |
| <p><i>How does this reduce risk?</i> Franklin County has adopted 2019 Residential Code of Ohio, which regulates 1-, 2-, and 3-family dwellings/residential homes. Section 307.37 (April 6, 2007) allows for freedom of adoption when it comes to county building codes. The 2019 Residential Code of Ohio requires the approval and inspection of all electrical, gas, mechanical and planning uses. The Residential code gives builders a pre-identified checklist prior to construction leading to safer actions to accomplish goals.</p> <p>The Franklin County Building Department is responsible for issuing building permits for 1-, 2- and 3-family residential structures and associated development. The State of Ohio issues commercial building permits. Any projects in Brown, Clinton, Franklin, Hamilton, Madison, Mifflin, Norwich, Pleasant, Sharon, and Truro townships must apply for a Certificate of Zoning Compliance through the Franklin County EDP. Homeowners and/or building contractors are required to obtain a zoning compliance from the townships of Blendon, Canal Winchester, Jackson, Jefferson, Perry, Plain, Prairie, or Washington and then apply to the County Building Department for the building permit. In the villages of Harrisburg, Lockbourne, Minerva Park, Riverlea, Urbancrest and Valleyview, homeowners and building contractors are required to obtain a zoning compliance from the village and apply to the Department for the building permit. Groveport and Obetz will issue both the zoning compliance and the building permits.</p> | | | | |
| Zoning/Land Use Code | Yes | Chapter 519 Township Zoning/Title 5 Township Zoning; Franklin County Zoning Resolution, Original adopted November 12, 1948, Amended and Readopted October 11, 2022 | County | Authority for adopting is Franklin County Board of Commissioners. Administered by EDP |
| <p><i>How does this reduce risk?</i> Helps to ensure appropriate separations and buffering between incompatible land uses. Prohibits development in floodways and requires development in floodway fringe areas to be designed so as to reduce risk. Requires a conditional use permit for floodplain development. Requires new developments and redevelopments to provide stormwater controls to reduce flooding. Includes stream setbacks in certain watersheds. Environmental constraints are considered when reviewing rezoning requests. Allows for conservation/cluster development to protect sensitive areas. Any projects in Brown, Clinton, Franklin, Hamilton, Madison, Mifflin, Norwich, Pleasant, Sharon, and Truro townships must apply for a Certificate of Zoning Compliance through the Franklin County EDP.</p> | | | | |
| Subdivision Ordinance | Yes | Chapter 711 of the Ohio Revised Code; Franklin County Subdivision Regulations Original adoption 1948, amended March 27, 2012 | County | Authority for adopting is Franklin County Planning Commission. Administered by EDP |
| <p><i>How does this reduce risk?</i> Includes stream setback provisions. Requires stormwater controls. Recognizes limitations of poorly drained soils and highly erodible land. Ensures adequate roadways for emergency vehicles. Requires building areas, wells, and wastewater treatment systems to avoid floodplain areas. Allows for conservation/cluster subdivisions.</p> | | | | |
| Site Plan Ordinance | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Stormwater Management Ordinance | Yes | Ohio Administrative Code Rule 901:10-3-11 Storm Water Permits and individual | State | Ohio Department of Natural Resources, Division of Soil and Water Conservation |
| <p><i>How does this reduce risk?</i> Shows best management practices for stormwater and gives the steps for jurisdictions to receive their permit requirements and construction requirements.</p> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |



| | Jurisdiction Has This? (yes/no) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual/ Department/ Agency Responsible |
|---|---------------------------------|--|---|---|
| Real Estate Disclosure | Yes | Chapter 4735 Real Estate Brokers. April 20th, 2022 | State | Ohio HUD |
| <i>How does this reduce risk?</i> Gives the brokers a set of rules to follow to avoid trouble. Shows powers and duties of the real estate commission. | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | Yes | Chapter 3745 Ohio Environmental Protection Agency | State | Ohio EPA |
| <i>How does this reduce risk?</i> Mitigates and sets rules on water quality, open burning regulations/air pollution control and waste control. | | | | |
| Flood Damage Prevention Ordinance | Yes | Franklin County Special Resolution NFIP Regulation, original adoption September 26, 1978, amended and readopted September 19, 2007 | County | Authority for adopting is Franklin County Board of Commissioners. Administered by EDP |
| <i>How does this reduce risk?</i> Prohibits development in floodways and requires development in floodway fringes to be designed to reduce risk; ensures the maintenance of floodplain areas within the 100-year flood area. Lists the duties of the Chief of Division of waters to mitigate flooding in vulnerable areas. | | | | |
| Wellhead Protection | Yes | Chapter 3745-9/Well construction September 1, 2022, Source Water Assessment and Protection Program | State | Ohio EPA |
| <i>How does this reduce risk?</i> Gives rules on when it is okay to operate wells making sure safety actions are taking place. Shows who to call if you do come upon a defective well | | | | |
| Emergency Management Ordinance | Yes | Section 5502.21- 5502.27 Emergency Management Definitions/Countywide FCEM&HS, September 29, 1999 | State | Legislative Service Commission |
| <i>How does this reduce risk?</i> Gives clear definitions on emergency management titles and demonstrates the roles/job actions that may take place at FCEM&HS; gives set standards for emergency management goals and gives direct definitions on important emergency management aspects | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | See Below | Local | Authority for adopting is Franklin County Board of Commissioners. Administered by EDP |
| <i>How does this reduce risk?</i> Community plans include recommendations related to protecting environmentally sensitive areas including streams and wetlands. Plans serve as policy guidance for decision makers considering rezoning requests. | | | | |
| <ul style="list-style-type: none"> • Big Darby Accord Watershed Master Plan • Big Darby Town Center Master Plan • Blacklick-Madison Area Plan • Blendon Community Plan • Brown Township Comprehensive Plan [2005] • Clinton West Neighborhood Plan • Clinton-Mifflin Land Use Plan • Jackson Township Comprehensive Plan • Pleasant Township Comprehensive Plan • Scioto-Franklin Neighborhood Plan • Southwest Area Plan • Washington Township Comprehensive Plan • Westland Area Interim Development Framework | | | | |
| Capital Improvement Plan | Yes | Franklin County Capital Improvement Plan. Run by the County Planning and Programming Engineers. Columbus also has an improvement plan. | County/City | County Planning and Programming Engineers |



| | Jurisdiction Has This? (yes/no) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual/ Department/ Agency Responsible |
|--|---------------------------------|--|---|---|
| <i>How does this reduce risk?</i> Monitor development schedules and work with other departments to identify safety, congestion and structural problems on roads/bridges. | | | | |
| Disaster Debris Management Plan | N/A | Franklin County Solid Waste Authority of Central Ohio (SWACO) Administrative Building does have a Solid Waste Management Plan | - | - |
| <i>How does this reduce risk?</i> Budget and fees to finance the plan, waste inventory, projections and strategies, facilities and analysis of the progress made toward achieving state solid waste reduction goals and the SWACO district rules. | | | | |
| Floodplain Management or Watershed Plan | Yes | Section 1521 Floodplain Management Activities. January 1, 2016 Columbus Watershed Management/Franklin County Floodplain Management team | City/County | Columbus Public Utilities/EDP |
| <i>How does this reduce risk?</i> Reduces the risk of bad drinking water and allows for safe housing in nonhazardous areas. | | | | |
| Stormwater Management Plan | Yes | Franklin County Storm Water Manual. March 13, 2012 | County | Franklin County Drainage Engineer |
| <i>How does this reduce risk?</i> The purpose of the manual is to protect existing natural stormwater resources, convey and control stormwater in a safe and responsible manner, and meet water quality goals. | | | | |
| Open Space Plan | Yes | Section 164.22 Eligible Projects. July 21, 2022 | State | Natural Recourses Assistance Counsel |
| <i>How does this reduce risk?</i> Gives clear definitions on what is clear space and shows how one can apply to build on open land without a problem. | | | | |
| Urban Water Management Plan | Yes | Chapter 1521 Division of Water Recourses. January 1, 2016 | County/Local | Columbus Public Utilities, The Division of Water |
| <i>How does this reduce risk?</i> Creates healthy water safety goals and outlines specific actions to keep safe urban water management activities. | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | Yes | Franklin County Economic Development Strategic Plan, Adopted May 2019 | County | Authority for adopting is Franklin County Board of Commissioners. Administered by EDP |
| <i>How does this reduce risk?</i> Includes a goal that economic development activities and programs should promote and improve environmental sustainability. | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | yes | Chapter 1531 Division of wildlife. September 29, 2017 | State | Franklin County Animal Services |
| <i>How does this reduce risk?</i> Gives proper wildlife definitions, Regulation of deer, publication of rules. This gives the community members a clear showing of how to handle wildlife and what is allowed. | | | | |
| Community Forest Management Plan | Yes | Chapter 1501:3-10 Forest Management Plans. October 20, 2021 | State | Ohio Department of Natural Resources (ODNR) |
| <i>How does this reduce risk?</i> The ODNR plan gives information on how to alleviate risk that could happen within a forest. For example, Fire training, protection, and forest health | | | | |
| Transportation Plan | Yes | Metropolitan Transportation Plan Franklin County and Delaware County Coordinated Transportation Plan | Regional | Mid-Ohio Regional Planning Commission |



| | Jurisdiction Has This? (yes/no) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual/ Department/ Agency Responsible |
|---|------------------------------------|---|---|--|
| <p><i>How does this reduce risk?</i></p> <ul style="list-style-type: none"> Metropolitan Transportation Plan—Includes a goal to protect natural resources and mitigate infrastructure vulnerabilities to maintain a healthy ecosystem and community. Coordinated Transportation Plan (April 2018-2021)—Identifies community transportation resources and mobility, to find gaps and needs with resources and to find an approach to solve those problems. | | | | |
| Agriculture Plan | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | Yes | Columbus Climate Action Plan December 2021 | Local/City | Sustainable Columbus |
| <p><i>How does this reduce risk?</i></p> <p>Helps find gaps in climate planning and gives responsibility and action plans for future climate growth.</p> | | | | |
| Tourism Plan | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Business/ Downtown Development Plan | Yes | Columbus Downtown Strategic Plan 2022 | Local/City | Columbus Downtown Development Corporation |
| <p><i>How does this reduce risk?</i></p> <p>Creates a safe and economic outlook for the city for riverfront mitigation, traffic flow mitigation. Develops a set of goals to create a well-balanced and diverse community for downtown progression.</p> | | | | |
| Other | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | Yes | Franklin County Emergency Operations Plan 2021 | County | Franklin County FCEM&HS |
| <p><i>How does this reduce risk?</i></p> <p>Addresses response for all hazards (man-made, technological, and natural) This document protects, mitigates, responds, and prevents all disasters.</p> | | | | |
| Continuity of Operations Plan | We will have adopted plan mid-2023 | Franklin county COOP/COG | County | Franklin County FCEM&HS |
| <p><i>How does this reduce risk?</i></p> <p>Gives the County a backbone and plan to resume operations if main building were to be uninhabitable.</p> | | | | |
| Strategic Recovery Planning Report | Yes | Economic Development Strategic Plan. May 2019 | County | EDP |
| <p><i>How does this reduce risk?</i></p> <p>Creates a strategic method to respond in a timely and safe manner, while getting the community back to its normal operations.</p> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | Yes | Latest 2021 update | County | Franklin county FCEM&HS |
| <p><i>How does this reduce risk?</i></p> <p>Identifies risk and threats throughout the community and scales them, allowing for strategic planning based on specific hazards.</p> | | | | |
| Post-Disaster Recovery Plan | Yes | Disaster Recovery Plan May 2017 | County | Franklin County FCEM&HS |
| <p><i>How does this reduce risk?</i></p> <p>Intended to be a pre-disaster recovery planning document as well as a guide for post-disaster recovery procedures.</p> | | | | |
| Public Health Plan | Yes | Franklin County Strategic Plan 2019-2023 | County | Franklin County Public Health |
| <p><i>How does this reduce risk?</i></p> <p>Aligning individual staff goals with the strategic plan.</p> | | | | |
| Other | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of Franklin County to oversee and track development.

Table 9.1-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? • If yes, what department is responsible? | Yes | EDP through the online permit center or the County Building Department. |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | EDP requires the completion of an NFIP permit for new development. |
| Do you have a buildable land inventory? • If yes, please describe | No | - |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Franklin County and their current responsibilities that contribute to hazard mitigation.

Table 9.1-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|---------------------|--|
| Administrative Capability | | |
| Planning Board | Yes | Planning Commission—Responsible for approving major subdivisions and making recommendations on rezonings. Staffed by EDP |
| Zoning Board of Adjustment | Yes | Board of Zoning Appeals—Responsible for approving variances and conditional uses. Staffed by EDP |
| Planning Department | Yes | Responsible for administering zoning, subdivision, and floodplain regulations |
| Mitigation Planning Committee | No | FCEM&HS and Columbus Public Health Planning Teams/Franklin County Public Health |
| Environmental Board/Commission | Yes | Franklin County Environmental Court |
| Open Space Board/Committee | Yes | Columbus Department of Development Administration |
| Economic Development Commission/Committee | Yes | Economic Development and Planning |
| Public Works/Highway Department | Yes | ODOT/Traffic management |
| Construction/Building/Code Enforcement Department | Yes | Ohio Board of Building standards |
| Emergency Management/Public Safety Department | Yes | FCEM&HS |
| Warning Systems/ Services (mass notification system, outdoor warning signals, etc.) | Yes | Everbridge, emergency alert systems, 196 tornado sirens |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Columbus Department of Public Utilities |
| Mutual aid agreements | Yes | FCEM&HS |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Human Resources Manual | Yes | Franklin County Human Resources, 373 S High St |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | County Engineer; EDP |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | County Engineer |
| Planners or engineers with an understanding of natural hazards | Yes | FCEM&HS Staff |
| Staff with expertise or training in benefit/cost analysis | Yes | FCEM&HS Staff |
| Professionals trained in conducting damage assessments | Yes | FCEM&HS Staff |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | Auditors, Data Center, GIS Specialist at FCEM&HS office |
| Environmental scientist familiar with natural hazards | Yes | Ohio State Byrd Climate Research Center |
| Surveyor(s) | Yes | Franklin County Engineer Office |
| Emergency Manager | Yes | 14 staffed personnel, specific roles to mitigate all hazards. |
| Grant writer(s) | Yes | various departments in the County |
| Resilience Officer | Yes | County has a climate resiliency officer with Sustainable Columbus |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to Franklin County.

Table 9.1-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | Yes |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | Yes |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | Yes |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Franklin County.

Table 9.1-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|--|---------------------|---|
| Public information officer or communications office | Yes | Public information officer (PIO) staffed at FCEM&HS |
| Personnel skilled or trained in website development | Yes | See above |
| Hazard mitigation information available on your website | Yes | Under the planning tab on emergency management site |
| Social media for hazard mitigation education and outreach | Yes | Social media run by PIO |
| Citizen boards or commissions that address issues related to hazard mitigation | Yes | Tetra Tech community questionnaires |
| Warning systems for hazard events | Yes | Outdoor sirens run by Warning Systems manager |
| Natural disaster/safety programs in place for schools | Yes | Ohio School Safety Center, Ohio Administrative Code 4501 |
| Does the jurisdiction have any public outreach mechanisms/ programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | Yes | Volunteer groups for community members to be active in community resilience. CERT, VIPS. Trainings for the public hosted by Franklin County agencies. |

Community Classifications

The table below summarizes classifications for community programs available to Franklin County.

Table 9.1-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | Class 3 | 2018 |
| Storm Ready Certification | Yes – Franklin County | - | - |
| Firewise Communities Classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.

- Weak: Capacity does not exist or could use substantial improvement.

Table 9.1-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.1.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning Team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for Franklin County.

Table 9.1-9. NFIP Summary

| Jurisdiction | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|--------------------------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Unincorporated Franklin County | 323 | 12 | \$83,867.09 | 21 | 1 |
| Franklin County (Total) | 1,659 | 1,260 | \$7,489,652.19 | 102 | 4 |

Sources: a. BureauNet 2023 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

b. State of Ohio 2023

Notes: Due to a contractual agreement with FFC&HS, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FFC&HS’s HUIX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Franklin County.

Table 9.1-10. NFIP Summary

| NFIP Topic | Comments |
|--|--|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | No |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | Evaluate the cost of repairs vs. the pre-damaged value of structure. No substantial damage determinations made recently. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | Some properties have been acquired through HMGP; County Engineer's office handled project in Whims Ditch area, and Prairie Township had a project. |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | No, the most recent map update in 2007 did not include new analysis of streams. |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | EDP |
| Are any certified floodplain managers on staff in your jurisdiction? | Yes |
| Do you have access to resources to determine possible future flooding conditions from climate change? | Unknown at the time of the plan update |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability) | Permit review, response to resident enquiries about floodplains, enforcement |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Evaluate cost of improvements and current value of structure |
| What are the barriers to running an effective NFIP program in the community, if any? | None at the time of the plan update |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | None at the time of the plan update |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | 2017 |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | Franklin County Special Resolution NFIP Regulation, original adoption September 26, 1978, amended and readopted September 19, 2007 |
| Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? | Yes, freeboard requirement |

| NFIP Topic | Comments |
|--|---|
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Floodplain management is administered by EDP, which also administers County zoning and subdivision regulations. |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.1.5 Growth/Development Trends

Franklin County EDP is responsible for issuing building permits for 1-, 2-, and 3-family structures in unincorporated areas and seven villages of Franklin County. These villages include Canal Winchester, Harrisburg, Lockbourne, Minerva Park, Riverlea, Urbancrest and Valleyview. Multi-family and commercial building permits are through the applicable commercial building department. Generally, the State of Ohio, Department of Commerce, Division of Industrial Compliance is responsible for issuing commercial building permits in unincorporated areas; however, some townships have formed their own building departments or contract with other municipalities to provide this service in their township. Townships with commercial building departments include Blendon, Clinton, Franklin, Jefferson, and Prairie. The City of Groveport issues commercial building permits for Madison Township.

The tables below summarize the number of building permits issued for new construction and recent and expected future development trends, including major residential/commercial development and major infrastructure development.

*Table 9.1-11. Number of Building Permits for New Construction Since the Previous HMP**

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|--------------------------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 267 | 0 | 279 | 0 | 228 | 0 | 317 | 0 | 258 (YTD 12.8.22) | 0 |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | 267 | 0 | 279 | 0 | 228 | 0 | 317 | 0 | 258 (YTD 12.8.22) | 0 |

SFHA Special Flood Hazard Area (1% annual chance flood event)

Table 9.1-12. Recent Major Development from 2018 to Present

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units/ Structures | Address and/or Parcel ID | Municipality | Known Hazard Zone(s) | Description/ Status of Development |
|--|-------------------------|------------------------|--------------------------|--------------|----------------------|------------------------------------|
| Villages at Jefferson Run Phase 1 Final Plat | Subdivision—Residential | 16 | 171-000966 | Jefferson | Inland Erosion | CLOSED |
| Villages at Jefferson Run Phase 6 | Subdivision—Residential | 36 | 171-000029 | Jefferson | Inland Erosion | CLOSED |
| Morrison Farms East Section 3 Final Plat | Subdivision—Residential | 42 | 171-000587 | Jefferson | None Identified | CLOSED |
| Morrison Farms East Section 4 Final Plat | Subdivision—Residential | 50 | 171-000587 | Jefferson | None Identified | CLOSED |

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units/ Structures | Address and/or Parcel ID | Municipality | Known Hazard Zone(s) | Description/ Status of Development |
|---|-------------------------|------------------------|--------------------------|--------------|----------------------|------------------------------------|
| Morrison Farms East Phase 5 | Subdivision—Residential | 37 | 171-000587 | Jefferson | None Identified | CLOSED |
| Morrison Farms East Phase 6 | Subdivision—Residential | 32 | 171-000587 | Jefferson | None Identified | PENDING |
| Weldon Phase 2 Final Plat | Subdivision—Residential | 40 | 170-000010 | Jefferson | None Identified | CLOSED |
| Woodland Creek Final Plat | Subdivision—Residential | 31 | 170-000074 | Jefferson | None Identified | CLOSED |
| The Farms at Jefferson—Phase 1 | Subdivision—Residential | 48 | 170-000179 | Jefferson | None Identified | CLOSED |
| The Farms at Jefferson—Phase 2 | Subdivision—Residential | 53 | 170-000238 | Jefferson | None Identified | CLOSED |
| The Farms at Jefferson—Phase 3 | Subdivision—Residential | 44 | 170-000179 | Jefferson | None Identified | CLOSED |
| Final plat for the Farms at Jefferson Phase 4 | Subdivision—Residential | 26 | 170-000238 | Jefferson | None Identified | CLOSED |
| The Farms at Jefferson—Phase 5 | Subdivision—Residential | 48 | 170-000179 | Jefferson | None Identified | CLOSED |
| The Farms at Jefferson—Phase 6 | Subdivision—Residential | 41 | 170-000238 | Jefferson | None Identified | CLOSED |
| The Farms at Jefferson—Phase 7 | Subdivision—Residential | 37 | 170-000179 | Jefferson | None Identified | CLOSED |
| The Farms at Jefferson—Phase 8 | Subdivision—Residential | 58 | 170-000179 | Jefferson | None Identified | CLOSED |
| Farms at Jefferson Phase 9 Final Plat | Subdivision—Residential | 37 | 170-000179 | Jefferson | None Identified | WAITING FOR RECORDING |
| Final plat for Heritage Estates | Subdivision—Residential | 7 | 120-000201 | Brown | None Identified | CLOSED |
| Country Club Estates | Subdivision—Residential | 6 | 230-001637 | Pleasant | None Identified | CLOSED |
| Courtyards at Riverside Phase 2 final plat | Subdivision—Residential | 50 | 212-000024 | Perry | None Identified | WAITING FOR RECORDING |
| Courtyards on Riverside—Phase 1 replat | Subdivision—Residential | 10 | 212-001360 | Perry | None Identified | CLOSED |
| Briarfield Subdivision—FINAL PLAT | Subdivision—Residential | 42 | 170-000086 | Jefferson | None Identified | WAITING FOR RECORDING |

Table 9.1-13. Known or Anticipated Major Development in the Next Five Years

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units/ Structures | Address and/or Parcel ID | Municipality | Known Hazard Zone(s) | Description/Status of Development |
|---|-------------------------|------------------------|--------------------------|--------------|---------------------------------|-----------------------------------|
| Villages at Galloway | Mixed Use | 94 | 240-000112 | Prairie | Inland Erosion, Land Subsidence | PENDING FINAL PLAT |
| Estates at Albany Acres preliminary plan | Subdivision—Residential | 12 | 220-000437 | Plain | None Identified | PENDING FINAL PLAT |
| Pegasus Estates | Subdivision—Residential | 7 | 160-000041 | Jackson | None Identified | PENDING FINAL PLAT |
| Zuber Road 9 lot subdivision preliminary plan | Subdivision—Residential | 9 | 160-000032 | Jackson | Land Subsidence | PENDING FINAL PLAT |
| Zubkevych Village—Preliminary Plan | Subdivision—Residential | 6 | 230-003253 | Pleasant | Land Subsidence | PENDING FINAL PLAT |
| Jefferson Manor subdivision | Subdivision—Residential | 38 | 170-000008 | Jefferson | None Identified | PENDING FINAL PLAT |
| Headley Heights | Subdivision—Residential | 7 | 170-001853 | Jefferson | None Identified | PENDING |
| West Point Estate | Subdivision—Residential | 7 | 230-001514 | Pleasant | None Identified | PENDING |
| Jackson Estates | Subdivision—Residential | 15 | 160-001411 | Jackson | None Identified | PENDING |

9.1.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Franklin County’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps are provided in the hazard profiles (Section 4.3) to illustrate the probable areas impacted within Franklin County. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. The maps also show the location of potential new development, where available.

Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). Refer to Section 4.3 (Hazard Profiles) for information on hazard events impacting Franklin County.

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts, and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Refer to Section 4.4 (Hazard Ranking) for countywide rankings of each hazard.

Critical Facilities and Community Lifelines

Critical facilities and community lifelines located in Franklin County are summarized in Section 3 (County Profile). Details on the potential hazard impacts on those facilities are found in Section 4.3 (Hazard Profiles).

Identified Problems

After review of Franklin County's hazard event history, hazard rankings, jurisdiction-specific vulnerabilities, hazard area extent and location, and current capabilities, Franklin County identified the following problems within its community:

- Franklin County's large population and being the home to the City of Columbus make any disease outbreak or pandemic event a major concern. During the Covid-19 pandemic, the County saw over 300,000 reported cases and 2,800 recorded deaths.
- During the Covid-19 pandemic, the County realized its lack of personal protective equipment (PPE) and of storage for such items. Additionally, record keeping was a challenge in the County, as it was receiving PPE but did not have a process in place for documenting donations and keeping an inventory.

- The County lacks a formal communication process between internal and external partners during disaster responses. This leads to miscommunication, outreach delays, and security concerns.
- While earthquakes are not a large problem in Franklin County, the Anne Champaign fault line runs underneath the western portion of Ohio and can create problems for Franklin County (e.g., power outages, infrastructure damage). The County does not have a plan in place that focuses on earthquake response.
- Flooding is one of the top hazards of concern for the County. In addition, Franklin County is home to multiple high hazard dams that have the potential to cause significant flood impacts if they were to fail. The dams include Griggs, Hoover, O'Shaughnessy, and Alum Creek.
- Franklin County has highway transportation routes within Special Flood Hazard Areas and dam inundation areas (for example, Highway 315 near Riverside Hospital). In the event of a dam break or flood, these roadways will become inundated and will not be accessible, impacting emergency response.
- Alerting and warning the population about flood prone areas and providing updates throughout the course of a flooding event will give citizens a better understanding of what transportation routes have added risk when driving. This will also give the population a better understanding of how to prepare for predicted flood events. Updated information on severe weather will help make sure that people who need groceries do not drive while a weather activity may be taking place.
- Franklin County is at risk of a variety of potential winter weather forms. Freezing rain in February 2022 caused level 2 snow emergencies through the County. Given how important the transportations routes are for food and goods, going to a level 3 emergency would be abnormal. This can be seen as a problem because of the risk that is elevated for citizens getting stuck on the highways and potentially stranded. It is never out of the question for Franklin County to be in a blizzard, causing traffic to be at dead stops for multiple hours, while having lower temperatures.
- Franklin County has experienced high temperatures (> 100°F). This leads to power outages across the County and creates health concerns for vulnerable populations and those without proper shelter. Temperatures are rising each year, and the County is seeing impacts on the power grid systems. Many cooling centers and shelters open up during these events; however, the County does not have a database that contains information on these shelters (location, resources available, etc.). This makes it difficult to inform the public about where to go during extreme heat events.
- Franklin County is susceptible to erosion and geological ground conditions that could create sinkholes. The northwestern, southwestern, and southeastern portions of Franklin County have most of the land identified as having the greater than 0.49 K factor soil threshold, which is based on erosion risk (refer to Section 4.3.7 for a description of K factor soils).
- Franklin County has a history of strong storms and heavy winds. Tornadoes are rare; however, they can cause significant damage across the County. The County currently has tornado sirens in place, and they are maintained weekly. The County also has mass notification systems in place and sends

out warnings to registered residents. However, the sirens do not cover the entire County, and not everyone is registered to receive mass notifications.

- Extreme heat affected Linden and North Linden neighborhoods during the June 2022 heat wave. Expansive urban infrastructure (parking lots) and insufficient greenery and street tree plantings exacerbated the issue.
- Aged electrical infrastructure and large trees can compromise the integrity of power lines during severe storm events, as noted during the June 2022 derecho. Trees need to be reported, trimmed, and re-planted in areas that avoid electrical infrastructure.
- Concrete barriers between Trabue Road and West Broad Street prohibit U-turns for first responders. Responders have to take alternative routes, some including railroad crossings, delaying response times.

9.1.7 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation initiatives, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.1-14. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|---|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Create wetlands and rain gardens where the stormwater retention ponds are not designed to reduce volume. Implement land management practices to reduce the volume of stormwater runoff from developed communities. | Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County Engineer's Office • City of Hilliard • Norwich Township • ODNR | In progress – This action is currently being completed in and by the City of Hilliard. Refer to Section 9.17 (City of Hilliard), Table 9.17-18, action 2023-Hilliard-001 | No | - | - |
| Reconnect 150 linear feet of Dysart Run to the floodplain and stabilize three sections of bank with severe erosion to reduce erosion and siltation | FCEM&HS • Franklin County Engineer's Office • City of Hilliard • Norwich Township • ODNR | Complete | No | - | - |
| Increase stormwater retention/detention features along waterways, such as Holcomb Ditch, to reduce and/or slow the flow of stormwater. | FCEM&HS • Franklin County Engineer's Office • City of Hilliard • Norwich Township • ODNR | In progress – This action is currently being completed in and by the City of Hilliard. Refer to Section 9.17 (City of Hilliard), Table 9.17-18, action 2023-Hilliard-002 | No | - | - |
| Develop a plan and strategy to ensure residents with functional needs are properly cared for in an emergency. | FCEM&HS • Franklin County social service agencies | In progress- FCEM&HS has begun including functional needs populations into all emergency plans | Yes | Refer to action number 2023-Franklin County-005, 006, and 007 in Table 9.1-16. | FCEMHS |
| Seek funding for backup generators for critical public buildings and infrastructure. | FCEM&HS • All 41 local jurisdictions | On-going – the County and municipalities apply for funding for generators at critical facilities as needed. | No | - | - |
| Develop comprehensive strategies to increase siren coverage for outdoor warning and to promote weather radios as a reliable means of indoor warning. | FCEM&HS • All 41 local jurisdictions | In Progress | Yes | Refer to action number 2023-Franklin County-009 in Table 9.1-16. | FCEMHS Alerting and Warning |
| Acquire properties in Prairie Township that have historically been subject to repeated flooding. | FCEM&HS • Franklin County Engineer's Office • Prairie Township | Completed - acquisition of seven parcels and the removal of six homes along Tamara Avenue. | No | - | - |

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|--|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding for lightning detection/warning systems for city parks and other outdoor recreation areas. | FCEM&HS • All 41 local jurisdictions | In Progress | Yes | Refer to action number 2023-Franklin County-009 in Table 9.1-16. | FCEMHS Alerting and Warning |
| Remove and/or chemically treat 5 percent of the invasive plant species each year within Franklin County, targeting areas of major concern, particularly those surrounding reservoirs. Though this will not eliminate them, it would be a start to control them if the areas that have been removed in previous years are maintained free of invasive species by once-a-year spraying. | Ohio Invasive Plants Council • Franklin County Soil and Water Conservation District • City of Columbus Watershed Management • Local Government and County Park Departments, ODOT, ODNR, Watershed Groups, Environmental Groups | No progress | No | - | - |
| Develop inventories of at-risk infrastructure and prioritize preventive measures in areas vulnerable to natural hazards. | Local Jurisdiction water and sewer departments • Franklin County Engineer's Office • FCEM&HS | Ongoing – part of the HMP update process | No | - | - |
| Integrate the goals and action items from the Franklin County Mitigation Plan into existing and future land use planning documents and existing regulatory programs. | FCEM&HS • EDP • Mid-Ohio Regional Planning Commission | Ongoing – the HMP is integrated into land use planning and programs as necessary | No | - | - |
| Identify resources and take appropriate actions in order to mitigate the effects of the hazards identified in the Risk Assessment for Franklin County as they impact each Franklin County jurisdiction. | FCEM&HS • EDP • All 41 local jurisdiction | On-going through BRIC grants | No | - | - |



| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|--|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Strengthen partnerships between government agencies and private sector businesses to develop public awareness of and involvement in natural hazard mitigation strategies. | FCEM&HS • American Electric Power • Private and public utility companies | In progress- Began conducting alerting and warning strategies with private sector companies in the need of mass notifications. | Yes | Refer to action number 2023-Franklin County-009 in Table 9.1-16. | FCEMHS Alerting and Warning |
| Develop and implement public education programs to increase public awareness and understanding of the risks associated with natural hazards. | FCEM&HS • Volunteer and Social Service organizations | In progress- FCEM&HS will post social media educational awareness tips given the month and weather hazard associated with the season. | Yes | Refer to action number 2023-Franklin County-009 in Table 9.1-16. | FCEMHS Alerting and Warning |
| Involve watershed and natural resource management, and other interested parties, in natural hazard mitigation planning to rehabilitate and maintain streams and waterways. | FCEM&HS • Mid-Ohio Regional Planning Commission: Water Resource Working Group | On-going | Yes | Refer to action number 2023-Franklin County-004 in Table 9.1-16. | FCEM&HS |
| Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | FCEM&HS • City of Bexley • City of Columbus • Franklin Township • City of Grove City • Madison Township • Pleasant Township • Prairie Township • Sharon Township • City of Upper Arlington • Washington Township • City of Westerville • City of Whitehall • City of Worthington | In progress- Begun surveying and reporting repetitive loss areas seeing if it is still occupied or not. | Yes | Refer to action number 2023-Franklin County-011 in Table 9.1-16. | FCEM&HS |
| Involve watershed and natural resource management, governmental land-owning agencies, and other interested parties, in natural hazard mitigation planning to control and eliminate invasive plant species. | Franklin County Soil and Water Conservation District • Ohio Invasive Plants Council • Local Government and County Park Departments, ODOT, ODNR, Watershed Groups, Environmental Groups | On going | Yes | Refer to action number 2023-Franklin County-010 in Table 9.1-16. | FCEM&HS |

Additional Mitigation Efforts

In addition to the mitigation initiatives completed in the table above, Franklin County identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County’s first HMP, Franklin County has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013), Mitigation Assistance Resource Guide for Ohio (FEMA, August 2022), and Local Mitigation Planning Handbook (FEMA March 2013).

The table below indicates the mitigation action categories used to address each hazard of concern assessed in this HMP. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.1-15. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA Categories | | | | CRS Categories | | | | | |
|-----------------------|-----------------|-----|-----|-----|----------------|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | | X | X | X | X | X | X | X | X |
| Disease Outbreak | X | X | | X | X | | X | | | X |
| Drought | X | | X | X | X | | X | | | X |
| Earthquake | X | | | X | X | | X | | | X |
| Extreme Temperature | X | X | X | X | X | X | X | | | X |
| Flood | X | | X | X | X | X | X | X | X | X |
| Geologic | X | X | X | X | X | | X | X | X | X |
| Invasive Species | X | | X | X | X | X | X | | | X |
| Severe Summer Weather | X | X | X | X | X | X | X | X | X | X |
| Severe Winter Weather | X | X | X | X | X | X | X | | | X |
| Tornado | X | | X | X | X | X | X | | | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.1-16)

The table below summarizes the mitigation actions Franklin County will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.1-16. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Critical Facility/Community Lifeline? | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------------|---|--|---|---------------------------------------|------------------|---|--|---|---|-----------------|----------|---------------------|--------------|
| 2023-Franklin County-001 | PPE Stockpile and Storage | <p>Problem: Franklin County's large population and being the home to the City of Columbus make any disease outbreak or pandemic event a major concern. During the Covid-19 pandemic, the County saw over 300,000 reported cases and 2,800 recorded deaths. The County realized its lack of PPE and of storage for such items. Additionally, record keeping was a challenge in the County as they were receiving PPE but did not have a process in place for documenting donations and keeping an inventory.</p> <p>Solution: Franklin County will identify a central location to store and stockpile PPE. Once identified, the County will implement a process for creating an inventory of equipment and a tracking system to use when equipment leaves the facility. This will ensure the County is maintaining enough PPE before, during, and after a disease outbreak event.</p> | Disease Outbreak | Yes | 2, 4, 5 | Continuous/ongoing | FCEM&HS, external and private partners | FEMA HMGP, County Budget, Ohio Department of Health | Maintaining proper response to a countywide problem | \$1 million+ | High | LPR, EAP, SIP | PI, ES |
| 2023-Franklin County-002 | Communication Protocols for Disaster Response | <p>Problem: The County lacks a formal communication process between internal and external partners during disaster responses. This leads to miscommunication, outreach delays, and security concerns.</p> <p>Solution: The County will develop a communication process between internal and external partners. The process will include roles, responsibilities, and required trainings for those involved in disaster response.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geological, Invasive Species, Severe Summer Weather, Severe Winter Weather, and Tornadoes | Yes | 1, 2, 3, 4, 5, 6 | Develop program – within two years; implement program – ongoing | FCEM&HS, external and private partners | FEMA HMGP, County Budget, Ohio Department of Health | Continuity of operations | \$50,000+ | High | LPR, EAP | PI, ES |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Critical Facility/Community Lifeline? | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------------|---|---|---|---------------------------------------|-----------|--------------------|---|---|---|-----------------|----------|---------------------|----------------|
| 2023-Franklin County-003 | Continuity of Operations/Continuity of Governments Plan | <p>Problem: While earthquakes are not a large problem in Franklin County, the Anne Champaign fault line runs underneath the western portion of Ohio and can create problems for Franklin County (e.g., power outages, infrastructure damage). The County does not have a plan in place that focuses on earthquake response.</p> <p>Solution: The County will develop a continuity of operations/continuity of governments plan to implement a response in the event an earthquake causes power outages and/or disrupts critical infrastructure. This will allow the County to provide essential services to residents in the event of a large-scale power outage or major roadway closures.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geological, Invasive Species, Severe Summer Weather, Severe Winter Weather, and Tornadoes | Yes | 2, 3 | One year | FCEM&HS | BRIC funding | Continuous communications and working with the agency to continue emergency management functions | \$50,000+ | High | LPR | PR |
| 2023-Franklin County-004 | Flood and Dam Failure Feasibility Study | <p>Problem: Flooding is one of the top hazards of concern for the County. In addition, Franklin County is home to multiple high hazard dams that have the potential to cause significant flood impacts if they were to fail. The dams include Griggs, Hoover, O'Shaughnessy, and Alum Creek. Franklin County has highway transportations routes within Special Flood Hazard Areas and dam inundation areas (Highway 315 near Riverside Hospital). In the event of a dam break or flood, these roadways will become inundated and will not be accessible, impacting emergency response.</p> <p>Solution: Identify weaknesses in the County's drainage systems, where they are located, and what measures are needed to address them. Provide redundancy within the County's critical infrastructure. Measures include:</p> | Dam/Levee Failure, Flood, Severe Summer Weather | Yes | 1, 2, 4 | Multiple years | Franklin County Sanitary Engineering, Columbus Public Utilities | FEMA BRIC, FMA, and HMGP, County Budget | The benefits would be less local flood damage to property and safer driving for crowded highways and roads. These actions would reduce risk to the highest risk hazard in the County. | \$250,000+ | High | LPR, SIP, NSP | PR, SP, NR, PP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Critical Facility/Community Lifeline? | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------------|----------------------------|---|---|---------------------------------------|---------------|--------------------|---------------------------|---------------------------|--|-----------------|----------|---------------------|--------------|
| | | <ul style="list-style-type: none"> Identifying weak spots on highways and all main roads that may be prone to hydroplaning or flooding. Maintaining a flood wall barrier in case of waterways breaching onto roads. This begins with developing a strategy to locate where those high water marks are. Partnering with stakeholders in each municipality to do a drive and check through their designated area to help the county prioritize where mitigation measures can be implemented. | | | | | | | | | | | |
| 2023-Franklin County-005 | Severe Weather Warning | <p>Problem: The County's current severe weather warning process is in need of updating. At this time, the County does not have an efficient way to inform the public about floodprone areas, flooding event updates, road closures, and other weather events. Alerting and warning systems would give the public a better outlook on how to prepare for the day. Updated information on severe weather will allow residents to make essential decisions before an event occurs.</p> <p>Solution: The first mitigation action would be to promote awareness and participation in the County alerting systems, FCReady. This would be done by working with local jurisdictions to promote and advertise the FCReady text messaging program, which is utilized by FCEM&HS. This can be done through radio calls, billboards or having a spot in the local paper detailing how to sign up and the benefits of doing so. FCReady is a keyword opt-in text messaging platform specific to hazards based on the keyword.</p> | Flood, Tornado, Severe Winter Weather, Severe Summer Weather, and Extreme Temperature | Yes | 1, 2, 4, 5, 6 | Multiple years | FCEM&HS | County Budget; FEMA HMGP | Safer community through hazard identification and announcements. Losses avoided will be big accidents requiring mass response and poor EOC communication. The County would have direct access to the NWS weather chat. | \$50,000 | High | NSP, EAP | PI, ES |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Critical Facility/Community Lifeline? | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------------|---------------------------------------|--|---|---------------------------------------|-----------|--------------------|---------------------------|---------------------------|--------------------------------|-----------------|----------|---------------------|--------------|
| | | Maintaining and advertising the NOAA storm ready program county wide will give communities in Franklin County a chance to receive timely updates through NWSchat. This program gives a one-on-one connection with the National Weather Service that could help determine predictions for storms, or let the County know if the EOC may be activated, as well as who would be a good source pre-event so the County can pre-plan for activating the EOC. | | | | | | | | | | | |
| 2023-Franklin County-006 | Winter Storm Alert and Warning System | <p>Problem: Franklin County is at risk of a variety of potential winter weather forms. The County has experienced Level 2 snow emergencies. This can create problems for commuters, those in need of emergency services, and essential personnel needing to go to work. It can create hazard situations for the County to respond to.</p> <p>Solution: Franklin County will work with its municipalities to ensure residents are aware of the warning systems in place and how to access them. FCEM&HS will make sure that an annual meeting is conducted, co-hosted with the sheriff, county engineer, county administration, state transportation (COTA) and the electric utility companies to update and discuss the Franklin County snow emergency plan. These are the partners that will work together to discuss response to a snow emergency. Alerting and warning all residents in a timely manner will lead to increased resilience and preparedness for winter weather events.</p> | Severe Winter Weather, Flood, and Extreme Temperature | Yes | 2, 5, 6 | Annually updated | FEMA and FCEM&HS | FEMA HMGP, County Budget | Risk reduction, citizen safety | \$25,000 | High | EAP | PI, ES |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Critical Facility/Community Lifeline? | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------------|---|---|---|---------------------------------------|---------------|--------------------|---|-----------------------------------|---|-----------------|----------|---------------------|--------------------|
| 2023-Franklin County-007 | Extreme Temperature Response Procedures | <p>Problem: Franklin County has experienced high temperatures (>100°F). This leads to power outages across the County and creates health concerns for vulnerable populations and those without proper shelter. Temperatures are rising each year and the County is seeing impacts on the power grid systems. Many cooling centers and shelters open up during these events; however, the County does not have a database that contains information on these shelters (location, resources available, etc.). This makes it difficult to inform the public about where to go during extreme heat events.</p> <p>Solution: Franklin County will develop and implement response procedures for extreme temperature events. First, the County will develop a partnership with private sector utility/energy companies to implement public messaging regarding energy conservation. The County will rely on the utility companies to send out messages when power spikes during extreme heat events. Second, the County will identify heating/cooling centers in locations throughout the County. A database will be created that will contain the location, capacity, and services available. To identify the centers, the County will map public-owned facilities suitable for such centers and sign a memorandum of understanding between the County and facility owners.</p> | Severe Summer Weather, Severe Winter Weather, Extreme Temperature | Yes | 2, 3, 5 | 2 years | FCEM&HS and CPH/FCPH; coordination with facility owners | FEMA BRIC and HMGP, County Budget | Public education/private sector relationship/ safer health | \$25,000+ | High | LPR, SIP, EAP | PR, PI, ES |
| 2023-Franklin County-008 | Geological Hazard Feasibility Study | <p>Problem: Franklin County is susceptible to erosion and geological ground conditions that could create sinkholes. The northwestern, southwestern, and southeastern portions of Franklin County have most of the land</p> | Geologic | Yes | 1, 2, 3, 5, 6 | Annually | FCEM&HS and Franklin County Soil and water conservation | County Budget | Concise location of geological losses. Gives time to prepare and mitigate for the hazard at hand. Potential land buyouts if needed, | \$25,000+ | Medium | LPR, SIP, NSP, EAP | PR, PI, ES, NR, SP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Critical Facility/Community Lifeline? | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------------|--|--|--------------------------------|---------------------------------------|------------|--------------------|---------------------------|---------------------------|--|-----------------|----------|---------------------|--------------|
| | | <p>identified as having the greater than .49 K factor threshold, based on erosion risk.</p> <p>Solution: The County will complete a feasibility study to identify areas in the County vulnerable to geological hazards (e.g., erosion, landslides, sinkholes). The study will also determine mitigation measures to protect critical facilities and lifelines vulnerable to such hazards. Once the study is complete, the County will seek funding to implement projects identified. The study will be updated each year to ensure it is current and addresses new development in the County.</p> | | | | | | | depending on the damage potential. Preserves property and life safety. | | | | |
| 2023-Franklin County-009 | Update Warning Technology for Weather Events | <p>Problem: Franklin County has a history of strong storms and heavy winds. Tornadoes are rare; however, they can cause significant damage across the County. The County currently has tornado sirens in place, and they are maintained weekly. The County also has mass notification systems in place and sends out warnings to registered residents. However, the sirens do not cover the entire County and not everyone is registered to receive mass notifications.</p> <p>Solution: The County will purchase and install proper emergency warning technology to inform the public of severe weather events. This will include:</p> <ul style="list-style-type: none"> Installing outdoor tornado sirens in areas that currently do not have warning systems in place. Installing solar-powered sirens in the County that provide non-rotating 360-degree sound siren. | Severe Summer Weather, Tornado | Yes | 1, 2, 4, 6 | Multiple Years | FCEM&HS | FEMA BRIC and HMGP | Better public alerting and warning with the potential for fewer siren setbacks. Improves the function and confidence in public alerting. | \$250,000+ | High | LPR, EAP | PI, ES |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Critical Facility/Community Lifeline? | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------------|---------------------------------|--|--|---------------------------------------|------------|--------------------|---|---|---|--------------------------|----------|---------------------|--------------|
| | | <ul style="list-style-type: none"> Upgrade existing analog siren activation technology, reducing the vulnerability to intrusion and false activation by others. (Digital P-25 or LTE technology). Develop an outreach program to inform residents and the public about the different siren warnings and how to register for mass notifications. Seek funding for lightning detection/warning systems for city parks and other outdoor recreation areas. | | | | | | | | | | | |
| 2023-Franklin County-010 | Tree Maintenance Program | <p>Problem: Aged electrical infrastructure and large trees can compromise the integrity of power lines during severe storm events, as noted during the June 2022 derecho. Trees need to be reported, trimmed, and re-planted in areas that avoid electrical infrastructure.</p> <p>Solution: The County will explore options for trimming and removal of high hazard trees that have been damaged or killed by diseases or storm events. The first phase of the project will involve the survey of trees in the County, on county-owned property, to determine which trees have been impacted by disease or storm events. The County will then work to remove trees by partnering with outside agencies such as utility providers and/or hiring contractors to remove the high hazard trees.</p> | Drought, Extreme Temperature, Flood, Invasive Species, Severe Summer Weather, Severe Winter Weather, and Tornadoes | Yes | 1, 2, 4, 6 | Two years | Franklin County Engineer's Office, Franklin County Highway Maintenance, and local jurisdictions | FEMA HMGP and BRIC, County budget | Reduction in damages from falling trees; reduce duration or occurrence of power outages; provide protection to critical infrastructure and community lifelines from tree damage | >\$25,000 | High | LPR, NSP | PP, ES |
| 2023-Franklin County-011 | Repetitive Loss Area Mitigation | <p>Problem: Areas across the County have experienced repetitive impacts due to flooding.</p> <p>Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity.</p> | Flood | No | 6 | Four years | FCEM&HS, all municipal jurisdictions | FEMA HMGP, FMA, and BRIC, County budget, Municipal budget, homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Critical Facility/Community Lifeline? | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------------|----------------------------------|---|---|---------------------------------------|-----------|--------------------|---|--|--|-----------------|----------|---------------------|--------------|
| 2023-Franklin County-012 | Countywide Capability Assessment | <p>Problem: While the County and each jurisdiction completed a review of their current capabilities as they relate to hazard mitigation, there is still a need to understand and describe how each jurisdiction will expand on and improve current capabilities.</p> <p>Solution: The County will work with each jurisdiction to use the findings of the current HMP to identify opportunities for integration in planning and regulations and improvement of capabilities. Once identified, specific actions will be developed by each jurisdiction, where appropriate, to help with implementation and integrating the current HMP.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geological, Invasive Species, Severe Summer Weather, Severe Winter Weather, and Tornadoes | No | All | Within 5 years | FCEM&HS, County Planning, all municipal jurisdictions | County and municipal budgets; staff time | Understanding of current capabilities and identifying future capabilities; integration of the HMP into future capabilities | <\$15,000 | High | LPR, EAP | PR, PI |

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CRS Community Rating System
- FEMA Federal Emergency Management Agency
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program

Potential FEMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses and preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative, or regulatory actions or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and stormwater management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.

- *Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.*

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation initiatives. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Table 9.1-17. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High/Medium/Low |
|--------------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|-----------------|
| 2023-Franklin County-001 | PPE Stockpile and Storage | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 9 | High |
| 2023-Franklin County-002 | Communication Protocols for Disaster Response | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 11 | High |
| 2023-Franklin County-003 | Continuity of Operations/Continuity of Governments Plan | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 9 | High |
| 2023-Franklin County-004 | Flood and Dam Failure Feasibility Study | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 9 | High |
| 2023-Franklin County-005 | Severe Weather Warning | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 10 | High |
| 2023-Franklin County-006 | Winter Storm Alert and Warning System | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 10 | High |
| 2023-Franklin County-007 | Extreme Temperature Response Procedures | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 9 | High |
| 2023-Franklin County-008 | Geological Hazard Feasibility Study | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 8 | Medium |
| 2023-Franklin County-009 | Update Warning Technology for Weather Events | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 10 | High |
| 2023-Franklin County-010 | Tree Maintenance Program | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 9 | High |
| 2023-Franklin County-011 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 10 | High |
| 2023-Franklin County-012 | Countywide Capability Assessment | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.2 CITY OF BEXLEY

This section presents the jurisdictional annex for the City of Bexley that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Bexley participated in the planning process, an assessment of the City of Bexley’s risk and vulnerability, the different capabilities used in the City of Bexley, and an action plan that will be implemented to achieve a more resilient community.

9.2.1 Hazard Mitigation Planning Team

The City of Bexley identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Bexley departments, including the Lieutenant. The Lieutenant represented the community on the Franklin County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.2-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|---|
| Name/Title: | Dawn Overly/Lieutenant | Name/Title: | Ben Kessler, Mayor |
| Address: | 559 North Cassingham Road Bexley Ohio 43209 | Address: | 2242 East Main Street Bexley, Ohio 43209 |
| Phone Number: | 614-559-4444 | Phone Number: | 614-559-4200 |
| Email: | DOverly@bexley.org | Email: | bkessler@bexley.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Andy Bashore, Assistant Service Director | | |
| Address: | 2242 E. Main Street | | |
| Phone Number: | 614-559-4220 | | |
| Email: | abashore@bexley.org | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.2.2 Municipal Profile

The City of Bexley is located on the banks of Alum Creek in the center of Franklin County. Bexley is one of Columbus' closest suburb, located 3.8 miles directly east from the center of the City of Columbus. Whitehall borders the city to its east and Hanford to the southwest.

According to the American Community Survey, the 2021 population for the City of Bexley was 13,820, a 5.84 percent increase from the 2010 Census population of 13,057. Data from the 2021 U.S. American Community Survey indicates that 6.3 percent of the population is 5 years of age or younger and 13.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.2.3 Jurisdictional Capability Assessment and Integration

The City of Bexley performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities :

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Bexley to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Bexley and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.2-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Building and Housing Code Part 14 | Local | Building Dept. |
| <p><i>How does this reduce risk?</i> The purpose of the Ohio Building Code is to establish uniform minimum requirements for the erection, construction, repair, alteration, and maintenance of buildings, including construction of industrialized units. Such requirements relate to the conservation of energy, safety, and sanitation of buildings for their intended use and occupancy with consideration for the following: (a) Performance. Establish such requirements, in terms of performance objectives for the use intended. (b) Extent of Use. Permit to the fullest extent feasible the use of materials and technical methods, devices, and improvements which tend to reduce the cost of construction without affecting minimum requirements for the health, safety, and security of the occupants of buildings without preferential treatment of types or classes of materials or products or methods of construction. (c) Standardization. Encourage, so far as may be practicable, the standardization of construction practices, methods, equipment, material and techniques, including methods employed to produce industrialized units.</p> | | | | |
| Zoning/Land Use Code | Yes | Planning and Zoning Code Part 12, Title 4 | Local | Building Dept. |
| <p><i>How does this reduce risk?</i> The zoning regulations have been made in accordance with the Comprehensive Zoning Plan in the interest of the protection and promotion of the public health, safety, and welfare of the residents.</p> | | | | |
| Subdivision Ordinance | Yes | Planning and Zoning Code Part 12, Title 3 | Local | Building Dept. |
| <p><i>How does this reduce risk?</i> This ordinance describes design and performance standards for all subdivisions within the City.</p> | | | | |
| Site Plan Ordinance | Yes | Bexley Codified Ordinance 1258.09 | Local | Building Dept. |
| <p><i>How does this reduce risk?</i> Defines drainage and setback requirements. Mitigates flooding and fire concerns.</p> | | | | |
| Stormwater Management Ordinance | Yes | Bexley Codified Ordinance 1250/1044/1490 | Local | Building Dept. |
| <p><i>How does this reduce risk?</i> Flood mitigation ordinance. Slated for update</p> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Real Estate Disclosure | Yes | 4537.58 | 4537.58 | 4537.58 |
| <p><i>How does this reduce risk?</i> Reduces risk by disclosing environmental problems with property and land. Identify potential hazards: mold, radon, and flooding.</p> | | | | |
| Growth Management | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Environmental Protection Ordinance | Yes | Bexley Codified Ordinance 1258/1490/285 | Local | Building Dept. |
| <p><i>How does this reduce risk?</i> Establishes requirements of environmental protection in steep slopes, waterways, and floodplains.</p> | | | | |
| Flood Damage Prevention Ordinance | Yes | Bexley Codified Ordinance 1444.01 | Local | Building Dept. |
| <p><i>How does this reduce risk?</i> Identifies risk prior to incident.</p> | | | | |
| Wellhead Protection | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Emergency Management Ordinance | Yes | Bexley Codified Ordinance 260 | Local | Mayor's Office |
| <i>How does this reduce risk?</i> Provides for the Mayor's Emergency Powers during an emergency. | | | | |
| Climate Change Ordinance | Under Development | Race to Zero Action Plan | Local | Mayor's Office |
| <i>How does this reduce risk?</i> Addresses causes of air pollution emissions within the City. | | | | |
| Other | Yes | Historic Preservation Ordinance | Local | Building Dept. |
| <i>How does this reduce risk?</i> | | | | |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Bexley Land Use Strategy Bexley Strategic Plan | Local | Mayor's Office |
| <i>How does this reduce risk?</i> This plan helps to identify potential risk, creates standards and accountability. | | | | |
| Capital Improvement Plan | Yes | Water/Sewers/Streets | Local | Mayor's Office |
| <i>How does this reduce risk?</i> This plan helps to identify potential risk, creates standards and accountability. | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | Yes | Bexley Codified Ordinance | Local | Building Dept./Mayor's Office |
| <i>How does this reduce risk?</i> Identifies risk early. | | | | |
| Stormwater Management Plan | No | - | State | - |
| <i>How does this reduce risk?</i> | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | State | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | Yes | Land use strategy, SW Bexley strategy framework, Joint Livingston Avenue Plan | Local | Building Dept., Code Enforcement, Council |
| <i>How does this reduce risk?</i> This strategy helps address challenges facing the city, and identifies strategic priorities for the various districts—both residential and commercial—in Bexley. | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|-------------------------------------|--|---|---|
| Community Forest Management Plan | Under Development | Comprehensive park plan focus on preservation and enhancement. | Local | Recreation and Parks Dept. |
| <i>How does this reduce risk?</i> Sustainable management, rehabilitation and protection of forest area and resources. | | | | |
| Transportation Plan | Yes | Bike Friendly Bexley, Safe Routes to School Plan, Link US, Cota Plan | Local, State, County | Service Dept., Mayor's Office |
| <i>How does this reduce risk?</i> | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | Under Development – Zero Waste Plan | Sustainability Plan | Local | Environmental Sustainability Advisory Committee |
| <i>How does this reduce risk?</i> The Plan develops recommendations for addressing energy and sustainability issues to advance the City. | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | Yes | Land Use Strategy | Local | Building Dept./Mayor's Office |
| <i>How does this reduce risk?</i> Minimizes development in areas where the likelihood of hazard impact is high. | | | | |
| Other | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | Under Development | Emergency Response Planning | Local | Emergency Management |
| <i>How does this reduce risk?</i> Emergency planning and preparedness efforts. Planning, preparation, response, and recovery for natural or manmade disasters. | | | | |
| Continuity of Operations Plan | Under Development | Mission Essential Functions continue to be performed. | Local | Emergency Management |
| <i>How does this reduce risk?</i> Identifies essential functions that must continue to be performed as response and mitigation efforts | | | | |
| Strategic Recovery Planning Report | No | | | |
| <i>How does this reduce risk?</i> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | Under Development | THIRA Plan | Local | Emergency Management |
| <i>How does this reduce risk?</i> Identifies potential risk within city. | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | Yes | Public Health Policy | Local, County | Mayor's Office |
| <i>How does this reduce risk?</i> Educational announcements – early detection – resources | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|-----------------------------------|---------------------------------|---|---|--|
| Other | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the City of Bexley to oversee and track development.

Table 9.2-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? If yes, what department is responsible? | Yes | Building Department |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | - |
| Do you have a buildable land inventory? If yes, please describe | Yes | Development Department– Land Use Strategy Plan – addressing short- and long-term planning options and land-use challenges |
| Describe the level of build-out in your jurisdiction. | N/A | |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Bexley and their current responsibilities that contribute to hazard mitigation.

Table 9.2-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|---------------------|--|
| Administrative Capability | | |
| Planning Board | Yes | City of Bexley Board of Zoning and Planning |
| Zoning Board of Adjustment | Yes | City of Bexley Board of Zoning and Planning |
| Planning Department | Yes | City of Bexley Board of Zoning and Planning |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | Yes | Environmental Sustainability Advisory Committee |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | Yes | City of Bexley Development Department |
| Public Works/Highway Department | Yes | City of Bexley Service Department |
| Construction/Building/Code Enforcement Department | Yes | City of Bexley Building Department/Code Enforcement |
| Emergency Management/Public Safety Department | Yes | Bexley Police Department Emergency Management (EM) Lieutenant |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | FCEMA, BexAlert system – EM Lieutenant/Mayor’s office |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | City of Bexley Water Department |
| Mutual aid agreements | Yes | City of Bexley Police Department, Service Department |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|------------------------|---|
| Human Resources Manual | Yes | Mayor's Office |
| Other | - | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | Building Dept. |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | Building Dept. /Code Enforcement |
| Planners or engineers with an understanding of natural hazards | Yes | Koch Engineering Group |
| Staff with expertise or training in benefit/cost analysis | Yes | City of Bexley Finance Department |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | Yes | Bexley Police Department - EM Lieutenant |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | - | - |
| <i>How do your administrative/technical capabilities contribute to risk reduction in your community?</i> Through community education – developing plans to reduce risk | | |

Fiscal Capability

The table below summarizes financial resources available to the City of Bexley.

Table 9.2-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | No |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas, or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | N/A |
| Stormwater utility fee | Yes |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | Yes |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | Yes |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | - |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Bexley.

Table 9.2-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|---|
| Public information officer or communications office | Yes | Education/outreach programs conducted by Green Bexley, Bexley Police Department |
| Personnel skilled or trained in website development | Yes | Mayor's office |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | Yes | Mayor's Office Social Media, EM Facebook |
| Citizen boards or commissions that address issues related to hazard mitigation | Yes | Community Improvement Board, Environmental Sustainability Committee |
| Warning systems for hazard events | Yes | BexAlert |
| Natural disaster/safety programs in place for schools | Under Development | School District, EM Lieutenant, |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | Under Development | Community workshops are being planned to educate community. |

Community Classifications

The table below summarizes classifications for community programs available to the City of Bexley.

Table 9.2-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | N/A | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | N/A | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | - | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.2-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Strong |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Strong |
| Tornado | Moderate |

9.2.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Bexley.

Table 9.2-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|--------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Bexley (C) | 14 | 23 | \$48,583.61 | 3 | 0 |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)
^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA’s HUDEX Report.

RL Repetitive Loss
 SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Bexley.

Table 9.2-10. NFIP Summary

| NFIP Topic | Comments |
|--|--|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | Yes – basement flooding |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | Yes – 195 mitigation elevation (basement flooding) |

| NFIP Topic | Comments |
|--|---|
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | Evaluate the cost of repairs vs. the pre-damaged value of structure. No substantial damage determinations made recently |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | Unknown |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | Unknown |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Building Department and Service Department |
| Are any certified floodplain managers on staff in your jurisdiction? | Contracted Franklin County Soil and Water Conservation District |
| Do you have access to resources to determine possible future flooding conditions from climate change? | Yes – Franklin County Soil and Water Conservation District and Mid-Ohio Regional Planning Commission |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability) | Consult with Franklin County Soil and Water Conservation District; consult with FEMA floodplain maps |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Based on overall size – riparian setback |
| What are the barriers to running an effective NFIP program in the community, if any? | N/A |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | None known |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | 2018 EF-1 Tornado |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | 1444 Flood Damage Prevention |
| Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? | Exceeds – Alum Creek Riparian setback |
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | No |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | Unsure |

9.2.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

*Table 9.2-11. Number of Building Permits for New Construction Since the Previous HMP**

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | - | - | - | - | - | - | - | - | - |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | - | - | - | - | - | - | - | - | - | - |

Table 9.2-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|---------------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| 424 South Columbia Avenue | Residential | 1 | 424 South Columbia Avenue | None | New build |
| 2106 East Main Street | Commercial | 1 | 2106 East Main Street | None | Bank |
| 2010 East Broad Street | Commercial | 1 | 2010 East Broad Street | None | Gymnasium, Convocation center |
| 202 South Columbia Avenue | Residential | 1 | 202 South Columbia Avenue | None | New build |
| 394 South Columbia Avenue | Residential | 1 | 394 South Columbia Avenue | None | New build |
| 407 Northview Drive | Residential | 1 | 407 Northview Drive | None | New build |
| 221 Ashbourne Road | Residential | 1 | 221 Ashbourne Road | None | New build |
| 261 South Columbia Avenue | Residential | 1 | 261 South Columbia Avenue | None | New build |
| 280 South Columbia Avenue | Residential | 1 | 280 South Columbia Avenue | None | New build |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| 2199 East Main Street | Residential/Commercial | 1 | 2199 East Main Street | None | Demolish, new build |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.2.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Bexley’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be

identified clearly using mapping techniques and technologies and for which the City of Bexley has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.2-1. City of Bexley Hazard Area Extent and Location Map-Flood

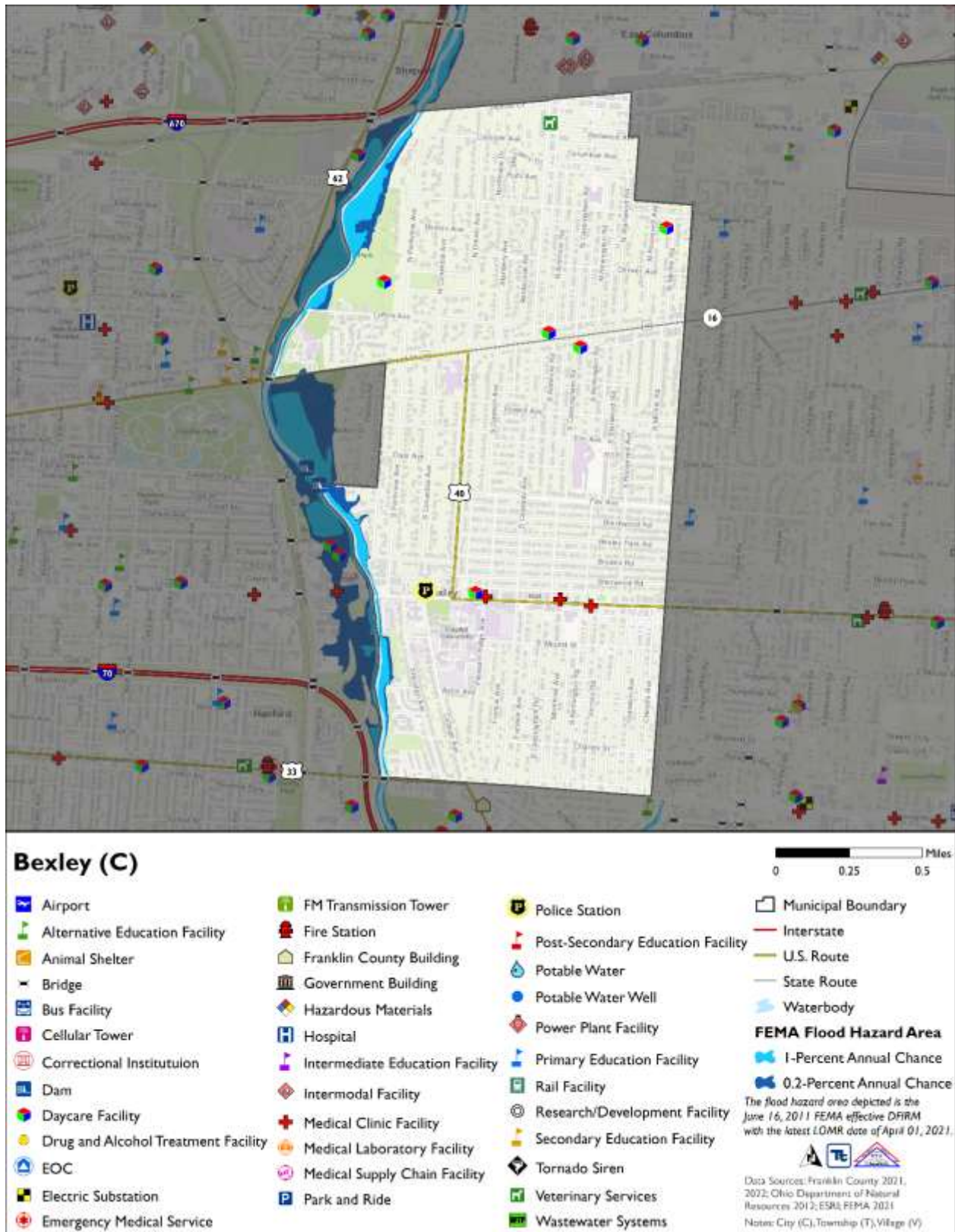


Figure 9.2-2. City of Bexley Hazard Area Extent and Location Map-Inland Erosion

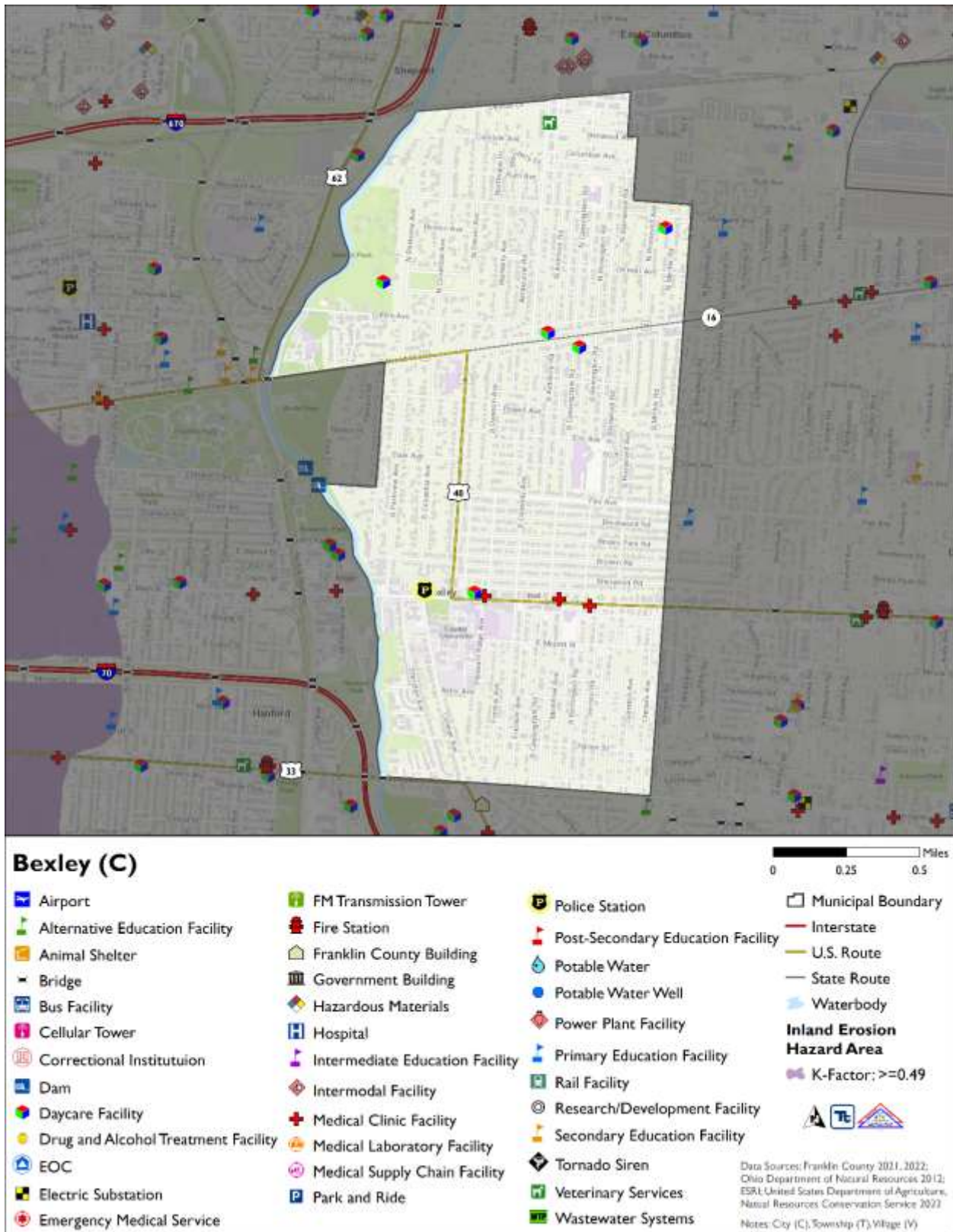
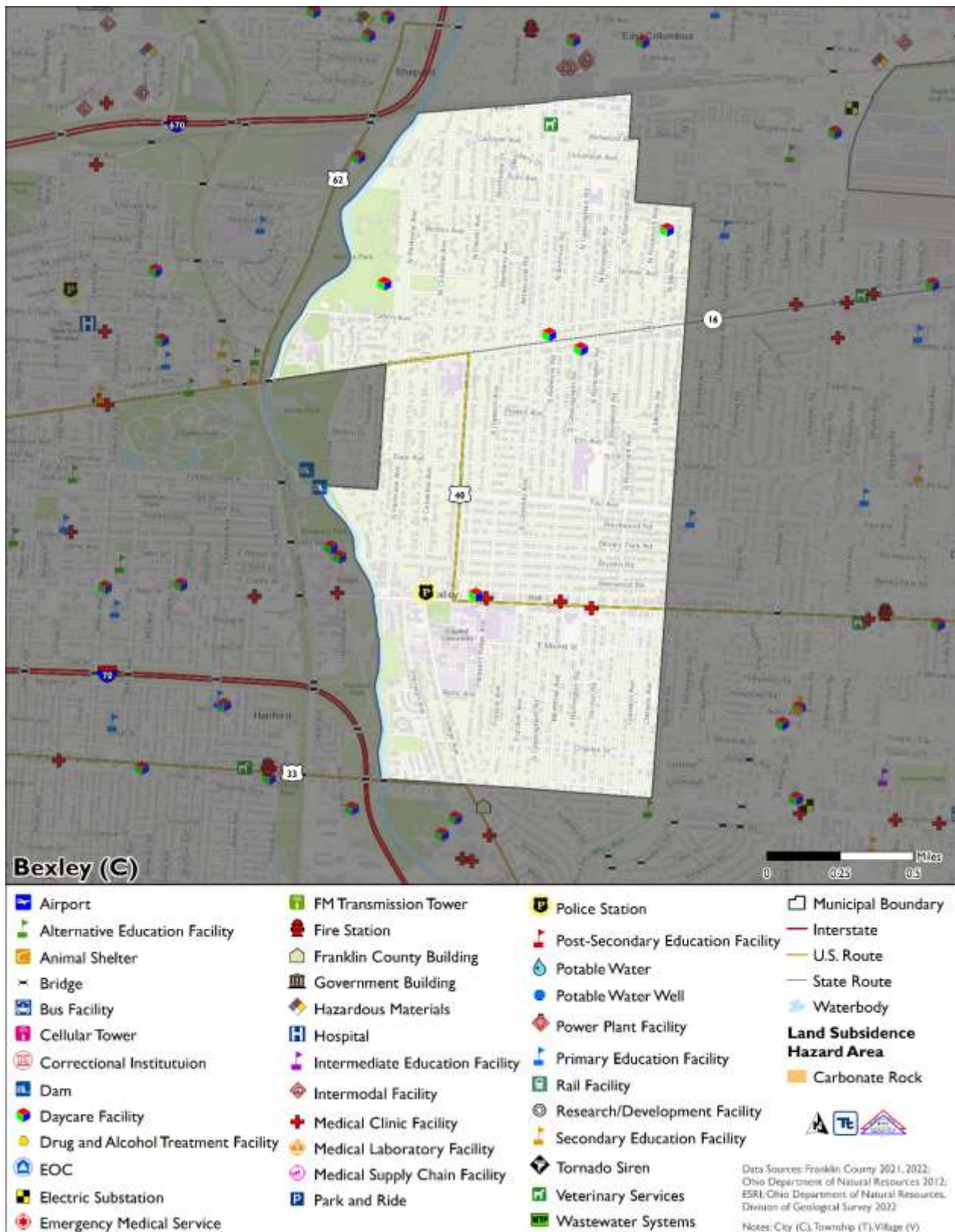


Figure 9.2-3. City of Bexley Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Bexley’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Bexley experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.2-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damage and Losses |
|--------------------|---|--------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | Trees and power lines down – debris clean-up completed in-house. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The City did not experience any notable damage or losses. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, Fort Bend County had 347,221 reported cases and 2,721 reported deaths. | The City did not experience any notable damage or losses. |

Hazard Ranking

This section provides the community-specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Bexley. The

City of Bexley reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Bexley agreed with all of the following hazard risk rankings.

Table 9.2-14. Hazard Ranking Input

| Hazard | Ranking |
|-----------------------|---------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.2-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Bexley

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| Inland Erosion (K-Factor: >= 0.49) Hazard Area | — | — |
| Subsidence (Karst/Carbonate Rock) Hazard Area | — | — |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | 2 | 2 |
| Delaware Dam Inundation (MH Breach) Hazard Area | 1 | 1 |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Bexley identified the following vulnerabilities within its community:

- The City sewer system becomes backed up during high-volume precipitation events, which is leading to flooded basements throughout the City.
- The City’s residents are unaware of how to prepare for and mitigate the hazards that affect Franklin County.
- The City currently does not have a system in place to identify socially vulnerable populations in the municipality. The City has determined that many residents that fall within this category do not have technology in place that allows them to receive mass notifications from the City. This makes it difficult to reach out and provide necessary goods and services to them before, during or after a hazard event.
- Private residential houses contribute large amounts of groundwater into the sanitary system. Illegal stormwater connections through downspouts, floor drains, sump pumps and yard drains overcome the capacity of the sanitary system, causing discharge into residents’ homes. This hazard covers the 2.5 square miles of the City of Bexley. Bexley’s high-water table does contribute to the problem.
- The City of Bexley has three repetitive loss properties. Many of these structures were built with limited flood design standards. These properties require mitigation to prevent future loss of life and property damage.
- The City of Bexley does not have a disaster debris management plan to establish guidelines for managing debris from disasters.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.2.7 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.2-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|--------------------|---|--|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Research and determine cause of overall flooding in Bexley. (100,000/ 1 year) | Service Department | No Progress | No | - | - |
| Seek funding to address core problems of flooding with permanent solutions | Service Department | No Progress | Yes | The City will complete several plans and projects to address this problem. Refer to Table 9.2-18 for these actions (001, 004, and 005). | Water and Sewer Department, Service Department |
| Seek funding for repetitive loss structures to permanently reduce damage to these structures. (3 known properties est. at \$925,000 / 2 years) | Mayor's Office | No Progress | No | - | - |
| Seek funding for backup generators for critical public buildings. (10 buildings @ \$500,000 / 6 months) | Mayor's Office | No Progress | No | - | - |
| Seek funding for lightning detection and warning for city parks. (\$100,000 / 1 year) | Mayor's Office | No Progress | No | - | - |
| Work with Franklin County Emergency Management and Homeland Security to develop public educational outreach regarding all natural hazards and Franklin County's susceptibility to those hazards and make available on Bexley's website. (No costs, ongoing) | Mayor's Office | No Progress | Yes | The City will work with the County to implement an outreach program. Refer to Table 9.2-18 for this action (002). | Mayor's Office |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Bexley identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, the City of Bexley has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Bexley participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.2-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | - | - | X | - | - | X | - | - | X |
| Disease Outbreak | - | X | X | X | - | - | X | X | X | X |
| Drought | - | - | - | X | - | - | X | - | - | X |
| Earthquake | X | - | - | X | - | - | X | - | - | X |
| Extreme Temp | - | - | - | X | - | - | X | - | - | X |
| Flood | X | X | X | X | - | X | X | X | X | X |
| Geologic | X | X | X | X | - | - | X | X | X | X |
| Invasive Species | X | - | - | X | - | - | X | - | - | X |
| Severe Summer Weather | X | X | X | X | - | X | X | X | X | X |
| Severe Winter Weather | X | X | - | X | - | X | X | - | X | X |
| Tornado | X | - | - | X | - | - | X | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.2-18). Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Bexley will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.2-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|--|---|---|-----------|--------------------|--|---------------------------|---|-----------------|----------|---------------------|--------------|
| 2023-City of Bexley-001 | Upgrade Sewer System* | Problem: The City sewer system becomes backed up during high volume precipitation events, which is leading to flooded basements throughout the City. Solution: The City will seek funding to address core problems of sewer systems flooding by conducting a study to implement permanent solutions. | Flood, Severe Weather, Severe Winter Weather | 2 | Less than 5 years | City of Bexley, Community Improvement Corporation, Development Department | FMA, BRIC, HMGP | Reduces repetitive flooding after an intense precipitation event. | >\$100,000 | High | SIP | PP, SP |
| 2023-City of Bexley-002 | Public Education and Outreach | Problem: The City's residents are unaware of how to prepare for and mitigate the hazards that affect Franklin County. Solution: Work with Franklin County Emergency Management and Homeland Security to develop public educational outreach regarding all natural hazards and Franklin County's susceptibility to those hazards and make available on Bexley's website. (No costs, ongoing) | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Weather, Severe Winter Weather, Tornado | 4, 5 | 1 Year | City of Bexley, Franklin County Emergency Management and Homeland Security | City and County Budget | Educates the public on hazards that affect the County and instructs them on how to prepare. | <\$3,000 | High | EAP | PI |
| 2023-City of Bexley-003 | Develop Registry for At-Need Populations | Problem: The City currently does not have a system in place to identify at-need populations in the municipality. The City has determined that many residents that fall within this category do not have technology in place that allows them to receive mass notifications from the City. This makes it difficult to reach out and provide necessary goods and services to them before, during, or after a hazard event. | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Weather, Severe Winter Weather, Tornado | 4 | 1 Year | City of Bexley, Franklin County Emergency Management | City and County Budget | The at-need population will be better protected from hazards of concern. | \$5,000 | High | EAP | ES, PI |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|------------------------------------|---|---|-----------|--------------------|--------------------------------------|---------------------------|--|---|----------|---------------------|--------------|
| | | <p>Solution: The City will implement a system and registry that will contain contact information for the at-need population. This will include a name, phone number, and the best way to contact the person. The City will promote this system and encourage residents to sign up so they will be notified during an emergency. This will also allow the City to provide the residents with the necessary goods and services before, during, and after a hazard event.</p> | | | | | | | | | | |
| 2023-City of Bexley-004 | Inflow and Infiltration Reduction* | <p>Problem: Private residential houses contribute large amounts of groundwater into the sanitary system. Illegal stormwater connections through downspouts, floor drains, sump pumps and yard drains overcome the capacity of the sanitary system, causing discharge into residents' homes. This hazard covers the 2.5 square miles of the City of Bexley. Bexley's high-water table does contribute to the problem.</p> <p>Solution: The City will help residents participate in home inspections to identify cross connections between storm and sanitary systems. The City will provide grant money or loan options to help with remediation. This would allow the City to install sump pumps in residential homes, reducing the foundation drainage into the sanitary systems. Contractors will excavate the floor drain where the cross connection predominantly is located and re-route the foundation drain to a sump pit that would be discharged to the curb and gutter drain.</p> | Disease Outbreak, Flood, Geologic, and Severe Weather | 2,5,6 | Less than 5 Years | City of Bexley's Water & Sewer Dept. | Ohio EPA, CDBG, FMA, BRIC | Mitigating the amount of groundwater introduced into the sanitary system will reduce property damage to residential homes. | \$4,940,000 (1,300 homes in projected area X \$3,800 per sump pump installed) | High | SIP, NSP | SP, NR |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|---------------------------------|---|--|-----------|--------------------|------------------------------|---------------------------|---|--|----------|---------------------|--------------|
| | | Bexley's DFFO has highlighted areas of severity in a 2013 study. | | | | | | | | | | |
| 2023-City of Bexley-005 | Repetitive Loss Mitigation | <p>Problem: The City of Bexley has three repetitive loss (RL) properties. Many of these structures were built with limited flood design standards. These properties require mitigation to prevent future loss of life and property damage.</p> <p>Solution: The City will conduct outreach to the RL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, the City will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition, purchase, moving, or elevating of residential homes in the flood prone areas that experience frequent flooding (high risk areas).</p> | Flood, Severe Weather, Severe Winter Weather | 6 | Less than 5 years | RL Property Owners, Ohio EPA | FMA, HMGP, BRIC, CDBG | The City will experience fewer losses in relation to RL structures. | TBD after mitigation alternative is chosen | High | SIP | SP |
| 2023-City of Bexley-006 | Disaster Debris Management Plan | <p>Problem: The City of Bexley does not have a Disaster Debris Management Plan to establish guidelines for managing debris from disasters.</p> <p>Solution: The City will create a Disaster Debris Management Plan to establish procedures for managing disaster debris from the identified hazards of concerns and will integrate the current HMP.</p> | Dam/Levee, Earthquake, Flood, Geologic, Invasive Species, Severe Weather, Severe Winter Weather, Tornado | 1,4 | 1 Year | Bexley Administration | City Budget, HMGP | The City will be better prepared to handle debris from hazards. | \$2,000 | High | LPR | ES |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:
 CRS Community Rating System

Potential FEMA HMA Funding Sources:
 FMA Flood Mitigation Assistance Grant Program

Timeline:
 The time required for completion of the project upon implementation.

FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Cost:
 The estimated cost for implementation.

Benefits:
 A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- *Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and stormwater management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.2-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-------------------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-City of Bexley-001 | Upgrade Sewer System | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-City of Bexley-002 | Public Education and Outreach | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-City of Bexley-003 | Develop Registry for At-Need Populations | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-City of Bexley-004 | Inflow and Infiltration Reduction | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 12 | High |
| 2023-City of Bexley-005 | Repetitive Loss Mitigation | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 11 | High |
| 2023-City of Bexley-006 | Disaster Debris Management Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 12 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.3 BLENDON TOWNSHIP

This section presents the jurisdictional annex for Blendon Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Blendon Township participated in the planning process, an assessment of Blendon Township 's risk and vulnerability, the different capabilities used in Blendon Township, and an action plan that will be implemented to achieve a more resilient community.

9.3.1 Hazard Mitigation Planning Team

Blendon Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Blendon Township departments, including the Township Administrator. The Fire Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.3-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|--|
| Name/Title: | John N. Glamarco - Administrator | Name/Title: | Jim Welch - Trustee |
| Address: | 6350 S. Hempstead Road Westerville, OH | Address: | 6350 S. Hempstead Road Westerville, OH |
| Phone Number: | 614-882-1270 | Phone Number: | 614-882-1270 |
| Email: | - | Email: | Jim.welch@blendontwp.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | - | | |
| Address: | - | | |
| Phone Number: | - | | |
| Email: | - | | |
| Additional Contributors | | | |
| Name/Title | No additional contributors | | |
| Method of Participation: | | | |

9.3.2 Municipal Profile

Blendon Township is in the northeastern corner of Franklin County and is bordered by Sharon Township to the west, Mifflin Township to the south and Plain Township to the east. The City of Westerville is located in the western part of the Township and has annexed much of the western part of the Township. Columbus and Minerva Park have also annexed parts of the Township.

According to the American Community Survey, the 2021 population for Blendon Township was 10,073, a 11.07 percent increase from the 2010 Census population of 9,069. Data from the 2021 American Community Survey indicates that 7.5 percent of the population is 5 years of age or younger and 12.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.3.3 Jurisdictional Capability Assessment and Integration

Blendon Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities.
- Development and permitting capabilities.
- Administrative and technical capabilities.
- Fiscal capabilities.
- Education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Blendon Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Blendon Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.3-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|--|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Blendon Township – Zoning Resolution | Local | Zoning Board of Appeals |
| <i>How does this reduce risk?</i> Blendon Township adopted the 2006 International Building Code. | | | | |
| Zoning/Land Use Code | Yes | Blendon Township – Zoning Resolution | Local | Zoning Board of Appeals |
| <i>How does this reduce risk?</i> Blendon Township adopted a Zoning Resolution in 2012 to benefit the residents of the unincorporated Township. The Township Zoning supersedes and replaces the County Zoning in its entirety. The Zoning Resolution is provided to guide the understanding, application, and administration of Blendon Township Zoning Resolution by setting the purpose, and nature of zoning, the organization of the zoning resolution and the intent of the zoning districts. | | | | |
| Subdivision Ordinance | Yes | Blendon Township – Zoning Resolution – Article IV – Planned Development Procedures and Regulations | Local | Zoning Board of Appeals |
| <i>How does this reduce risk?</i> Article IV identifies the rules of application for Planned Development Regulations. These Rules outline the identification of uses, Permitted uses, procedures, development standards. Within this Article are the rules and regulations for Planned Residential Districts. Land and buildings in this district can be used only for residential development, home occupation, accessory uses, schools and parks, religious uses and commercial uses that normally services and are associated with residential developments. | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | Flood Damage Reduction Regulation | County | Franklin County Floodplain Administration |
| <i>How does this reduce risk?</i> It is the purpose of these regulations to promote the public health, safety, and general welfare, and to: <ul style="list-style-type: none"> • Protect human life and health • Minimize expenditure of public money for costly flood control projects • Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public • Minimize prolonged business interruptions • Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| <ul style="list-style-type: none"> Help maintain a stable tax base by providing for the proper use and development of areas of special flood hazard to protect property and minimize future flood blight areas Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions Minimize the impact of development on adjacent properties within and near flood prone areas Ensure that the flood storage and conveyance functions of the floodplain are maintained Minimize the impact of development on the natural, beneficial values of the floodplain Prevent floodplain uses that are either hazardous or environmentally incompatible Meet community participation requirements of the National Flood Insurance Program. | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | Yes | Franklin County Emergency Operations Plan | County | Franklin County EM&HS |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Blendon Community Plan | Local | Zoning Commission |
| <i>How does this reduce risk?</i> The Blendon Community Plan is a guide for future development in Blendon Township. The Plan includes recommendations for the community's future growth for new residential and business buildings. The plan highlights smart growth while maintaining its rural character. | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | Yes | Franklin County and Township Stormwater Management Program | County, Local | County Engineer Office |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Shoreline Management Plan | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Continuity of Operations Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | Yes | Franklin County Public Health Plan | County | Department of Public Health |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of Blendon Township to oversee and track development.

Table 9.3-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|----------------------|
| Do you issue development permits? • If yes, what department is responsible? | Yes | Toole and Associates |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | - |
| Do you have a buildable land inventory? • If yes, please describe | No | - |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Blendon Township and their current responsibilities that contribute to hazard mitigation.

Table 9.3-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|---------------------|---|
| Administrative Capability | | |
| Planning Board | Yes | Township Planning Board |
| Zoning Board of Adjustment | Yes | Zoning Board of Appeals consist of five (5) members appointed by Township Board of Trustees and is responsible administrative review, conditional use permits and variances. |
| Planning Department | Yes | Township |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | Yes | Blendon Township staff, along with help from the City of Westerville economic development team, work to promote the features and amenities of Blendon Township. In addition, many studies are commissioned to help guide us into the future. |
| Public Works/Highway Department | Yes | Blendon Township Service Department is responsible for road maintenance, storm sewer maintenance, snow removal, park maintenance, cemetery maintenance, street signs and a variety of other public service needs. The staff consists of a Service Director and two equipment operators. |
| Construction/Building/Code Enforcement Department | Yes | The Township |
| Emergency Management/Public Safety Department | Yes | Franklin County Emergency Management |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | No | - |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | NPDES |
| Mutual aid agreements | Yes | Franklin County Police Department |
| Human Resources Manual | No | - |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | Toole and Associates |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | Zoning Department |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to Blendon Township .

Table 9.3-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas, or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | No |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Blendon Township.

Table 9.3-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|--|------------------------|-------------------------|
| Public information officer or communications office | Yes | Chief of Police |
| Personnel skilled or trained in website development | Yes | Township Administration |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | No | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | No | - |

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|----------------------------|
| Natural disaster/safety programs in place for schools | Yes | Township Police Department |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | No | - |

Community Classifications

The table below summarizes classifications for community programs available to Blendon Township .

Table 9.3-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.3-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|---------|--|
| Tornado | Moderate |

9.3.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the national Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Township of Blendon.

Table 9.3-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|---------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Blendon (Twp) | NR | NR | NR | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

Flood Vulnerability Summary

The following table provides a summary of the NFIP program in Blendon Township.

Table 9.3-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | Executive Parkway |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | SD requirements are triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value). No determinations made recently. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? | No |

| NFIP Topic | Comments |
|--|---|
| <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | No |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Franklin County |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability) | N/A |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | N/A |
| What are the barriers to running an effective NFIP program in the community, if any? | N/A |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | N/A |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | Franklin County Flood Damage Prevention Ordinance |
| Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? | N/A |
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | No |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.3.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.3-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|---------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | - | - | - | - | - | - | - | - | - |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | - | - | - | - | - | - | - | - | - | - |

Table 9.3-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

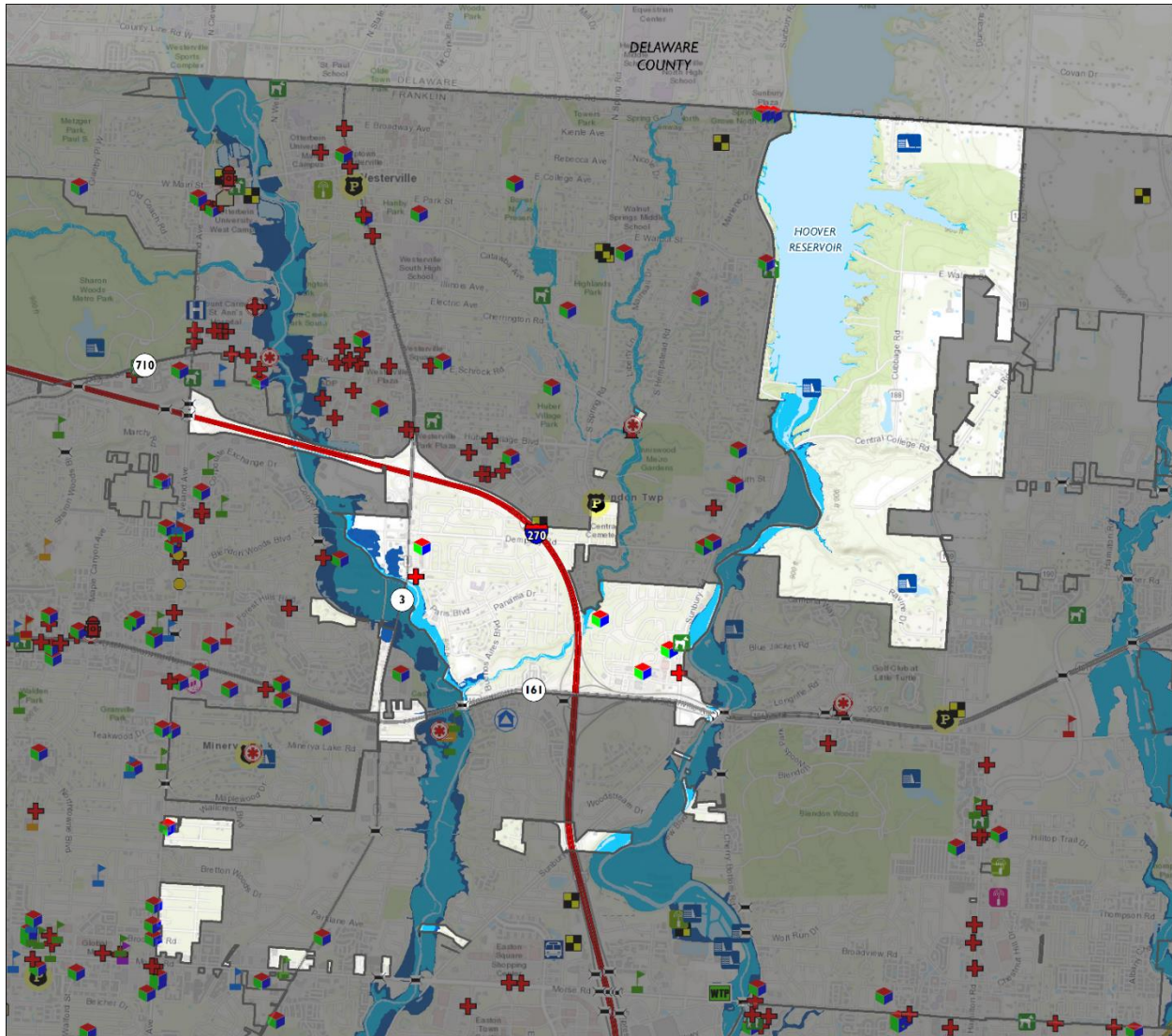
Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.3.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Blendon Township’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which Blendon Township has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.3-1. Blendon Township Hazard Area Extent and Location Map-Flood



Blendon (T)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service

- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems

0 0.5 1 Miles

- Municipal Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody

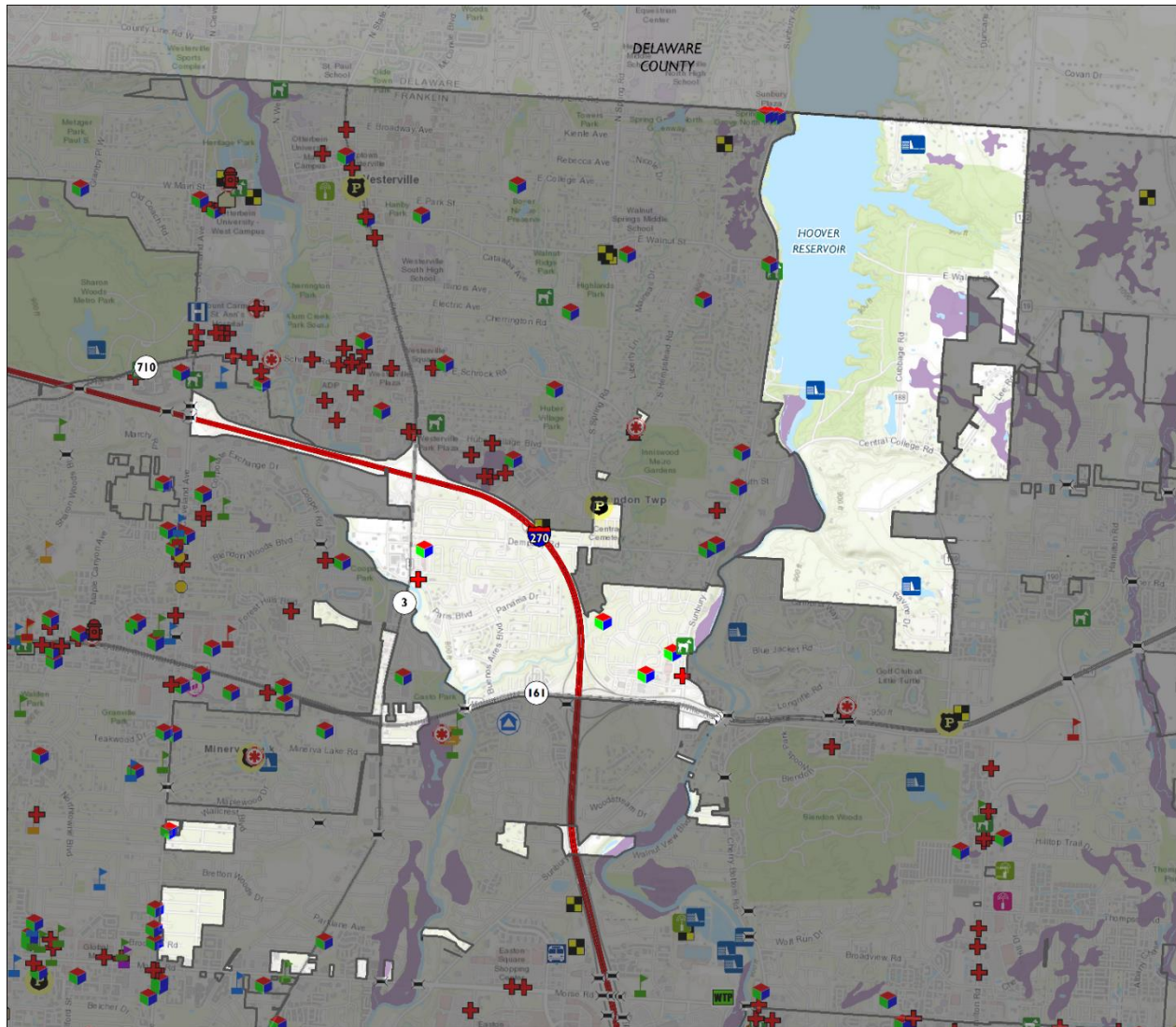
FEMA Flood Hazard Area

- 1-Percent Annual Chance
- 0.2-Percent Annual Chance

The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.

Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021
Notes: City (C), Township (T), Village (V)

Figure 9.3-2. Blendon Township Hazard Area Extent and Location Map-Inland Erosion



Blendon (T)

| | | | |
|--------------------------------|---------------------------------|-----------------------------------|---|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hospital | Power Plant Facility | Waterbody |
| Cellular Tower | Intermediate Education Facility | Primary Education Facility | Inland Erosion Hazard Area |
| Correctional Institution | Intermodal Facility | Rail Facility | K-Factor: >=0.49 |
| Dam | Medical Clinic Facility | Research/Development Facility | 0 0.5 1 Miles |
| Daycare Facility | Medical Laboratory Facility | Secondary Education Facility | |
| EOC | Medical Supply Chain Facility | Tornado Siren | <small>Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; United States Department of Agriculture, Natural Resources Conservation Service 2022.</small> |
| Electric Substation | Park and Ride | Veterinary Services | <small>Notes: City (C), Township (T), Village (V)</small> |
| Emergency Medical Service | Wastewater Systems | | |

Figure 9.3-3. Blendon Township Hazard Area Extent and Location Map-Land Subsidence

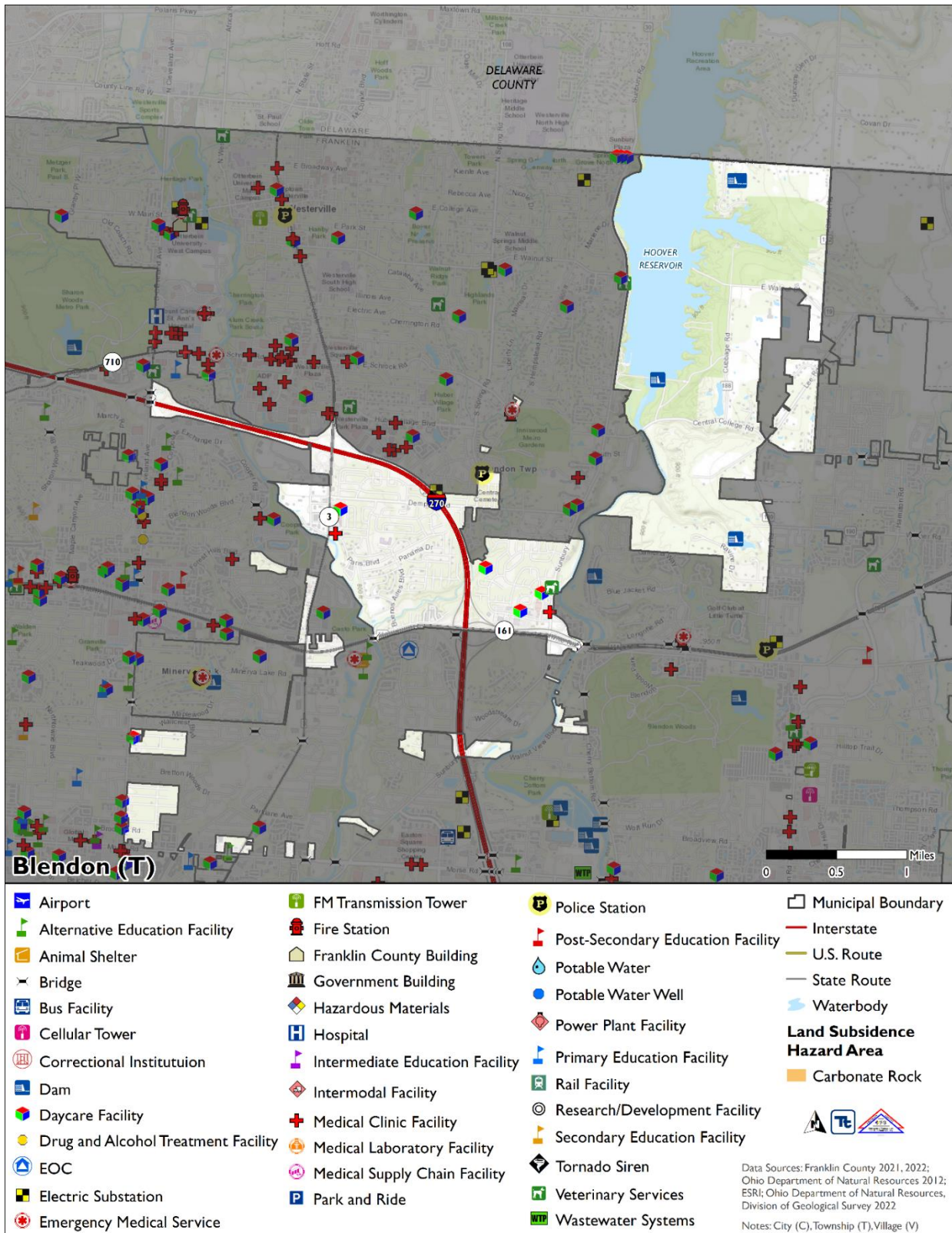
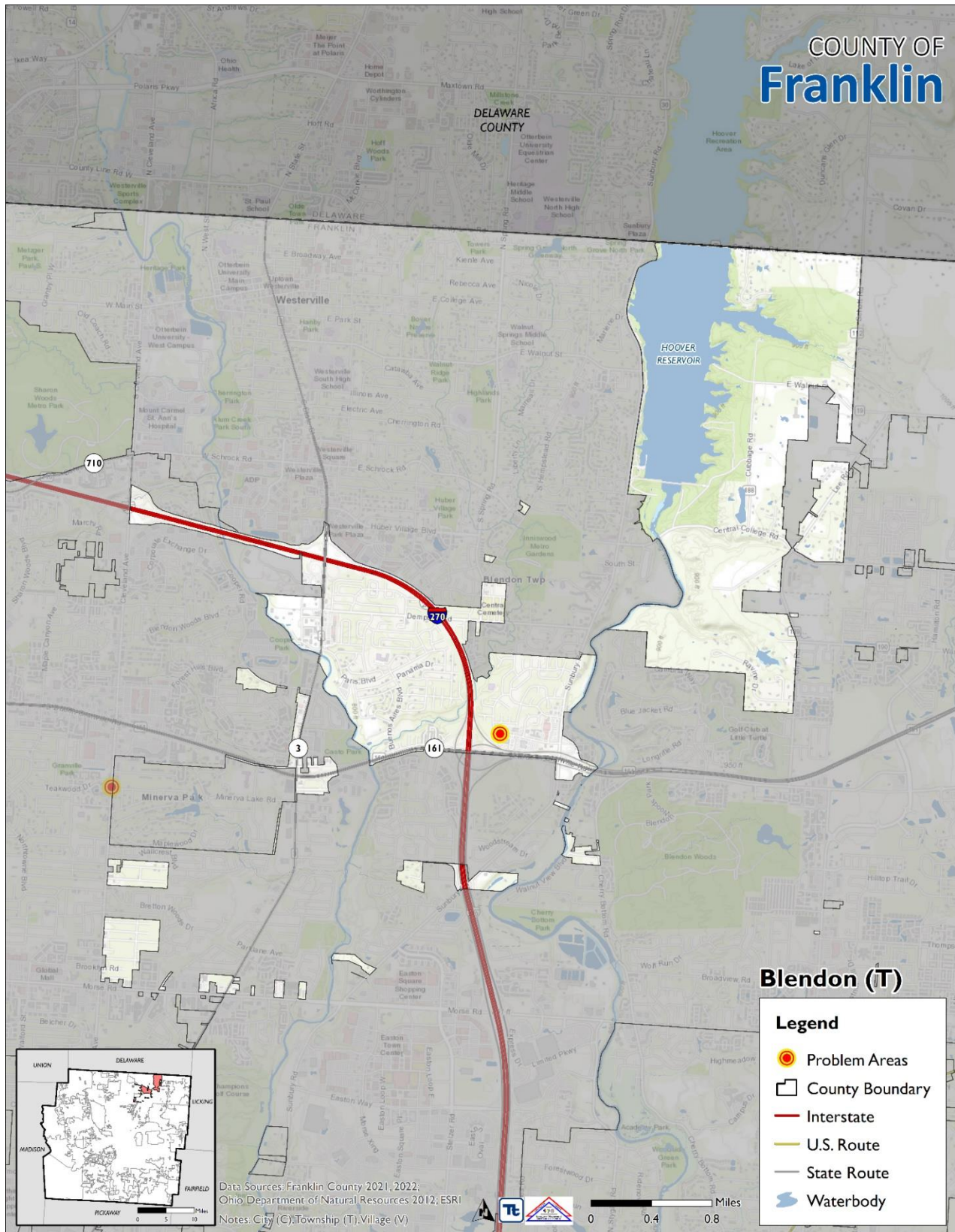


Figure 9.3-4. Blendon Township Problem Areas



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Blendon Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Bexley experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.3-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|------------------------|---|-----------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Township did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Township did not experience any notable damages or losses. |
| March 2020- present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Township did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for Blendon Township.

Blendon Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Blendon Township agreed with all of the following hazard risk rankings.

Table 9.3-14. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards area of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.3-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Bexley

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | 2 | 1 |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

In addition to critical facilities that are exposed to flooding, the following high hazard dams are located in or could impact Blendon Township:

- The Hoover dam is located within the 1% and 0.2% flood area

Identified Issues

In addition to the risk assessment, the Township of Blendon identified the following vulnerabilities within its community:

- The Township building code does not include building and site design standards to withstand strong winds from severe storms and severe winter weather.

- Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.
- Blendon Township does not have a certified Floodplain Administrator
- Blendon Township does not have a Disaster Debris Management Plan
- Hoover Dam is a critical facility located within the 1-percent floodplain. Hoover Dam dams the Big Walnut Creek to form the Hoover Memorial Reservoir and is a major water source for surrounding areas. Heavy rainfall, Severe Summer Weather events can impact the reservoir causing flooding to Blendon Township
- Hoover Dam is a high hazard dam located in Blendon Township. Failure of the dam would impact the Township and surrounding areas and potentially threaten life and property.

9.3.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and previously are presented in the Capability Assessment earlier in this annex.

Table 9.3-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|-------------------|--|---|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Install generators for critical infrastructure and emergency shelters | Township | Complete | No | - | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, Blendon Township identified the following mitigation efforts completed since the last HMP:

- Install generators for critical facilities and emergency shelters

Since the adoption of the County’s first HMP, Blendon Township has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

Blendon Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.3-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | X | - | X | X | X | X | - | - | X |
| Disease Outbreak | X | - | - | X | X | - | X | - | - | X |
| Drought | X | - | - | X | X | - | X | - | - | X |
| Earthquake | X | - | - | X | X | - | X | - | - | X |
| Extreme Temp | X | - | - | X | X | - | X | - | - | X |
| Flood | X | - | - | X | X | - | X | - | - | X |
| Geologic | X | - | - | X | X | - | X | - | - | X |
| Invasive Species | X | - | - | X | X | - | X | - | - | X |
| Severe Summer Weather | X | - | - | X | X | X | X | - | - | X |
| Severe Winter Weather | X | - | - | X | X | X | X | - | - | X |
| Tornado | X | - | - | X | X | X | X | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.3-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Blendon Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.3-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------------|--|--|--|-----------|--------------------|--|---------------------------|--|-----------------|----------|---------------------|--------------|
| 2023-Blendon Township-001 | Promote Site and Building Design Standards | Problem: The Township building code does not include building and site design standards to withstand strong winds from severe storms and severe winter weather Solution: The Township will update its building code to incorporate using natural environment features such as wind buffers and incorporate passive ventilation in building and site design. | Severe Summer Weather, Severe Winter Weather, Tornado | 1,2 | 1 to 2 years | Blendon Township | HMGP, Local Funds | Reduce loss of property and potential loss of life due to storm events | Low | High | LPR | PP, PR |
| 2023-Blendon Township-002 | All-Hazards Education Campaign | Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township. Solution: The Township will Work with Franklin County EM&HS to provide residents of Washington Township with the necessary | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, | 2,4,5 | 1 to 2 years | Franklin County EM&HS, Pleasant Township | Local Budget | Increase awareness of potential hazard risks, reduce loss of life and property | Low | High | EAP | PI, ES |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------------|---|---|--|-----------|--------------------|--|---------------------------|--|-----------------|----------|---------------------|--------------|
| | | information to protect themselves and understand the threats of all hazards. | Severe Summer Weather, Severe Winter Weather, Tornadoes | | | | | | | | | |
| 2023-Blendon Township-003 | Establish Floodplain Administrator | Problem: Blendon Township does not have a certified Floodplain Administrator Solution: Blendon Township will work with Franklin County to establish a Floodplain Administrator and maintain certification once selected. | Dam/Levee Failure, Flood | 1 | 1 to 2 years | Blendon Township, Franklin County | Local Budget | Reduce risk of loss of property in the floodplain | Low | High | LPR | PR |
| 2023-Blendon Township-004 | Develop Disaster Debris Management Plan | Problem: Blendon Township does not have a Disaster Debris Management Plan Solution: Blendon Township Zoning and Planning Department will develop a Disaster Debris Management Plan that will identify the procedure, guidelines and responsible parties for the beginning phases of disaster debris management | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, | 1,2 | 1 to 3 years | Blendon Township Zoning, Planning Department | Local Budget | Reduce risk of loss of property, reduce stormwater overflow and build up | Low | High | LPR | PR |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------------|--------------------------------------|--|---------------------------|-----------|--------------------|---|--|---|-------------------------------|----------|---------------------|--------------|
| | | | Tornadoes | | | | | | | | | |
| 2023-Blendon Township-005 | Critical Facilities Flood Protection | <p>Problem: Hoover Dam is a critical facility located within the 1-percent floodplain. Hoover Dam dams the Big Walnut Creek to form the Hoover Memorial Reservoir and is a major water source for surrounding areas. Heavy rainfall, Severe Summer Weather events can impact the reservoir causing flooding to Blendon Township</p> <p>Solution: Blendon Township will work with Franklin County Engineers to conduct a feasibility assessment to determine what additional flood protection measures are needed at the reservoir to protect it to the 500-year flood level.</p> | Dam/Levee Failure | 6 | Within 5 years | Blendon Township, Franklin County Engineers | FEMA HMGP and PDM, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Local budget | Ensure continuity of operations, facilities protected from flood damage | TBD by feasibility assessment | High | SIP | PP |
| 2023-Blendon Township-006 | Hoover Dam Emergency Planning | <p>Problem: Hoover Dam is a high hazard dam located in Blendon Township. Failure of the dam would impact the Township and surrounding areas and</p> | Dam/Levee Failure, Flood | 1,2,3,4 | Within 2 years | Blendon Township, Franklin County, City of Columbus | HHPD, Local Budget, Franklin County | Better emergency planning and partnership with neighbors | Low | High | LPR | ES |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------------|---------------------------------|---|---------------------------|-----------|--------------------|--|---|--|--------------------------|----------|---------------------|--------------|
| | | potentially threaten life and property. Solution: Blendon Township will work with Franklin County and the City of Columbus to gather information on dam failure inundation zones, collaborate for dam failure warning systems, and coordinate emergency planning. | | | | | | | | | | |
| 2023-Blendon Township-007 | Repetitive Loss Area Mitigation | Problem: Portions of the Township experienced repetitive flooding. Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | Flood | 6 | 4 years | Blendon Township, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria or prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.3-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|---------------------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Blendon Township-001 | Promote Site and Building Design Standards | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 | High |
| 2023-Blendon Township-002 | All-Hazards Education Campaign | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 | High |
| 2023-Blendon Township-003 | Establish Floodplain Administrator | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 | High |

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|---------------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Blendon Township-004 | Develop Disaster Debris Management Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 | High |
| 2023-Blendon Township-005 | Critical Facilities Flood Protection | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 10 | High |
| 2023-Blendon Township-006 | Hoover Dam Emergency Planning | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-Blendon Township-007 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.4 VILLAGE OF BRICE

The Village of Brice did not participate in the 2023 update of the Franklin County HMP. If the Village chooses to participate in the future, this annex will be updated accordingly, and the Village will follow the linkage procedures as outlined in Appendix H (Linkage Procedures).

9.4.1 Hazard Mitigation Planning Team

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.4-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|-----------------------------------|----------------------------|---|
| Name/Title: | John Mathys - Mayor | Name/Title: | - |
| Address: | 5990 Columbus Street, Brice, Ohio | Address: | - |
| Phone Number: | (614) 864-8591 | Phone Number: | - |
| Email: | mayor@briceohio.com | Email: | - |
| NFIP Floodplain Administrator | | | |
| Name/Title: | - | | |
| Address: | - | | |
| Phone Number: | - | | |
| Email: | - | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.4.2 Municipal Profile

Brice Village is along the eastern side of Franklin County and is surrounded by Truro Township and is roughly 11 miles from Columbus. The Village has a total area of .10 square miles and is all land.

According to the American Community Survey, the 2021 population for Brice Village was 185, a 62.28 percent increase from the 2010 Census population of 114. Data from the 2020 U.S. Census indicate that 11.9 percent of the population is 5 years of age or younger and 19.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.4.3 Jurisdictional Capability Assessment and Integration

The Village of Brice performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for

hazard mitigation planning. The jurisdictional assessment addresses the following types of Village capabilities:

- Planning, legal and regulatory capabilities.
- Development and permitting capabilities.
- Administrative and technical capabilities.
- Fiscal capabilities.
- Education and outreach capabilities.
- Classification under various community mitigation programs.
- Adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Village of Brice to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Brice and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.4-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Local Zoning Code | Local | Zoning Department |
| <i>How does this reduce risk?</i> The Village of Brice adopted the Franklin County Building Code. | | | | |
| Zoning/Land Use Code | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Subdivision Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Real Estate Disclosure <i>How does this reduce risk?</i> | No | - | - | - |
| Growth Management <i>How does this reduce risk?</i> | No | - | - | - |
| Environmental Protection Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Flood Damage Prevention Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Wellhead Protection <i>How does this reduce risk?</i> | No | - | - | - |
| Emergency Management Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Change Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Capital Improvement Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Disaster Debris Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Floodplain Management or Watershed Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Stormwater Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Open Space Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Urban Water Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Habitat Conservation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Economic Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Shoreline Management Plan <i>How does this reduce risk?</i> | No | - | - | - |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Brice to oversee and track development.

Table 9.4-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|-----------------|
| Do you issue development permits? • If yes, what department is responsible? | No | Franklin County |
| If you do not issue development permits, what is your process for tracking new development? | N/A | |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | - |
| Do you have a buildable land inventory? • If yes, please describe | No | - |
| Describe the level of build-out in your jurisdiction. | N/A | |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Brice and their current responsibilities that contribute to hazard mitigation.

Table 9.4-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|---------------------|--|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | Yes | Village Zoning Officer is responsible issuing zoning permits |
| Planning Department | Yes | Building Department issues building permits |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | No | - |
| Construction/Building/Code Enforcement Department | No | - |
| Emergency Management/Public Safety Department | No | - |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | No | - |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | No | - |
| Mutual aid agreements | Yes | Mutual Aid with Franklin County |
| Human Resources Manual | No | - |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | Zoning Officer |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | Zoning Officer |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Surveyor(s) | No | - |
| Emergency Manager | Yes | Village of Brice Police |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to the Village of Brice.

Table 9.4-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | - |
| Capital improvements project funding | - |
| Authority to levy taxes for specific purposes | - |
| User fees for water, sewer, gas or electric service | - |
| Impact fees for homebuyers or developers of new development/homes | - |
| Stormwater utility fee | - |
| Incur debt through general obligation bonds | - |
| Incur debt through special tax bonds | - |
| Incur debt through private activity bonds | - |
| Withhold public expenditures in hazard-prone areas | - |
| Other federal or state Funding Programs | - |
| Open Space Acquisition funding programs | - |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | - |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Brice.

Table 9.4-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|----------|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | No | - |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | No | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | No | - |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | No | - |

Community Classifications

The table below summarizes classifications for community programs available to the Village of Brice.

Table 9.4-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.4-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.4.4 National Flood Insurance Program Compliance

The Village of Brice does not participate in the National Flood Insurance Program. Therefore, NFIP statistics and NFIP summary were not provided.

9.4.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development. Franklin County is responsible for issuing building permits.

Table 9.4-9. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | - | - | - | - | - | - | - | - | - |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | - | - | - | - | - | - | - | - | - | - |

Table 9.4-10. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| Not Applicable | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| Not Applicable | | | | | |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.4.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Village of Brice’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Village of Brice has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.4-1. Village of Brice Hazard Area Extent and Location Map-Flood

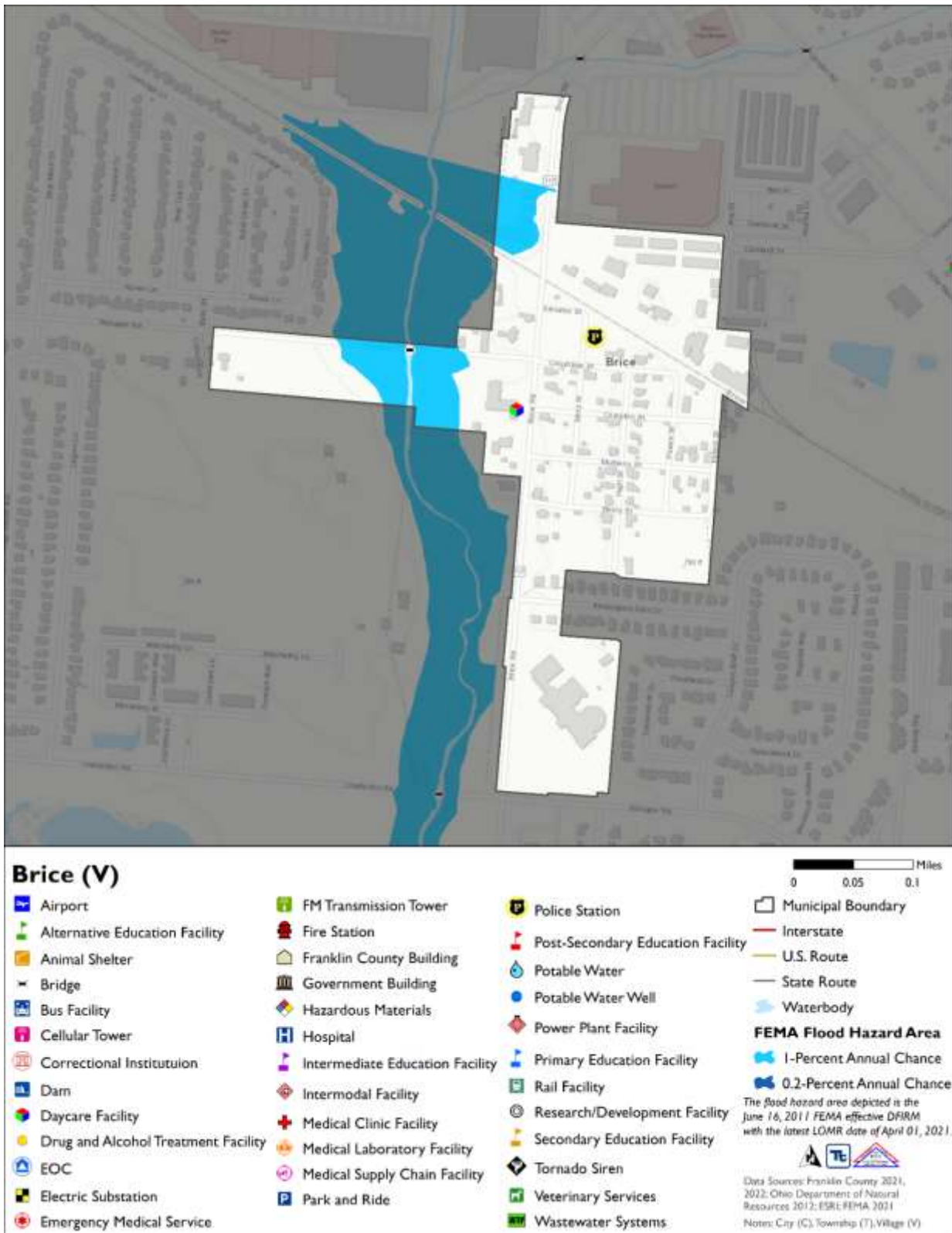


Figure 9.4-2. Village of Brice Hazard Area Extent and Location Map-Inland Erosion

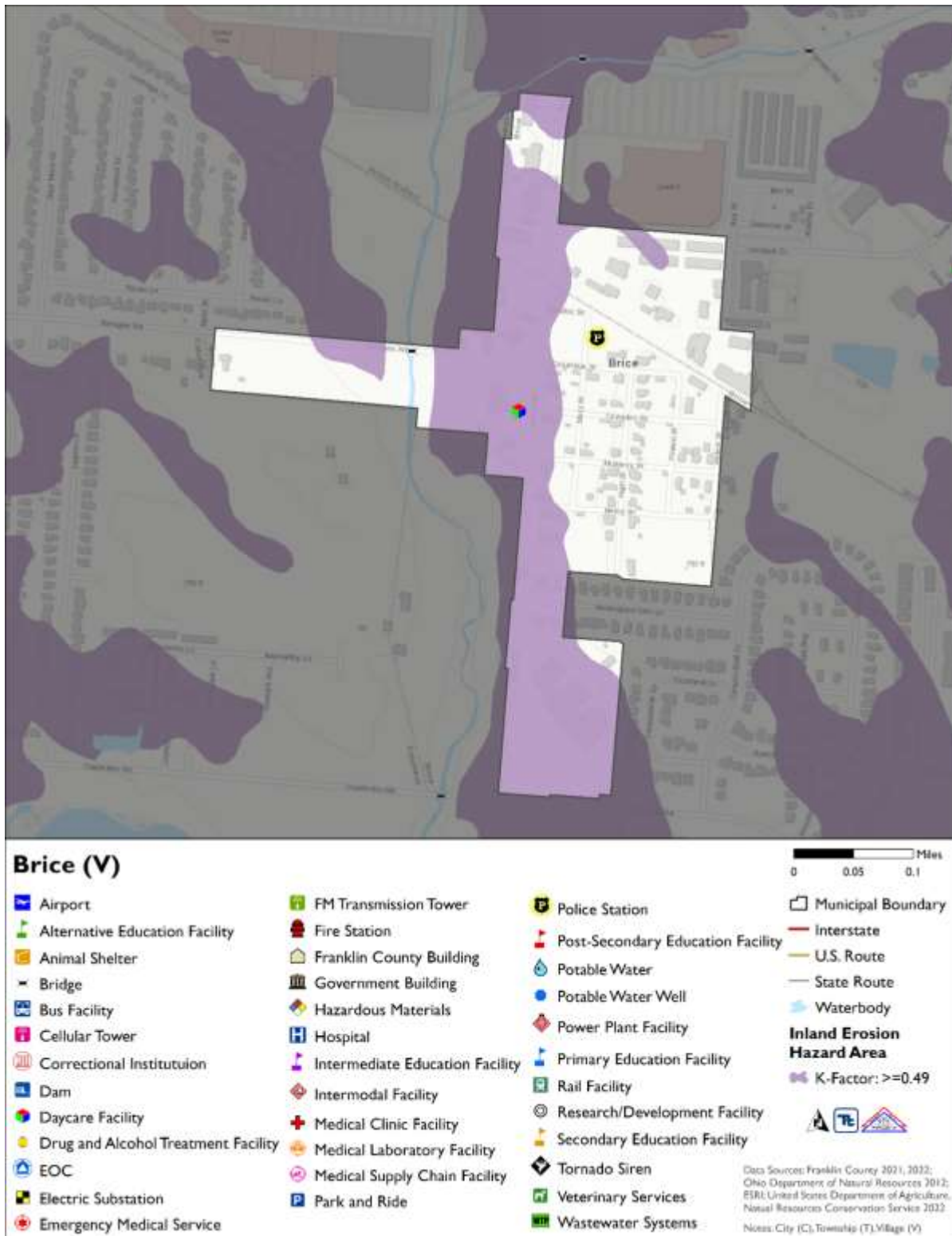
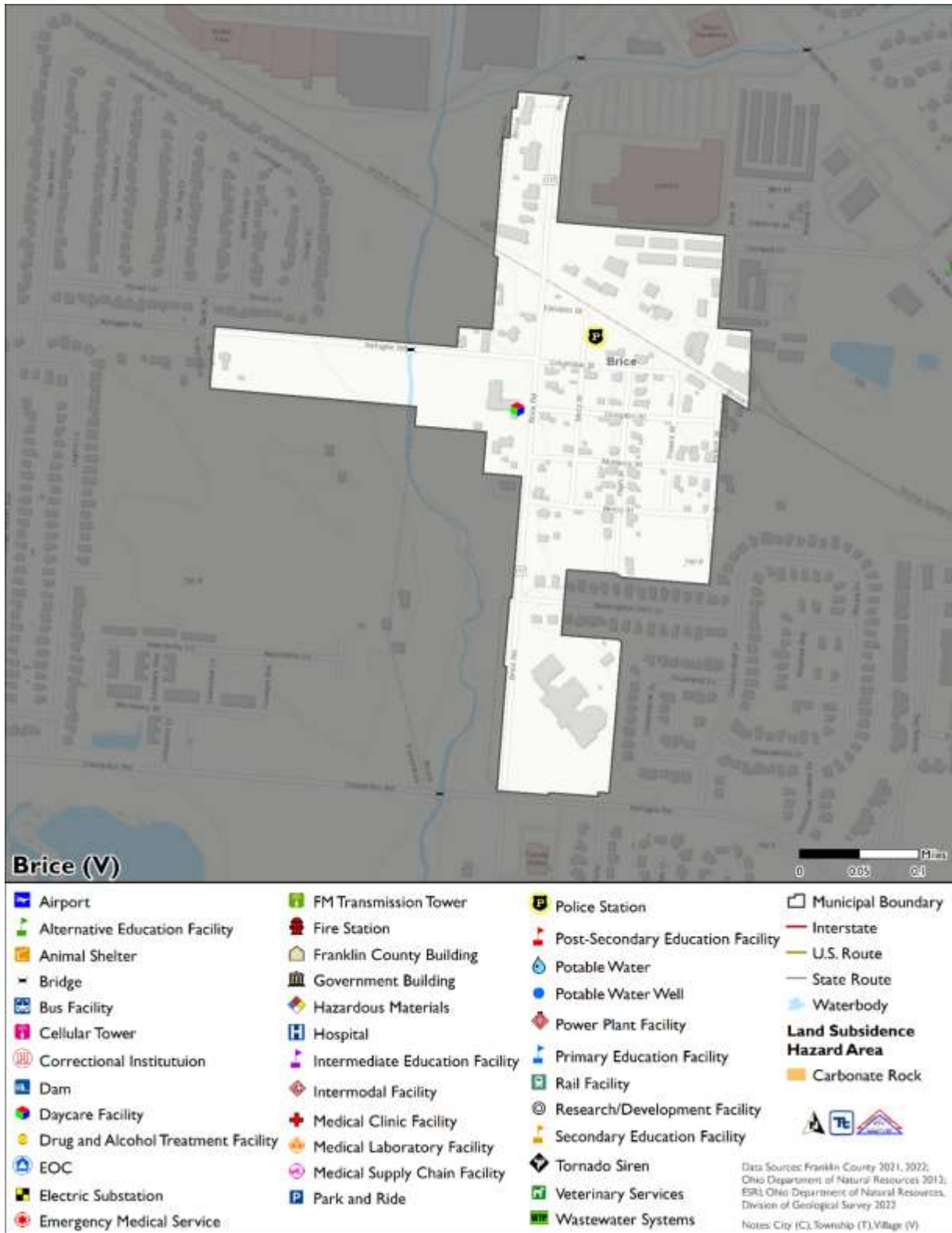


Figure 9.4-3. Village of Brice Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Village of Brice’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Bexley experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.4-11. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Village did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Village did not experience any notable damages or losses. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, Fort Bend County had 347,221 reported cases and 2,721 reported deaths. | The Village did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concerns based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Brice. The

Village of Brice reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.4-12. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.4-13. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Village of Brice

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| Inland Erosion (K-Factor: >= 0.49) Hazard Area | 1 | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the Villager of Brice identified the following vulnerabilities within its community:

- The Village does not have tornado siren efficient enough to reach all incorporated areas
- The Village does not have weather alert radios in the event of emergency
- Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.

- The Village of Brice does not have a Disaster Debris Management Plan to establish guidelines for managing debris from disasters.

9.4.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.4-14. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|---|--|---|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (10 facilities @ 1000 / 2 months) | Village Administration and Mayor's office | No Progress | - | - | - |
| Purchase Tornado Sirens through the Franklin County Emergency Management & Homeland Security for community. (3 @ 60,000 / 4 months) | Village Administration and Mayor's office | No Progress | - | - | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Village of Brice identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, the Village of Brice has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Brice participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures’ (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (FEMA, January 2013).

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.4-15. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|--|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES | |
| Dam/Levee | | | | | | | | | | | |
| Disease Outbreak | | | | | | | | | | | |
| Drought | | | | | | | | | | | |
| Earthquake | | | | | | | | | | | |
| Extreme Temp | | | | | | | | | | | |
| Flood | | | | | | | | | | | |
| Geologic | | | | | | | | | | | |
| Invasive Species | | | | | | | | | | | |
| Severe Summer Weather | | | | | | | | | | | |
| Severe Winter Weather | | | | | | | | | | | |
| Tornado | | | | | | | | | | | |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.4-15)
 Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Village of Brice will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.4-16. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|----------------------------|-------------------------------------|---------------------------|-----------|--------------------|---------------------------|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CRS Community Rating System
- FEMA Federal Emergency Management Agency
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria or prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.4-17. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------|--------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.5 BROWN TOWNSHIP

This section presents the jurisdictional annex for Brown Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Brown Township participated in the planning process, an assessment of Brown Township’s risk and vulnerability, the different capabilities used in Brown Township, and an action plan that will be implemented to achieve a more resilient community.

9.5.1 Hazard Mitigation Planning Team

Brown Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Brown Township departments, including Fiscal Officer and Trustee. The Fiscal Officer represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.5-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|-------------------------------|----------------------------|-------------------------------|
| Name/Title: | Becky Kent – Fiscal Officer | Name/Title: | Joe Martin – Trustee |
| Address: | 2491 Walker Rd., Hilliard, OH | Address: | 2491 Walker Rd., Hilliard, OH |
| Phone Number: | (614) 876-2133 | Phone Number: | (614) 876-2133 |
| Email: | becky_kent@BrownTwp.org | Email: | joe_martin@browntwp.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | - | | |
| Address: | - | | |
| Phone Number: | - | | |
| Email: | - | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.5.2 Municipal Profile

Brown Township is along the western side of Franklin County and is bordered by Washington and Norwich Townships to the east, Prairie Township to the south and Madison County to the west. A small part of the city of Hilliard is located in northeastern Brown Township, and part of Lake Darby lies in the Township's southwest. Columbus is 14.8 miles from the Township.

According to the American Community Survey, the 2021 population for the Township of Brown was 3,679, a 60.44 percent increase from the 2010 Census population of 2,293. Data from the 2021 American Community Survey indicates that 3.8 percent of the population is 5 years of age or younger and 14.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.5.3 Jurisdictional Capability Assessment and Integration

Brown Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events
-

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Brown Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Brown Township and provides information as to how each capability integrates hazard mitigation and risk reduction.



Table 9.5-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Franklin County Building Code | County | Franklin County Planning Division |
| <i>How does this reduce risk?</i> The Township adopted Franklin County Building Code. | | | | |
| Zoning/Land Use Code | Yes | Franklin County Zoning Resolution | County | Franklin County Zoning Division |
| <i>How does this reduce risk?</i> Brown Township utilizes Franklin County's Zoning Division to enforce zoning regulations and resolutions. The purpose of zoning it to promote public health, safety and general welfare throughout the Township. | | | | |
| Subdivision Ordinance | Yes | Subdivision Regulations | County | Franklin County Zoning Division |
| <i>How does this reduce risk?</i> The Township utilizes Franklin County's Zoning Division to enforce subdivisions. Any subdivision of land should not create lots less than the minimum size required for the zoning district which it is located and must be in accordance with the Subdivision Regulations of Franklin County. | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | Franklin County Zoning Resolution | County | Franklin County Zoning Division |
| <i>How does this reduce risk?</i> | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Comprehensive/Master Plan | Yes | Brown Township Comprehensive Plan | Local | Brown Township |
| <i>How does this reduce risk?</i> Brown Township Comprehensive Plan serves to move the township towards unified goals and interests which transcend the desires of any individual interests. The Plan aims to preserve the rural lifestyle and natural resources found within the community. | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Agriculture Plan | Yes | Agricultural Preservation Plan | Local | Brown Township |
| <i>How does this reduce risk?</i> The Brown Agricultural Preservation Plan is a land use document that defines suitable development which preserves agricultural land and open space while enhancing the health and sovereignty of the township. | | | | |
| Climate Action/ Resiliency/Sustainability Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Continuity of Operations Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of Brown Township to oversee and track development.

Table 9.5-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--|
| Do you issue development permits? • If yes, what department is responsible? | No | Franklin County Zoning Division issues permits for the Township. |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | - |
| Do you have a buildable land inventory? • If yes, please describe | No | - |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Brown Township and their current responsibilities that contribute to hazard mitigation.

Table 9.5-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | No | - |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | No | - |
| Construction/Building/Code Enforcement Department | No | - |
| Emergency Management/Public Safety Department | No | - |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | No | - |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | No | - |
| Mutual aid agreements | No | - |
| Human Resources Manual | No | - |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | County |
| Engineers or professionals trained in building or infrastructure construction practices | No | County |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to Brown Township.

Table 9.5-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | - |
| Capital improvements project funding | - |
| Authority to levy taxes for specific purposes | - |
| User fees for water, sewer, gas or electric service | - |
| Impact fees for homebuyers or developers of new development/homes | - |
| Stormwater utility fee | - |
| Incur debt through general obligation bonds | - |

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|---|
| Incur debt through special tax bonds | - |
| Incur debt through private activity bonds | - |
| Withhold public expenditures in hazard-prone areas | - |
| Other federal or state Funding Programs | - |
| Open Space Acquisition funding programs | - |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | - |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Brown Township.

Table 9.5-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|----------|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | No | - |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | No | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | No | - |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | No | - |

Community Classifications

The table below summarizes classifications for community programs available to Brown Township.

Table 9.5-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each

jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.5-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.5.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

9.5.5 NFIP Statistics

The following table summarizes the NFIP statistics for Brown Township.

Table 9.5-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|--------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Brown (Twp) | NR | NR | NR | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA’s HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Brown Township.

Table 9.5-10. NFIP Summary

| NFIP Topic | Comments |
|--|--|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | No |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | <p>SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director.</p> <p>According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value).</p> |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | N/A |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | N/A |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | N/A |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | - |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | N/A |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | N/A |

| NFIP Topic | Comments |
|---|--|
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | All development goes through Franklin County |
| What are the barriers to running an effective NFIP program in the community, if any? | N/A |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | N/A |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | N/A |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | N/A |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | N/A |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | N/A |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.5.6 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.5-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|---|---|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| Number of Building Permits for New Construction Issued Since the previous HMP* (total/within regulatory floodplain) | | | | | | | | | | |
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | Franklin County issues all permits for new construction within Brown Township | | | | | | | | | |
| Multi-Family | | | | | | | | | | |
| Other (commercial, mixed-use, etc.) | | | | | | | | | | |
| Total Permits Issued | | | | | | | | | | |

Table 9.5-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| All Development in the Township goes through Franklin County | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| No anticipated development within the next 5 years | | | | | |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.5.7 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Brown Township’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which Brown Township has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.5-1. Brown Township Hazard Area Extent and Location Map-Flood

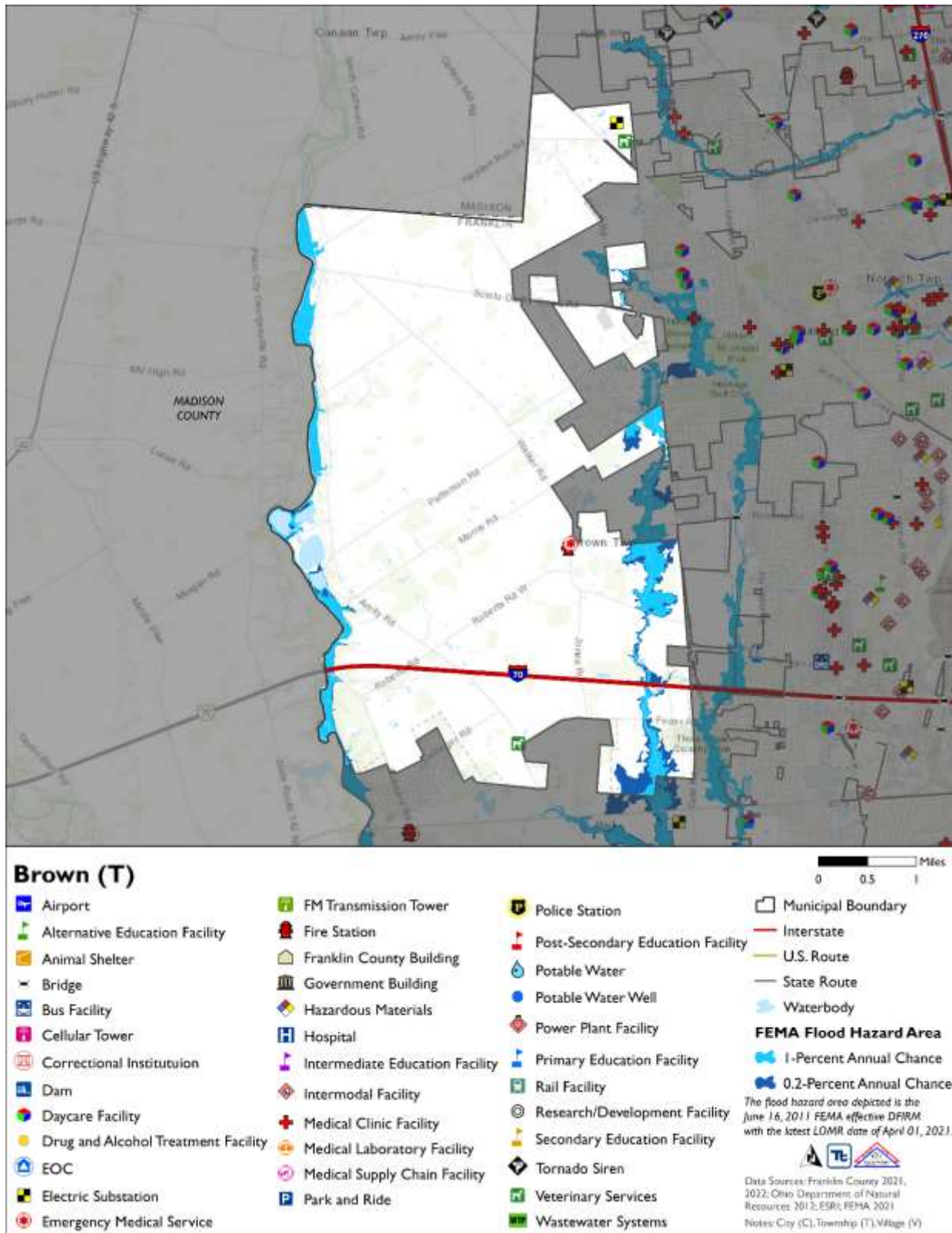


Figure 9.5-2. Brown Township Hazard Area Extent and Location Map-Inland Erosion

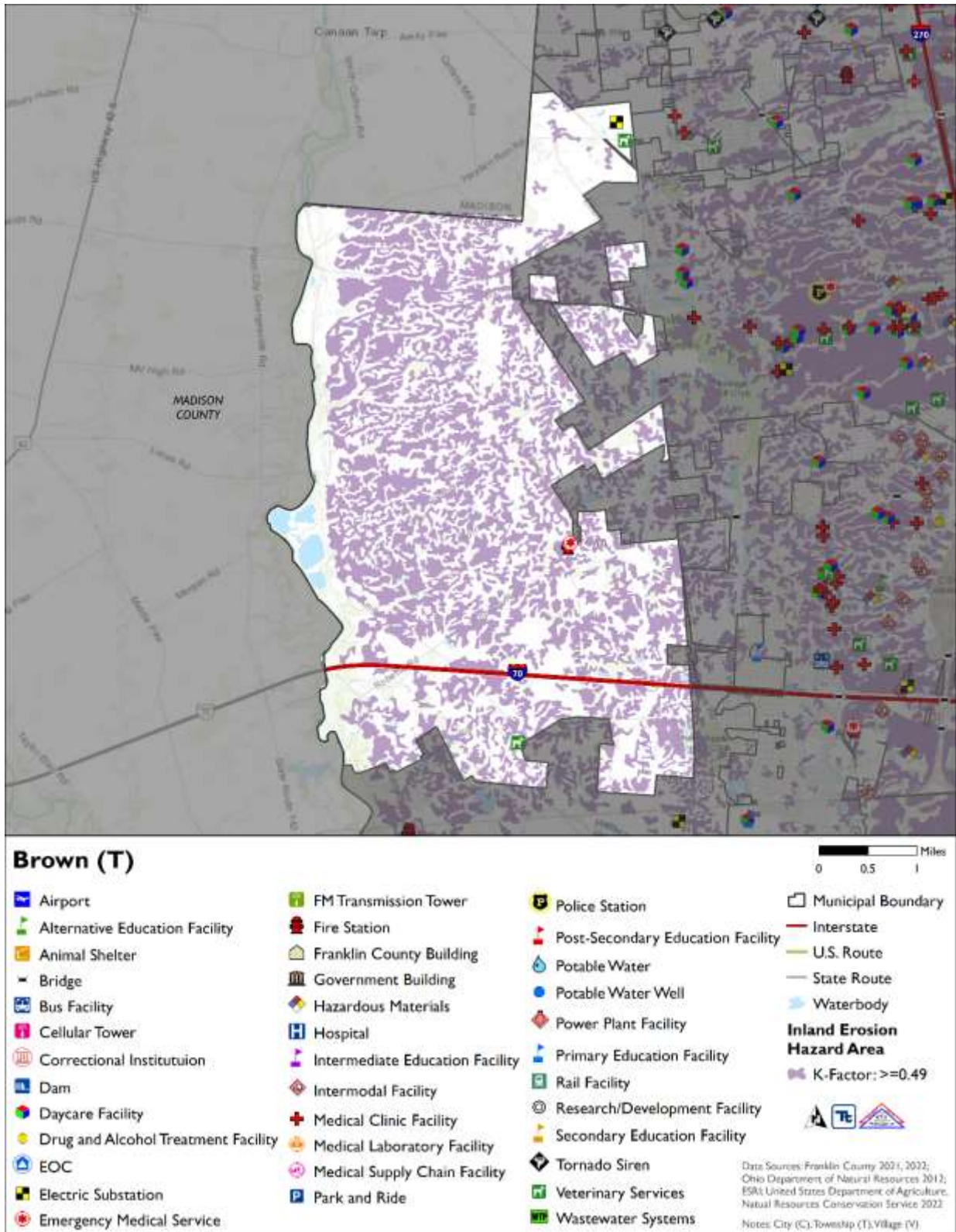
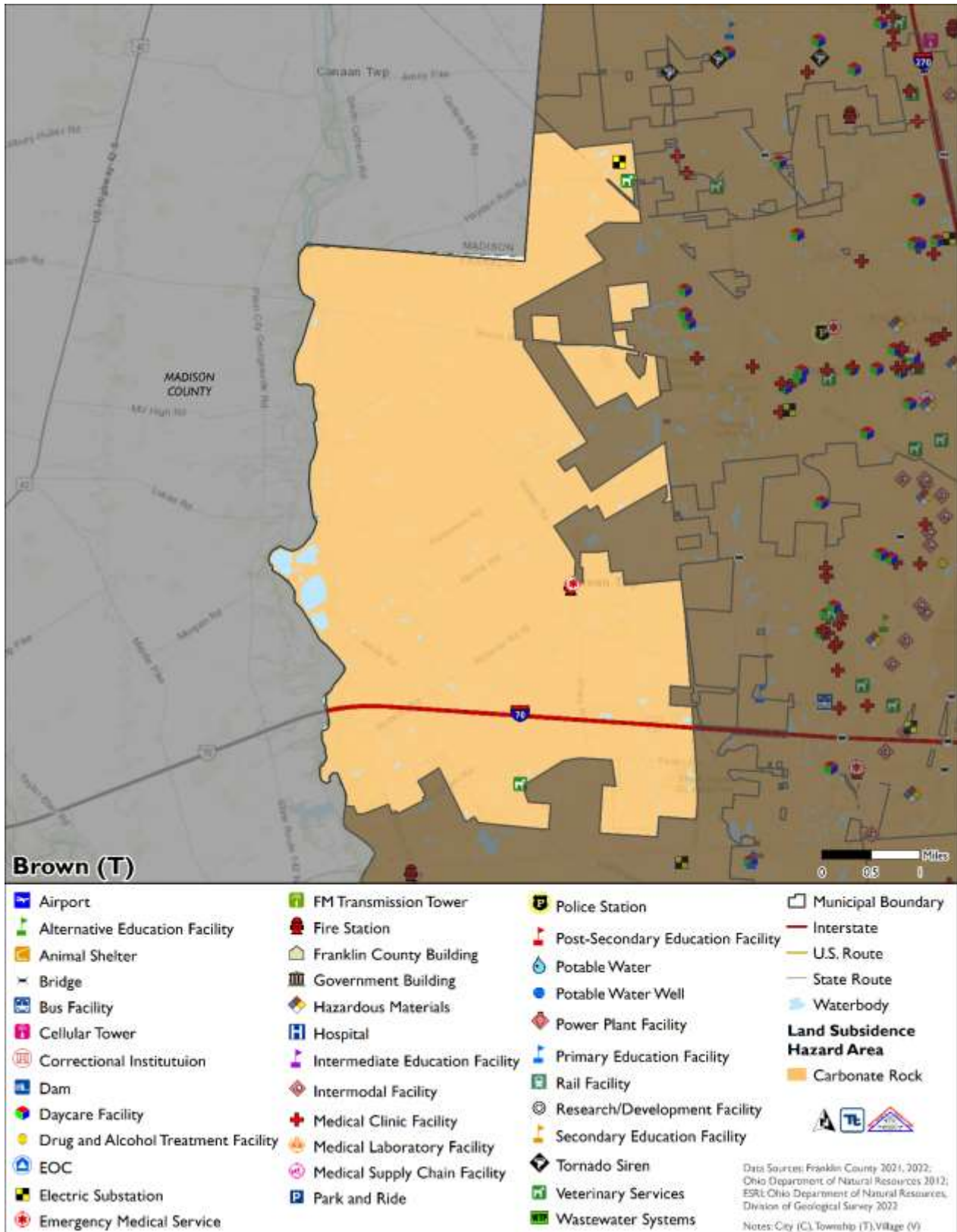


Figure 9.5-3. Brown Township Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Brown Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage Brown Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.5-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Township did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Township did not experience any notable damages or losses. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Township did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for Brown Township. Brown

Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Brown Township agreed with all of the following risk rankings.

Table 9.5-14. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee | Low |
| Disease Outbreak | Low |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Low |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.5-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Brown Township

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | - |
| Inland Erosion (K-Factor: >= 0.49) Hazard Area | 2 | 2 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 5 | 5 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the Township of Brown identified the following vulnerabilities within its community:

- Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.

- Property owners in the Township do not have access to technical assistance and public information including outreach projects and technical information.
- The Township does not have tornado siren efficient enough to reach all incorporated areas
- Davis, Walker, Morris, and Patterson roads all experience stormwater flooding during heavy rain events.
- The Township has not updated the Comprehensive Plan since 2005.

9.5.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.5-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|---------------------------|--|---|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding for public information including outreach projects and technical assistance to property owners. (15,000 / 1 year | Township Trustee's office | No Progress | Yes | Property owners in the Township do not have access to technical assistance and public information including outreach projects and technical information. | Brown Township Trustee's office, Franklin County EM&HS |
| Work with Franklin County Emergency Management and Homeland Security to develop public outreach regarding all natural hazards, and the county's susceptibility to those hazards, and make available on website. (No cost | Township Trustee's office | No Progress | Yes | Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township. | Franklin County EM&HS, Brown Township |
| In cooperation with Franklin County Emergency Management & Homeland Security, purchase tornado sirens to cover gaps in coverage in Brown Township. | Township Trustee's office | No Progress | Yes | The Township does not have tornado siren efficient enough to reach all incorporated areas | Brown Township Trustee's Office, Franklin County EM&HS |
| Study and mitigate stormwater flooding along Davis, Walker, Morris, and Patterson roads. | Township Trustee's office | No Progress | Yes | Davis, Walker, Morris, and Patterson roads all experience stormwater flooding during heavy rain events. | Brown Township Trustee's Office, Franklin County EM&HS |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, Brown Township identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, Brown Township has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

Brown Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table further demonstrate the wide-range of activities and mitigation measures selected.

Table 9.5-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | - | - | X | X | X | X | - | - | X |
| Disease Outbreak | X | - | - | X | X | X | X | - | - | X |
| Drought | X | - | - | X | X | X | X | - | - | X |
| Earthquake | X | - | - | X | X | X | X | - | - | X |
| Extreme Temp | X | - | - | X | X | X | X | - | - | X |
| Flood | X | - | - | X | X | X | X | - | - | X |
| Geologic | X | - | - | X | X | X | X | - | - | X |
| Invasive Species | X | - | - | X | X | X | X | - | - | X |
| Severe Summer Weather | X | - | - | X | X | X | X | - | - | X |
| Severe Winter Weather | X | - | - | X | X | X | X | - | - | X |
| Tornado | X | - | - | X | X | X | X | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.5-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Township of Brown will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.5-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|--|--|--|-----------|--------------------|--|---------------------------|--|-----------------|----------|---------------------|--------------|
| 2023-Brown Township-001 | All-Hazards Education Campaign | <p>Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.</p> <p>Solution: The Township will Work with Franklin County EM&HS to provide residents of Washington Township with the necessary information to protect themselves and understand the threats of all hazards.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 2,4,5 | 1 to 2 years | Franklin County EM&HS, Brown Township | Local Budget | Increase awareness of potential hazard risks, reduce loss of life and property | Low | High | EAP | PI, ES |
| 2023-Brown Township-002 | Public Information/ Technical Assistance Funding | <p>Problem: Property owners in the Township do not have access to technical assistance and public information including outreach projects and technical information.</p> <p>Solution: The Township will work with Franklin County to secure funding that will benefit home owners with technical assistance and outreach projects to better inform them of hazard risks.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 2,4,5 | 1 year | Brown Township Trustee's office, Franklin County EM&HS | Local budget, HMGP | Increase awareness of potential hazard risks, reduce loss of life and property for property owners | \$15,000 | High | EAP | PP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|-----------------------------------|---|--|-----------|--------------------|--|---------------------------|---|-----------------|----------|---------------------|--------------|
| 2023-Brown Township-003 | Purchase Tornado Sirens | Problem: The Township does not have tornado siren efficient enough to reach all incorporated areas Solution: The Township will work with the Franklin County Emergency Management and Homeland Security to purchase new tornado sirens that will cover the gaps in coverage within the Township | Tornado | 2,3,5 | 1 to 2 years | Brown Township Trustee's Office, Franklin County EM&HS | Local Budget | Increase warning time for tornado events | \$60,000 | High | EAP | ES |
| 2023-Brown Township-004 | Stormwater Management Flood Study | Problem: Davis, Walker, Morris, and Patterson roads all experience stormwater flooding during heavy rain events. Solution: The Township will work with Franklin County Emergency Management and Homeland Security to conduct a flood study on Davis, Walker, Morris and Patterson Roads to identify best mitigation practices to lessen the chances of flooding. | Flood | 1,2,3 | 1 to 2 years | Brown Township Trustees Office, Franklin County EM&HS | Local Budget | Reduce the risk of flooding on roadway infrastructure | Medium | High | LPR | PR |
| 2023-Brown Township-005 | Update Comprehensive Plan | Problem: The Township has not updated the Comprehensive Plan since 2005. Solution: The Township will update the Comprehensive Plan to integrate hazard mitigation practices | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 1 | 1 to 2 years | Brown Township | Local Budget | Increase growth and development through the Township | Low | High | LPR | PR |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|---------------------------------|--|---------------------------|-----------|--------------------|--|---|--|-----------------|---------------------------|---------------------|--------------|
| 2023-Brown Township-006 | Repetitive Loss Area Mitigation | Problem: Portions of the Township experienced repetitive flooding. Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | Flood | 6 | 4 years | Brown Township, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | High | > \$100,000 per structure | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.

- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.5-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-------------------------|-----------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Brown Township-001 | All-Hazards Education Campaign | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 13 | High |
| 2023-Brown Township-002 | Public Information Funding | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 13 | High |
| 2023-Brown Township-003 | Purchase Tornado Sirens | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 13 | High |
| 2023-Brown Township-004 | Stormwater Management Flood Study | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 10 | High |
| 2023-Brown Township-005 | Update Comprehensive Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 | High |
| 2023-Brown Township-006 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.6 CITY OF CANAL WINCHESTER

This section presents the jurisdictional annex for the City of Canal Winchester that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Canal Winchester participated in the planning process, an assessment of the City of Canal Winchester’s risk and vulnerability, the different capabilities used in the City of Canal Winchester, and an action plan that will be implemented to achieve a more resilient community.

9.6.1 Hazard Mitigation Planning Team

The City of Canal Winchester identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Canal Winchester departments, including Department of Public Services. The Director of Public Services represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.6-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|---|
| Name/Title: | Matt Peoples/ Director of Public Service | Name/Title: | Michael Ebert/ Mayor |
| Address: | 45 E. Waterloo Street, Canal Winchester, OH | Address: | 45 E. Waterloo Street, Canal Winchester, OH |
| Phone Number: | 614-837-7493 | Phone Number: | 614-837-7493 |
| Email: | mpeoples@canalwinchesterohio.gov | Email: | mebert@canalwinchesterohio.gov |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Andrew Moore | | |
| Address: | 45 E. Waterloo St., Canal Winchester, OH 43110 | | |
| Phone Number: | 614-837-6742 | | |
| Email: | amoore@canalwinchesterohio.gov | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.6.2 Municipal Profile

The City of Canal Winchester is one of the far suburbs that make up the Columbus metropolitan area. The City annexed part of Madison Township which nearly surrounds the city. Fairfield County borders the City to the east and parts of the City of Pickerington border the City to the north. Walnut Creek and Little Walnut Creek pass through the City boundaries.

According to the American Community Survey, the 2021 population for the City of Canal Winchester was 9,209, a 29.69 percent increase from the 2010 Census population of 7,101. Data from the 2021 American Community Survey indicates that 8.5 percent of the population is 5 years of age or younger and 19.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.6.3 Jurisdictional Capability Assessment and Integration

The City of Canal Winchester performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Canal Winchester to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Canal Winchester and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.6-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|--|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Canal Winchester Code – Chapter 13, 1986, 2006, 2017, 2019 | Local & State | Building |
| <i>How does this reduce risk?</i> Enforces administration and enforcement of the provisions of all laws, codes, ordinances, regulations, and orders applicable to construction to protect health and safety of residents. | | | | |
| Zoning/Land Use Code | Yes | Canal Winchester Code – Part 11, 2001, 2007, 2008, 2011, 2012, 2015, | Local | Planning & Zoning |
| <i>How does this reduce risk?</i> The Code promotes the health, safety, morals and the general welfare of the community through the regulation of the height, number of stories and size of buildings and other structures, the percentage of lots that may be occupied, the size of yards, courts and other open spaces, the densities of population and the location and use of buildings, structures and land for industries and businesses. | | | | |
| Subdivision Ordinance | Yes | Canal Winchester Code – Part 11, Chapters 1101 – 1130, 2008 | Local | Planning & Zoning |
| <i>How does this reduce risk?</i> Enforces and establishes a formal subdivision plat to ensure use of land and property is for the good of the City and puts forth the health and safety of residents and property owners. | | | | |
| Site Plan Ordinance | Yes | Canal Winchester Code – Part 11, Chapters 1181 – 1199, 2012 | Local | Planning & Zoning |
| <i>How does this reduce risk?</i> The Site plan review chapter provisions are intended to secure compliance with the requirements and standards set forth. | | | | |
| Stormwater Management Ordinance | Yes | Canal Winchester Code – Part 9, Chapter 941, 2010 | Local | Public Service |
| <i>How does this reduce risk?</i> Provides information on how to regulate and monitor stormwater management to protect people, property and life. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | Canal Winchester Code – Part 11, Chapter 1179, 2010 | Local | Planning & Zoning |
| <i>How does this reduce risk?</i> Provides information and regulations to prevent flooding. | | | | |
| Wellhead Protection | Yes | Leiberman Wellfield Source Water Assessment and Protection Plan - 2006 | Local | Public Service – Division of Water |
| This reduces risk by presenting workable strategies for preventing, detecting, and responding to ground water contamination within the drinking water source protection area. | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Emergency Management Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Change Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Other | - | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan <i>How does this reduce risk?</i> The Comprehensive Plan establishes a strategy to affect the immediate and long-range protection, enhancement, growth and development. | Yes | Canal Winchester and Violet Township CEDA Plan | Local | Development |
| Capital Improvement Plan This reduces risk by identifying hazard mitigation projects and planning for their implementation | Yes | Resolution 22-046 – 11-2022 | Local | Public Service |
| Disaster Debris Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Floodplain Management or Watershed Plan This reduces risk by providing regulations to reduce the flood risks to new buildings and infrastructure | Yes | Canal Winchester Code – Part 11, Chapter 1177, 2005 | Local | Planning & Zoning |
| Stormwater Management Plan this reduces risk by implementing ways to reduce runoff from rainwater that can cause flooding by overwhelming the City's stormwater systems | Yes | Stormwater Management Plan - 2016 | Local | Public Service |
| Open Space Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Urban Water Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Habitat Conservation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Economic Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Shoreline Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan This reduces risk by limiting access to hazard areas, guide growth to safe locations and provide efficient access for evacuation routing | Yes | Ordinance 21-057 - 2021 | Local | Public Service |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan This reduces risk by providing a guide for growth in the downtown area | Yes | Old Town Plan - 2017 | Local | Development |
| Other | - | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of the City of Canal Winchester to oversee and track development.

Table 9.6-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--------------------------|
| Do you issue development permits? • If yes, what department is responsible? | Yes | Planning & Zoning |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | Floodplain |
| Do you have a buildable land inventory? • If yes, please describe | Yes | Zoning and land use maps |
| Describe the level of build-out in your jurisdiction. | N/A | |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Canal Winchester and their current responsibilities that contribute to hazard mitigation.

Table 9.6-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|------------------------|--|
| Administrative Capability | | |
| Planning Board | Yes | <p>The Canal Winchester Planning and Zoning Commission shall have the responsibility to initiate amendments to the provisions of the zoning code and official zoning map and to review all proposed amendments of this zoning code and zoning map and to forward recommendations to Council.</p> <p>They also review all proposed development plans, and act upon applications for variances and conditional use permits in accordance with the zoning code. They administer the provisions of Canal Winchester's Subdivision Regulations in consideration of major subdivisions and make recommendations on platting to Council.</p> <p>Members:</p> <ul style="list-style-type: none"> • Joe Donahue - Chairman • Joe Wildenthaler - Vice Chair • Brad Richey - Secretary • Deborah McDonnell • Rick Deeds • Steve Palsgrove |
| Zoning Board of Adjustment | No | - |
| Planning Department | Yes | 3 Employees |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | Yes | Street Tree Advisory Board – 5 Members |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | Yes | 23 Employees |
| Construction/Building/Code Enforcement Department | Yes | 3 Employees |
| Emergency Management/Public Safety Department | No | - |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Contract with Franklin County EMA, subscription-based electronic notification |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Department of Public Service |
| Mutual aid agreements | Yes | Agreements in place with neighboring entities to for road maintenance and water and sewer services |
| Human Resources Manual | No | <p>Consider the following:</p> <p>Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?</p> |
| Other | - | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | Development Director, Planning & Zoning Administrator |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | Directors of Public Service, Construction Services |
| Planners or engineers with an understanding of natural hazards | Yes | Planning & Zoning Administrator |
| Staff with expertise or training in benefit/cost analysis | Yes | Finance Director |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | Director of Construction Services, Planning & Zoning Administrator |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | - | - |

Fiscal Capability

The table below summarizes financial resources available to the City of Canal Winchester.

Table 9.6-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | Yes |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | Yes |
| Withhold public expenditures in hazard-prone areas | Yes |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | Yes |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | - |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Canal Winchester.

Table 9.6-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|--|------------------------|--|
| Public information officer or communications office | Yes | Events & Communications Coordinator |
| Personnel skilled or trained in website development | Yes | Events & Communications Coordinator, Finance Director and Information Technology Coordinator are all proficient in maintaining our website |
| Hazard mitigation information available on your website | Yes | Legislation adopting Hazard Mitigation Plan is available through website |
| Social media for hazard mitigation education and outreach | Yes | City has a social media presence on Facebook, Twitter, and YouTube |
| Citizen boards or commissions that address issues related to hazard mitigation | Yes | Citizen commissions include Planning & Zoning Commission, Landmarks Commission & Street Tree Advisory Board |

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|---|
| Warning systems for hazard events | Yes | City has FCEMA tornado sirens, has an alert subscription system through our website, and promotes the ALERT Franklin County program |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | Yes | City has FCEMA tornado sirens, has an alert subscription system through our website, and promotes the ALERT Franklin County program |

Community Classifications

The table below summarizes classifications for community programs available to the City of Canal Winchester.

Table 9.6-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | 03/3Y | 6-29-20 |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | - | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.6-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|---------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temperature | Moderate |
| Flood | Moderate |
| Geologic | Moderate |

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.6.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes the NFIP statistics for the City of Canal Winchester.

Table 9.6-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|----------------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Canal Winchester (C) | 7 | 7 | \$8,694.95 | NR | NR |

Sources: *a* BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Canal Winchester.

Table 9.6-10. NFIP Summary

| NFIP Topic | Comments |
|--|--|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | Undeveloped areas of woodlands and farm fields along Walnut Creek between Lithopolis Winchester Road, and Washington Street is prone to flooding during heavy rain events. |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No N/A |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | A substantial damage determination has not been done since the NFIP effective date for the community. However zoning section 1177.03(l) provides direction for substantial damage determination. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | None |

| NFIP Topic | Comments |
|---|---|
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why. | Yes |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Planning and Zoning Department |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | We provide floodplain development permitting, boundary determination letters, GIS educational tools, plan review, inspections and engineering services. Some in house and others third party services. |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Any reconstruction, rehabilitation, addition or other improvement to an existing structure in which the total cost equals or exceeds 50% of the market value before the start of construction for the improvement. |
| What are the barriers to running an effective NFIP program in the community, if any? | N/A |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | Undetermined |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | Zoning Code Section 1177. Most recent update was 4/4/2011. |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | There is a minimum freeboard requirement of 1.5' above BFE for residential and commercial construction. |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Yes. Site Plan Review is required for all development proposals. Typically, floodplain mitigation is reviewed with a no-rise certificate and placing fill within the developed area with compensatory storage is regulated. |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.6.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Franklin County EDP is responsible for issuing building permits for 1-, 2-, and 3-family structures in unincorporated areas and seven villages of Franklin County. These villages include Canal Winchester, Harrisburg, Lockbourne, Minerva Park, Riverlea, Urbancrest and Valleyview. Multi-family and commercial

building permits are through the applicable commercial building department. Generally, the State of Ohio, Department of Commerce, Division of Industrial Compliance is responsible for issuing commercial building permits in unincorporated areas; however, some townships have formed their own building departments or contract with other municipalities to provide this service in their township. Townships with commercial building departments include Blendon, Clinton, Franklin, Jefferson, and Prairie. The City of Groveport issues commercial building permits for Madison Township.

The tables below summarize the number of building permits issued for new construction and recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.6-11. Number of Building Permits for New Construction Since the Previous HMP

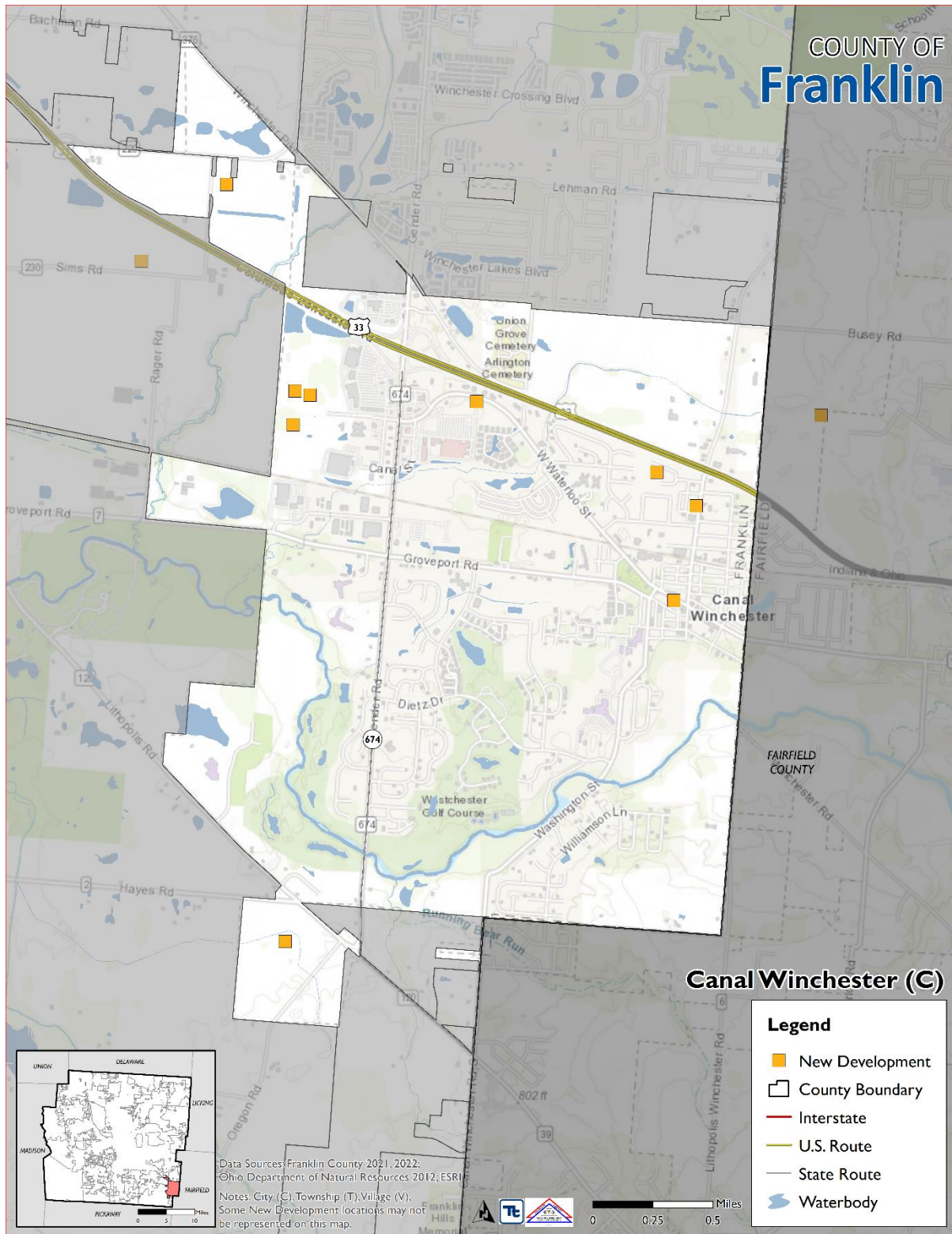
| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-----------|-------------|------------|-------------|------------|-------------|------------|-------------|-----------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 53 | 0 | 89 | 0 | 121 | 1 | 93 | 0 | 72 | 0 |
| Multi-Family | 6 | 0 | 6 | 0 | 12 | 0 | 5 | 0 | 0 | 0 |
| Other (commercial, mixed-use, etc.) | 6 | 0 | 8 | 2 | 7 | 2 | 5 | 1 | 7 | 2 |
| Total Permits Issued | 77 | 0 | 103 | 2 | 235 | 3 | 103 | 1 | 79 | 2 |

Table 9.6-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-------------------------------|----------------------|---|
| Recent Major Development from 2018 to Present | | | | | |
| Winchester Logistics (2019) | Industrial | 2 | PID 184-000532 & 184-003445 | Zone AE 1% SFHA | Filed for LOMR with FEMA to remove/relocated SFHA on property. |
| Tenby - BD33 (2021) | Industrial | 1 | PID 184-003570 | Zone AE 1% SFHA | Filed with FEMA to reclassify SFHA as shown |
| Canal Crossing (2020) | Industrial | 2 | PID 184-000879 & 184-003368 | Zone AE 1% SFHA | Filed for LOMR with FEMA to remove/relocate SFHA on property. |
| Evans Farm – Canal Pointe (2022) | Industrial | 2 | PID 042-0411700 & 042-0411600 | Zone A 1% SFHA | Once completed, filing with FEMA to establish elevations, and remove/relocate SFHA on property. |
| Turning Stone | Mixed Use | 75 | PID 184-003439 | Inland Erosion | Construction in progress |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| Winchester Crossing | Mixed Use | 4 | W. Waterloo St. | Inland Erosion | Anticipated within the next five years |
| Middletown Farms | Residential | 250 | Lithopolis Rd/Oregon Rd. | N/A | Anticipated within the next five years |
| Old Waterloo Redevelopment | Mixed Use | 20 | Hill Rd. | N/A | Anticipated within the next five years |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

Figure 9.6-1. City of Canal Winchester New Development

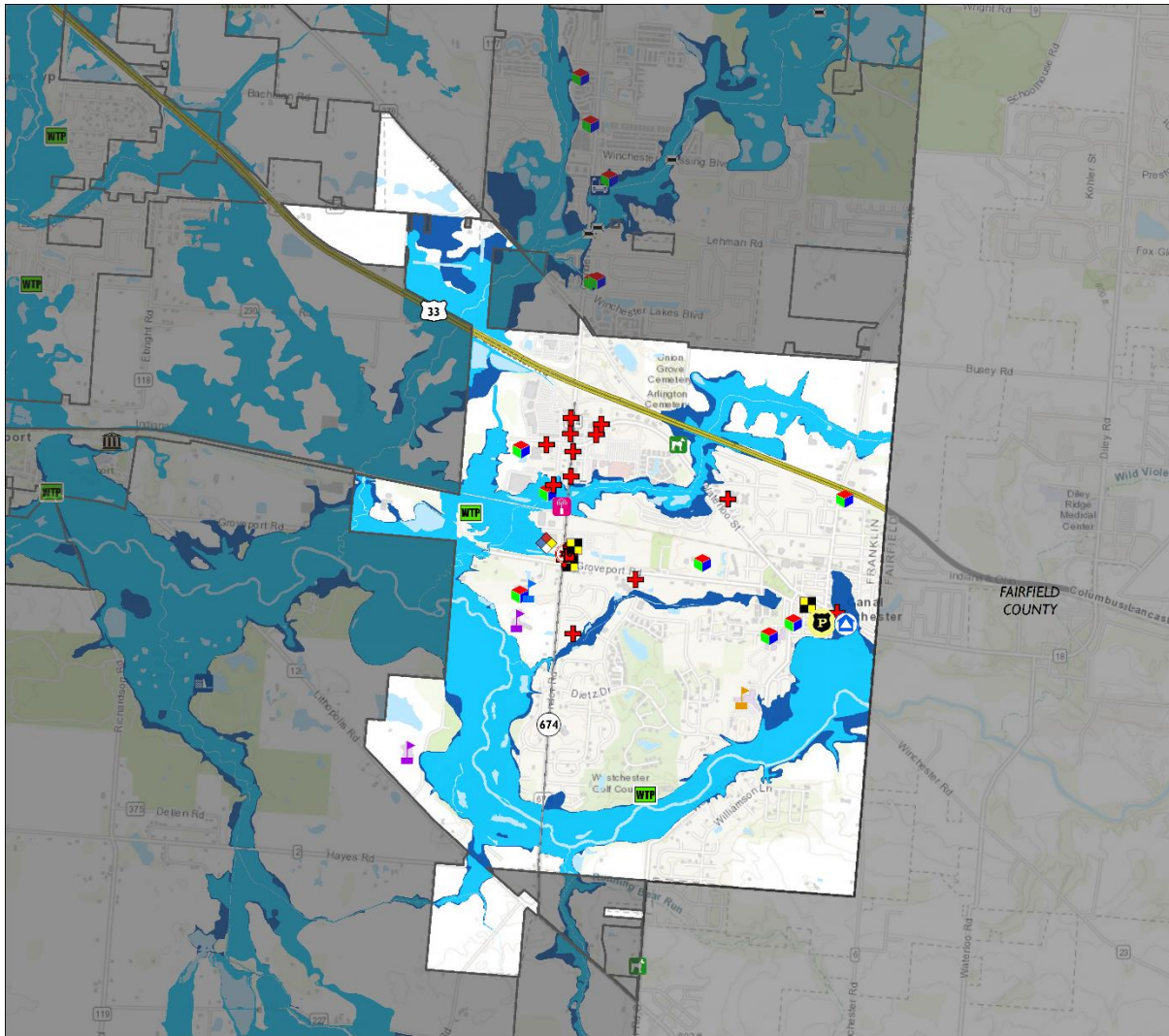


9.6.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Canal Winchester's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Canal Winchester has significant exposure. The maps also show the location of potential new development, where available.

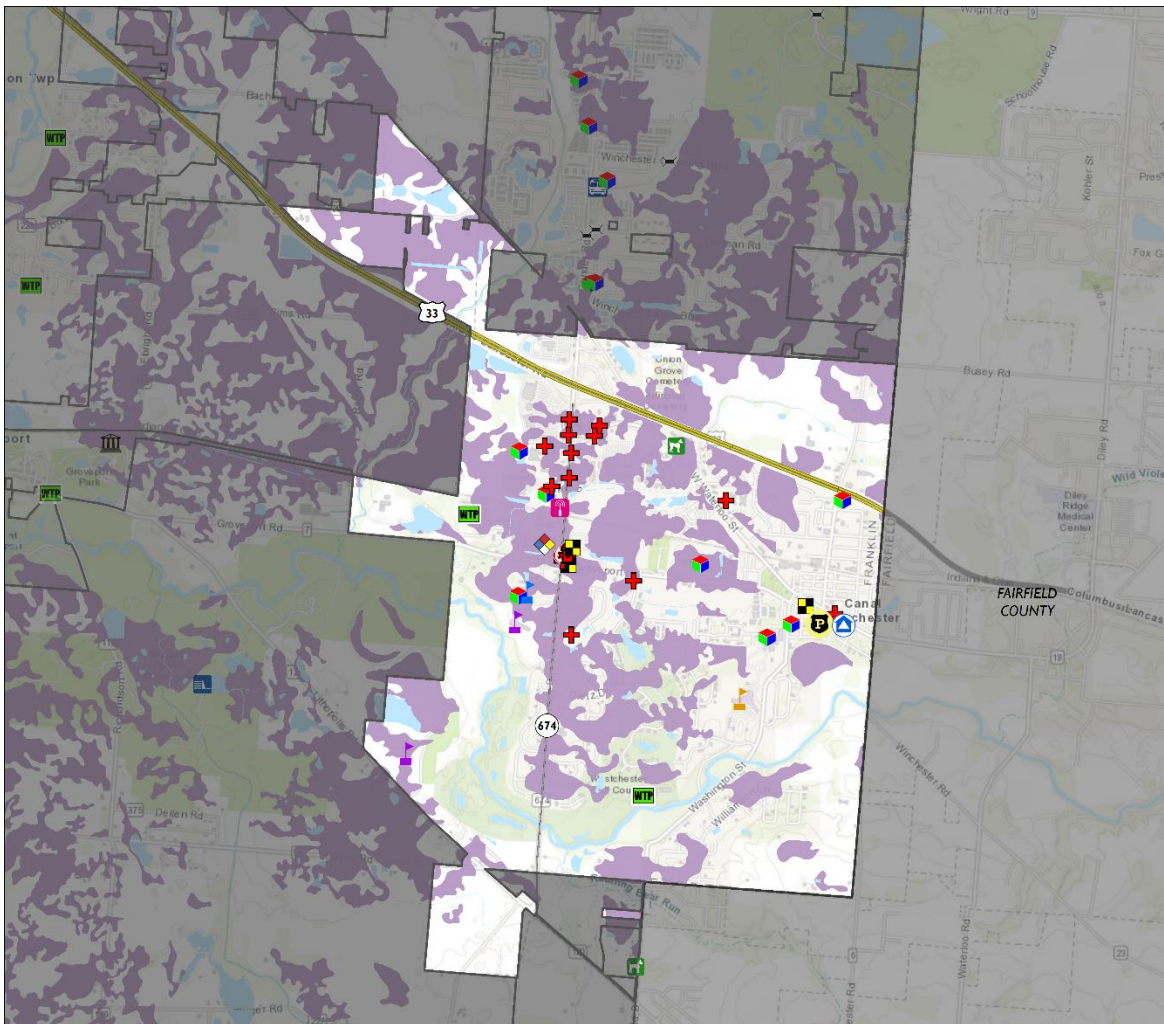
Figure 9.6-2. City of Canal Winchester Hazard Area Extent and Location Map-Flood



Canal Winchester (C)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | 0 0.5 1 Miles |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Municipal Boundary |
| Animal Shelter | Franklin County Building | Potable Water | Interstate |
| Bridge | Hospital | Potable Water Well | U.S. Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | State Route |
| Cellular Tower | Intermediate Education Facility | Primary Education Facility | Waterbody |
| Correctional Institution | Intermodal Facility | Rail Facility | FEMA Flood Hazard Area |
| Dam | Medical Clinic Facility | Research/Development Facility | 1-Percent Annual Chance |
| Daycare Facility | Medical Laboratory Facility | Secondary Education Facility | 0.2-Percent Annual Chance |
| Drug and Alcohol Treatment Facility | Medical Supply Chain Facility | Tornado Siren | <i>The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.</i> |
| EOC | Park and Ride | Veterinary Services | Tetra Tech |
| Electric Substation | Wastewater Systems | | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021 |
| Emergency Medical Service | | | Notes: City (C), Township (T), Village (V) |

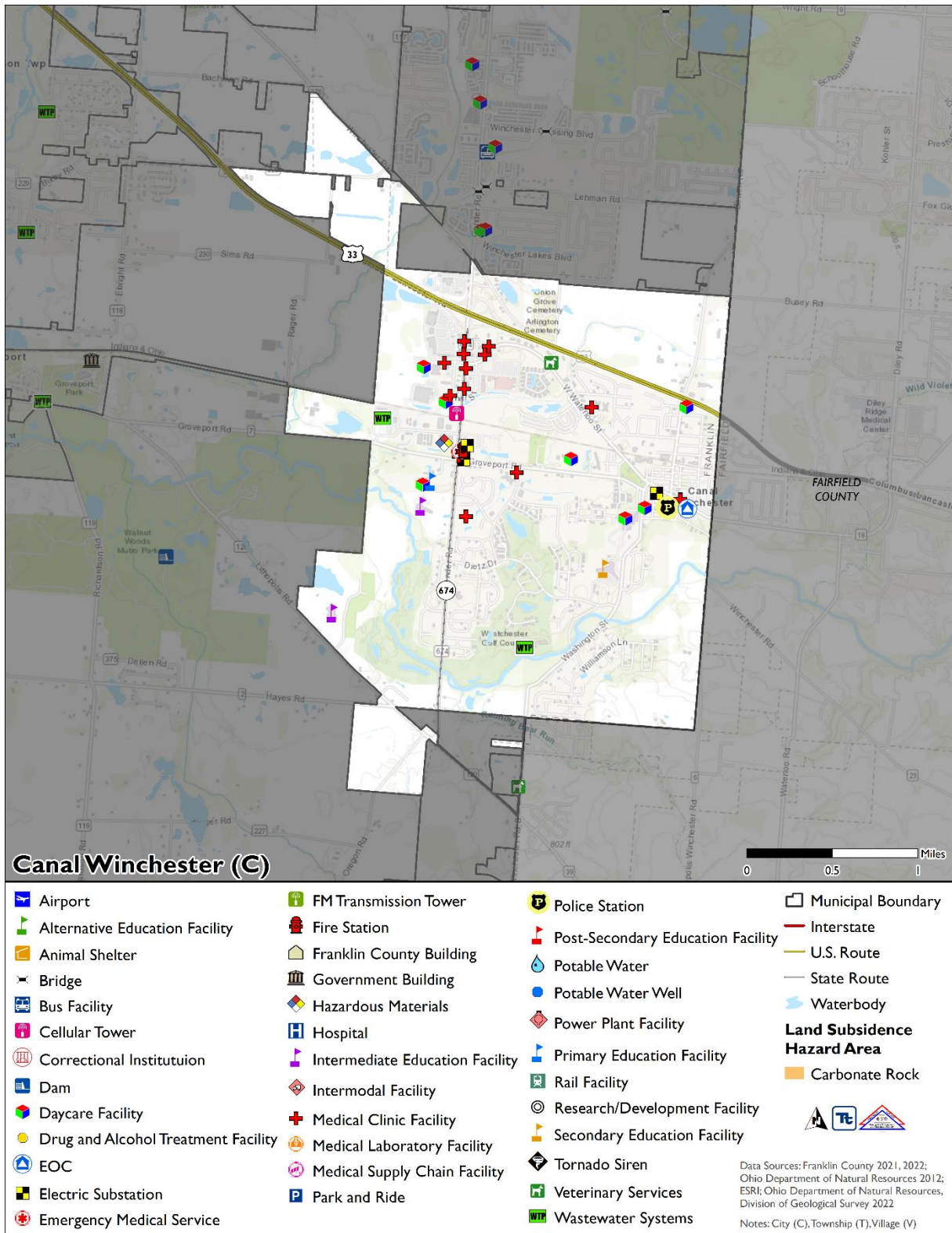
Figure 9.6-3. City of Canal Winchester Hazard Area Extent and Location Map-Inland Erosion



Canal Winchester (C)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Inland Erosion Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | K-Factor: >=0.49 |
| Dam | Intermodal Facility | Research/Development Facility | 0 0.4 0.8 Miles |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; United States Department of Agriculture, Natural Resources Conservation Service 2022 |
| EOC | Medical Supply Chain Facility | Veterinary Services | Notes: City (C), Township (T), Village (V) |
| Electric Substation | Park and Ride | Wastewater Systems | |
| Emergency Medical Service | | | |

Figure 9.6-4. City of Canal Winchester Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Canal Winchester’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Canal Winchester experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.6-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| April 3-4, 2018 | EF-1 Tornado | N/A | Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage. | The City of Canal Winchester did not incur any damages or losses from this event. |
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The City of Canal Winchester did not incur any damages or losses from this event. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The City of Canal Winchester did not incur any damages or losses from this event. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The City of Canal Winchester did not incur any damages or losses from this event. |
| July 21, 2022 | Thunderstorm | N/A | Cloud to ground lightening from thunderstorm activity resulted in an electrical surge at the Public Service Facility. | Equipment and component damage valued at approximately \$75,000 |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concerns based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community

capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Canal Winchester. The City of Canal Winchester reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Canal Winchester agreed with all hazard rankings.

Table 9.6-14. Hazard Ranking Input

| Hazard | Ranking |
|-----------------------|---------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temperature | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.6-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Canal Winchester

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 4 | 3 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 6 | 5 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | 21 | 19 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

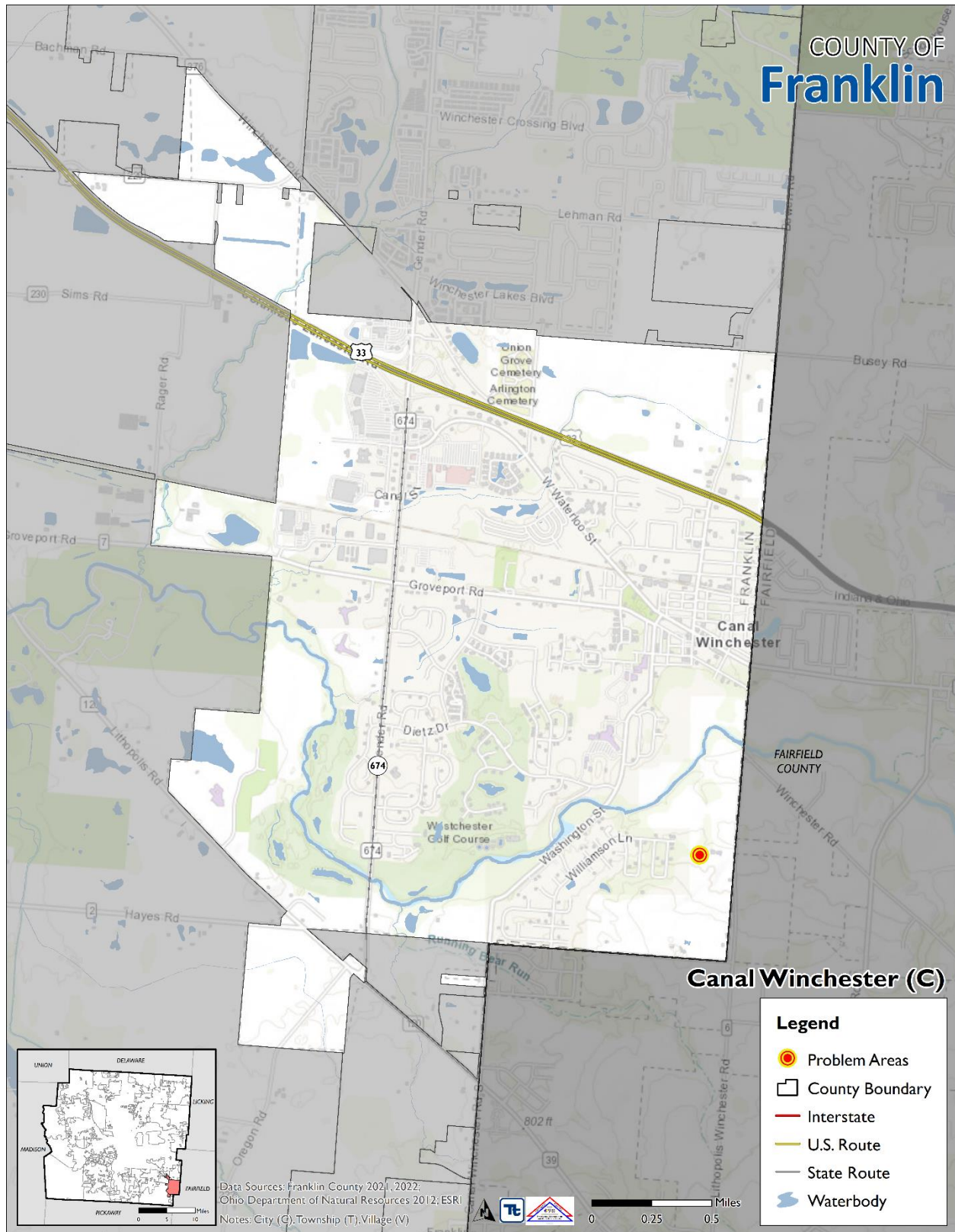
Identified Issues

In addition to the risk assessment, the City of Canal Winchester identified the following vulnerabilities within its community:

- There are three elevated water towers that do not have backup emergency power and communication. The water treatment plant and the communication towers are interrupted when severe weather causes local power outages.
- The City does not have emergency hazard sirens in place that are able to alert all residents in the City.
- Communication between City agencies is inconsistent due to dated and limited communication equipment. Informing City agencies of issues regarding hazards is time consuming and inefficient.
- Ahsbrook Road, which provides access to the Public Service Complex, becomes impassable during and after periods of heavy precipitation.
- The following critical facilities are municipally owned and located in the special flood hazard area:
 - Cell Towers
 - The Goddard School
 - Canal Winchester City Hall
 - Waste Management of Ohio
- The City is experiencing issues with invasive species killing and outcompeting native species.
- The City does not have a Comprehensive Emergency Management Plan that integrates the current HMP.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

Figure 9.6-5. City of Canal Winchester Problem Areas



9.6.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.6-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|-------------------|--|---|--|---|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Upgrade generator at water reclamation facility | Mayor's Office | Complete \$500,000 project was funded by existing Sewer Division funds along with a \$50,000 grant from Ohio EPA | No | - | - |
| Provide generator for water tower to maintain control system communication | Mayor's Office | No Progress | Yes | None of the three elevated water towers are equipped with backup emergency power and communication between the water treatment plant and the towers would be interrupted if severe weather caused local power outages. Once communications are lost, city would be unable to determine tower levels and be susceptible to loss of water system pressure, resulting in a loss of water for consumption and fire protection. | Public Service – Division of Water |
| Improve access to public service facility during flooding | Mayor's Office | Complete Easement was obtained from neighboring property at no cost to the City/. | No | - | - |
| Provide generator/backup pumps for priority pump stations | Mayor's Office | Complete Portable pump purchased for \$65,000 using existing Sewer Division funds. | No | - | - |
| Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (35 facilities @ 3000 / 6 months) | Mayor's Office | No Progress | No | - | - |

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|-------------------|--|---|---|---|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Develop plan to have lightning arrestors installed on all lift stations. (70,000 / 1 year | Mayor's Office | No progress | No | - | - |
| Seek funding for purchase and installation of additional tornado sirens | Mayor's Office | No progress | Yes | Coverage area deficiencies | Mayor's Office |
| Seek permission & funding to acquire equipment to optimize interagency communications | Mayor's Office | Ongoing | Yes | Communications incompatibility | Mayor's Office |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Canal Winchester identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, the City of Canal Winchester has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Canal Winchester participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.6-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | X | - | - | X | - | - | - | - | X |
| Disease Outbreak | X | X | - | - | X | - | - | - | - | X |
| Drought | X | X | - | - | X | - | - | - | X | X |
| Earthquake | X | X | - | - | X | - | - | - | X | X |
| Extreme Temperature | X | X | - | - | X | - | - | - | X | X |
| Flood | X | X | - | - | X | - | - | - | X | X |
| Geologic | X | X | - | - | X | - | - | - | X | X |
| Invasive Species | X | X | - | - | | X | - | - | - | X |
| Severe Summer Weather | X | X | - | - | X | - | - | - | X | X |
| Severe Winter Weather | X | X | - | - | X | - | - | - | X | X |
| Tornado | X | X | - | - | X | - | - | - | X | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.6-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Canal Winchester will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.6-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------------|----------------------------------|--|--|-----------|--------------------|---|---------------------------|---|-----------------|----------|---------------------|--------------|
| 2023-Canal Winchester-001 | Generator Installation | Problem: There are three elevated water towers that do not have backup emergency power and communication. The water treatment plant and the communication towers are interrupted when severe weather causes local power outages. Solution: Provide generator for water tower to maintain control system communication | Drought, Earthquake, Extreme Temperature, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado | 6 | 1 Year | Department of Public Service, Division of Water | City Budget, BRIC, HMGP | City will maintain use of water for consumption and fire protection. | \$40,000 | High | SIP | SP |
| 2023-Canal Winchester-002 | Installation of Emergency Sirens | Problem: The City does not have emergency hazard sirens in place that are able to alert all residents in the City. Solution: The City will seek funding for purchase and installation of additional emergency sirens. | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, | 4 | 1 Year | Department of Public Service | City Budget, HMGP | Residents in the City will have more time to shelter from tornado events. | >\$100,000 | High | SIP | PR |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------------|---|---|---|-----------|--------------------|---|------------------------------------|---|-----------------------|----------|---------------------|--------------|
| | | | Severe Summer Weather, Severe Winter Weather, Tornado | | | | | | | | | |
| 2023-Canal Winchester-003 | Installation of Communication Equipment | <p>Problem: Communication between City agencies is inconsistent due to dated and limited communication equipment. Informing City agencies of issues regarding hazards is time consuming and inefficient.</p> <p>Solution: Seek permission & funding to acquire equipment to optimize interagency communications for hazards of concern.</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 6 | 1 Year | Department of Public Service, Mayors Office | City Budget, HMGP, BRIC | The City will be able to share information regarding hazards of concern in a quick and time efficient manner. | Medium | High | SIP | ES |
| 2023-Canal Winchester-004 | Ashbrook Road Flood Study | <p>Problem: Ashbrook Road, which provides access to the Public Service Complex, becomes impassable during and after periods of heavy precipitation.</p> <p>Solution: The City will conduct a flood study with an engineer and will</p> | Flood, Severe Summer Weather, Severe Winter Weather | 6 | 1 Year | City Department of Public Service, Engineer | City Budget, FMA, HMGP, BRIC, CDBG | The Road will become passable during precipitation events. | TBD after Flood Study | High | SIP | SP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------------|---|--|---------------------------|-----------|--------------------|---|------------------------------------|---|----------------------------------|----------|---------------------|--------------|
| | | come up with a cost-effective solution to mitigate the flooding problem and will implement the solution. | | | | | | | | | | |
| 2023-Canal Winchester-005 | Canal Winchester Flood Vulnerability Evaluation | <p>Problem: The following critical facilities are municipally owned and located in the special flood hazard area:</p> <ul style="list-style-type: none"> • Cell Towers • The Goddard School • Canal Winchester City Hall • Waste Management of Ohio <p>Solution: The City will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the facilities to protect each to the 500-year flood level. Options include:</p> <ul style="list-style-type: none"> • Elevation of facility • Floodproofing of facility • Mobile flood barriers | Flood | 6 | Less than 5 Years | City Department of Public Service, Engineer | City Budget, FMA, HMGP, BRIC, CDBG | The City's critical facilities will be protected to the 500-year flood level. | TBD after Feasibility assessment | High | SIP | SP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------------|---|---|---|-----------|--------------------|----------------------------|---------------------------|---|-----------------|----------|---------------------|--------------|
| | | Once the most cost-effective option is identified, the Town will carry out the option. | | | | | | | | | | |
| 2023-Canal Winchester-006 | Invasive Species Eradication Program | <p>Problem: The City is experiencing issues with invasive species killing and outcompeting native species.</p> <p>Solution: The City will work with state agencies on developing quarantine, control, and eradication programs for invasive species to protect native species.</p> | Invasive Species | 1 | 2 Years | City Administration | City Budget, HMGP | The City's native species will become better protected. | \$2,000 | High | LPR | PP |
| 2023-Canal Winchester-007 | Comprehensive Emergency Management Plan | <p>Problem: The City does not have a Comprehensive Emergency Management Plan that integrates the current HMP.</p> <p>Solution: The City will develop a Comprehensive Emergency Management Plan that integrates the current HMP. This will include indicating and designating where emergency vaccination stations, emergency shelters and</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 1 | 2 Years | City Administration, Mayor | City Budget, HMGP | The City will be better prepared for emergencies. | \$2,000 | High | LPR | ES |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------------|---------------------------------|---|---------------------------|-----------|--------------------|---|---|--|---------------------------|----------|---------------------|--------------|
| | | heating/cooling stations are located. | | | | | | | | | | |
| 2023-Canal Winchester-008 | Repetitive Loss Area Mitigation | <p>Problem: Portions of the City experienced repetitive flooding.</p> <p>Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity.</p> | Flood | 6 | 4 years | City Administration, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, City budget, Homeowners | Reduction in repetitive losses due to floods | > \$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.

- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.6-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|---------------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Canal Winchester-001 | Generator Installation | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-Canal Winchester-002 | Installation of Emergency Sirens | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 11 | High |
| 2023-Canal Winchester-003 | Installation of Communication Equipment | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 | High |
| 2023-Canal Winchester-004 | Ashbrook Road Flood Study | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 12 | High |
| 2023-Canal Winchester-005 | Canal Winchester Flood Vulnerability Evaluation | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 11 | High |
| 2023-Canal Winchester-006 | Invasive Species Eradication Program | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 11 | High |

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|---------------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Canal Winchester-007 | Comprehensive Emergency Management Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-Canal Winchester-008 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.7 CLINTON TOWNSHIP

This section presents the jurisdictional annex for the Clinton Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Clinton Township participated in the planning process, an assessment of the Clinton Township’s risk and vulnerability, the different capabilities used in the Clinton Township, and an action plan that will be implemented to achieve a more resilient community.

9.7.1 Hazard Mitigation Planning Team

The Clinton Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Clinton Township departments, including the Fire Chief. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.7-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|--|
| Name/Title: | Eric Walker/ Township Administrator | Name/Title: | Brian Fraley /Fire Chief |
| Address: | 3820 Cleveland Ave. Columbus, OH 43224 | Address: | 3820 Cleveland Ave Columbus, OH 43224 |
| Phone Number: | 614-471-1479 | Phone Number: | 614-471-1479 |
| Email: | ewalker@clintontownship.org | Email: | bfraley@clintontownship.org: |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Matt Brown, Franklin County | | |
| Address: | 150 S Front St Columbus, OH 43215 | | |
| Phone Number: | 614-525-5647 | | |
| Email: | mybrown@franlincountyohio.gov | | |
| Additional Contributors: | | | |
| Name/Title: | Matt Huffman/Township Administrator | | |
| Method of Participation: | Provided key input in the planning process | | |

9.7.2 Municipal Profile

The Clinton Township is in the northern part of Franklin County and is bordered by Sharon Township to the north, Perry Township to the west, Mifflin Township to the east and Franklin and Montgomery Townships to the south. Clinton Township consists of many scattered "islands" of land surrounded by the city of Columbus.

According to the American Community Survey, the 2021 population for the Clinton Township was 4,449, an 8.27 percent increase from the 2010 Census population of 4,109. Data from the 2021 American Community Survey indicates that 3.1 percent of the population is 5 years of age or younger and 9.7 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.7.3 Jurisdictional Capability Assessment and Integration

The Clinton Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Clinton Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Clinton Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.7-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|--|---|---|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Ohio Building Code & Residential Code of Ohio | Local & County | SafeBuilt/ Matt Brown, Planning Administrator |
| <i>Reduces loss of life and property by minimizing the impact of disasters</i> Franklin County has adopted 2019 Residential Code of Ohio, which regulates 1, 2, and 3 family dwellings/residential homes. Section 307.37 (April 6, 2007) allows for freedom of adoption when it comes to counties building codes. The 2019 Residential Code of Ohio requires the approval and inspection of all electrical, gas, Mechanical and Planning uses. The Residential code gives builders a pre identified checklist prior to construction leading to safer actions to accomplish goals. | | | | |
| Zoning/Land Use Code | Yes | Chapter 519 Township Zoning/Title 5 township Zoning; Franklin County Zoning Resolution, Original adopted November 12, 1948, Amended and Readopted October 11, 2022 | County | Matt Brown, Planning Administrator |
| <i>Reduces loss of life and property by minimizing the impact of disasters</i> Helps to ensure appropriate separations and buffering between incompatible land uses. Prohibits development in floodways and requires development in floodway fringe areas to be designed so as to reduce risk. Requires a conditional use permit for floodplain development. Requires new developments and redevelopments to provide stormwater controls to reduce flooding. Includes stream setbacks in certain watersheds. Environmental constraints are considered when reviewing rezoning requests. Allows for conservation/cluster development to protect sensitive areas. | | | | |
| Subdivision Ordinance | Yes | Chapter 711 of the Ohio Revised Code; Franklin County Subdivision Regulations Original adoption 1948, amended March 27, 2012 | County | Matt Brown, Planning Administrator |
| <i>Reduces loss of life and property by minimizing the impact of disasters</i> Includes stream setback provisions. Requires stormwater controls. Recognizes limitations of poorly drained soils and highly erodible land. Ensures adequate roadways for emergency vehicles. Requires building areas, wells and wastewater treatment systems to avoid floodplain areas. Allows for conservation/cluster subdivisions. | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>Reduces loss of life and property by minimizing the impact of disasters</i> | | | | |
| Stormwater Management Ordinance | Yes | Ohio Administrative Code Rule 901:10-3-11 Storm Water Permits and individual | County | Matt Brown, Planning Administrator |
| <i>Reduces loss of life and property by minimizing the impact of disasters</i> Shows best management practices for stormwaters and gives the steps for members to receive their permit requirements and construction requirements. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> <i>Consider the following:</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|--|---|--|
| <ul style="list-style-type: none"> Are environmental systems that protect development from hazards identified and mapped? Do environmental policies maintain and restore protective ecosystems? Do the ordinances prohibit development within, of filling of, wetlands, floodways, and floodplains? Do environmental policies provide incentives to development that is located outside protective ecosystems? | | | | |
| Flood Damage Prevention Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | Yes | Section 5502.21- 5502.27 Emergency Management Definitions/Countywide Emergency Management Agency, September 29th, 1999 | Franklin County EMA | Franklin County EMA |
| <i>Coordinates county-wide emergency planning, training, warning, response and recovery</i> Gives clear definitions on emergency management titles and demonstrates the roles/job actions that may take place at the agency; gives set standards for emergency management goals and gives direct definitions on important emergency management aspects | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | - | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | *Clinton-Mifflin Land Use Plan *Cleveland Avenue Streetscape 2020 *Clinton West Neighborhood Plan *Clinton Township Redevelopment and Community Sustainability Plan | Local | Eric Walker, Township Administrator |
| <i>How does this reduce risk?</i> Reduces loss of life and property my minimizing the impact of disasters | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | Yes | Section 1521 Floodplain Management Activities. January 1st, 2016 Columbus Watershed Management/Franklin County Floodplain Management team | County | Matt Brown, Planning Administrator |
| <i>Reduces loss of life and property my minimizing the impact of disasters</i> Reduces the risk of bad drinking water and allows for safe housing in nonhazardous areas. | | | | |
| Stormwater Management Plan | Yes | Franklin County Storm Water Manual. March 13th, 2012 | County | Matt Brown, Planning Administrator |
| <i>Reduces loss of life and property my minimizing the impact of disasters</i> The purpose of the Manual is to protect existing natural stormwater resources, convey and control stormwater in a safe and responsible manner, and meet water quality goals | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | - | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| <i>Consider the following:</i> | | | | |
| <ul style="list-style-type: none"> Does your CEMP cover short-term response and long-term recovery to address communications, evacuation, and housing necessary for identified hazards? | | | | |
| Continuity of Operations Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the Clinton Township to oversee and track development.

Table 9.7-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--------------------------------|
| Do you issue development permits? • If yes, what department is responsible? | No | - |
| If you do not issue development permits, what is your process for tracking new development? | N/A | County does this for Township. |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | - |
| Do you have a buildable land inventory? • If yes, please describe | No | - |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Clinton Township and their current responsibilities that contribute to hazard mitigation.

Table 9.7-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|---------------------|--|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | No | - |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | Yes | Superintendent and four FTE |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Construction/Building/Code Enforcement Department | Yes | One Code Compliance |
| Emergency Management/Public Safety Department | Yes | Fire and Police Departments |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Tornado siren |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Public Works |
| Mutual aid agreements | Yes | Fire and Police Departments |
| Human Resources Manual | Yes | - |
| Other | - | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | - |
| Engineers or professionals trained in building or infrastructure construction practices | No | Franklin County Engineer |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | Yes | Fire and Police Chiefs |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | - | - |

Fiscal Capability

The table below summarizes financial resources available to the Clinton Township.

Table 9.7-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | No |
| Capital improvements project funding | No |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | - |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Clinton Township.

Table 9.7-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|------------------|
| Public information officer or communications office | Yes | Deborah Smothers |
| Personnel skilled or trained in website development | No | - |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | Yes | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Tornado siren |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | No | - |

Community Classifications

The table below summarizes classifications for community programs available to the Clinton Township.

Table 9.7-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | 3 | 2018 |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | - | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.7-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.7.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Clinton Township.

Table 9.7-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|---------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Clinton (Twp) | NR | NR | NR | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of the NFIP information for the Clinton Township.

Table 9.7-10. NFIP Summary

| NFIP Topic | Comments |
|---|-------------------------------|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. | |
| <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | Roadways – no list maintained |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? | No |

| NFIP Topic | Comments |
|---|---|
| <ul style="list-style-type: none"> How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | Total cost of repair is 50 percent or more of the structure's market value before the disaster occurred |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | Unknown |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | No – Franklin County would handle |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Franklin County |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | Unknown |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | N/A |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Franklin County |
| What are the barriers to running an effective NFIP program in the community, if any? | N/A |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | Unknown |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | Unknown |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | Do not have flood damage prevention ordinance |
| Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? | Unknown |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Franklin County |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | Not eligible |

9.7.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.7-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|---------------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | County Tracks | | | | | | | | | |
| Multi-Family | | | | | | | | | | |
| Other (commercial, mixed-use, etc.) | | | | | | | | | | |
| Total Permits Issued | | | | | | | | | | |

Table 9.7-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.7.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Clinton Township’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Clinton Township has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.7-1. Clinton Township Hazard Area Extent and Location Map-Flood

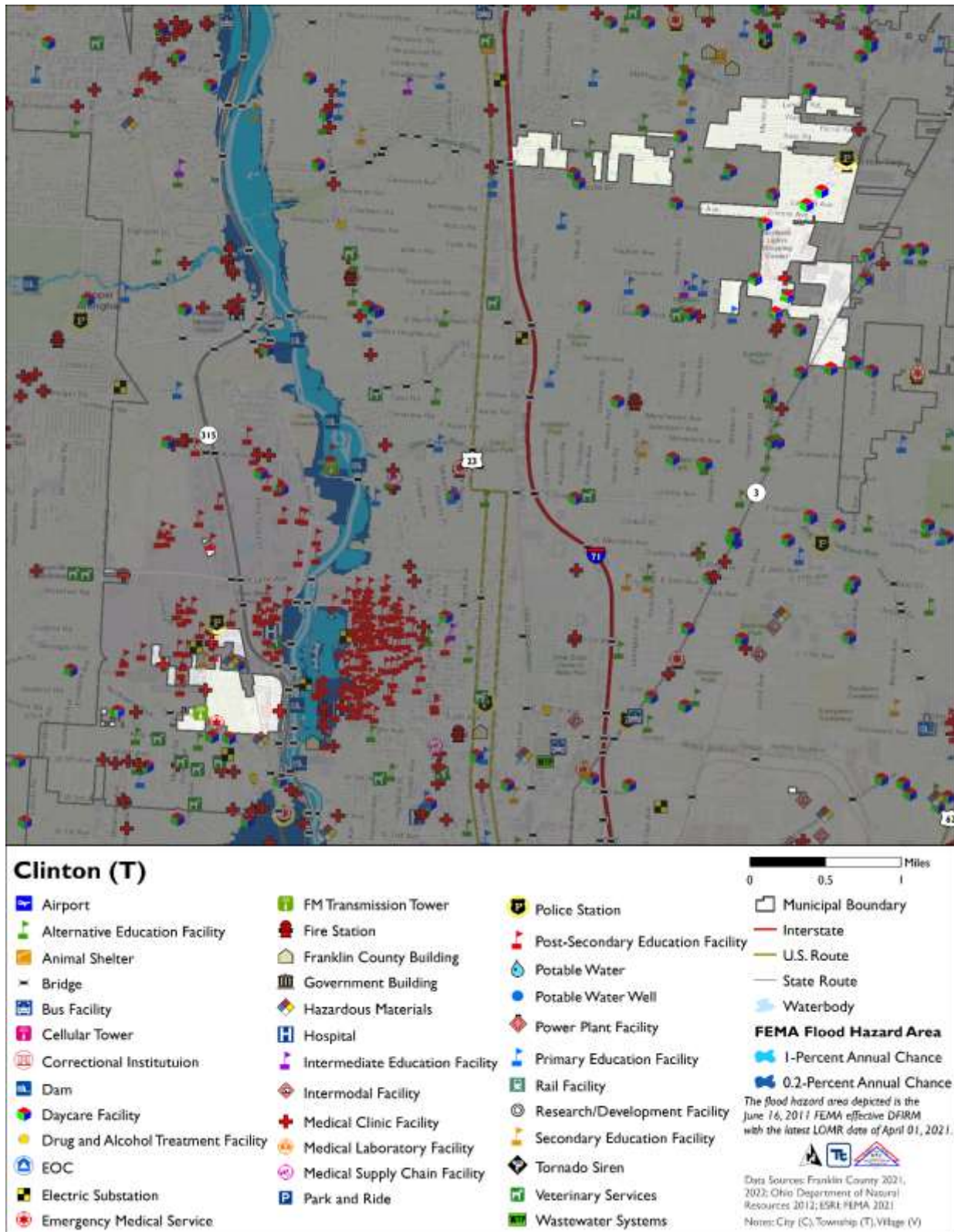


Figure 9.7-2. Clinton Township Hazard Area Extent and Location Map-Inland Erosion

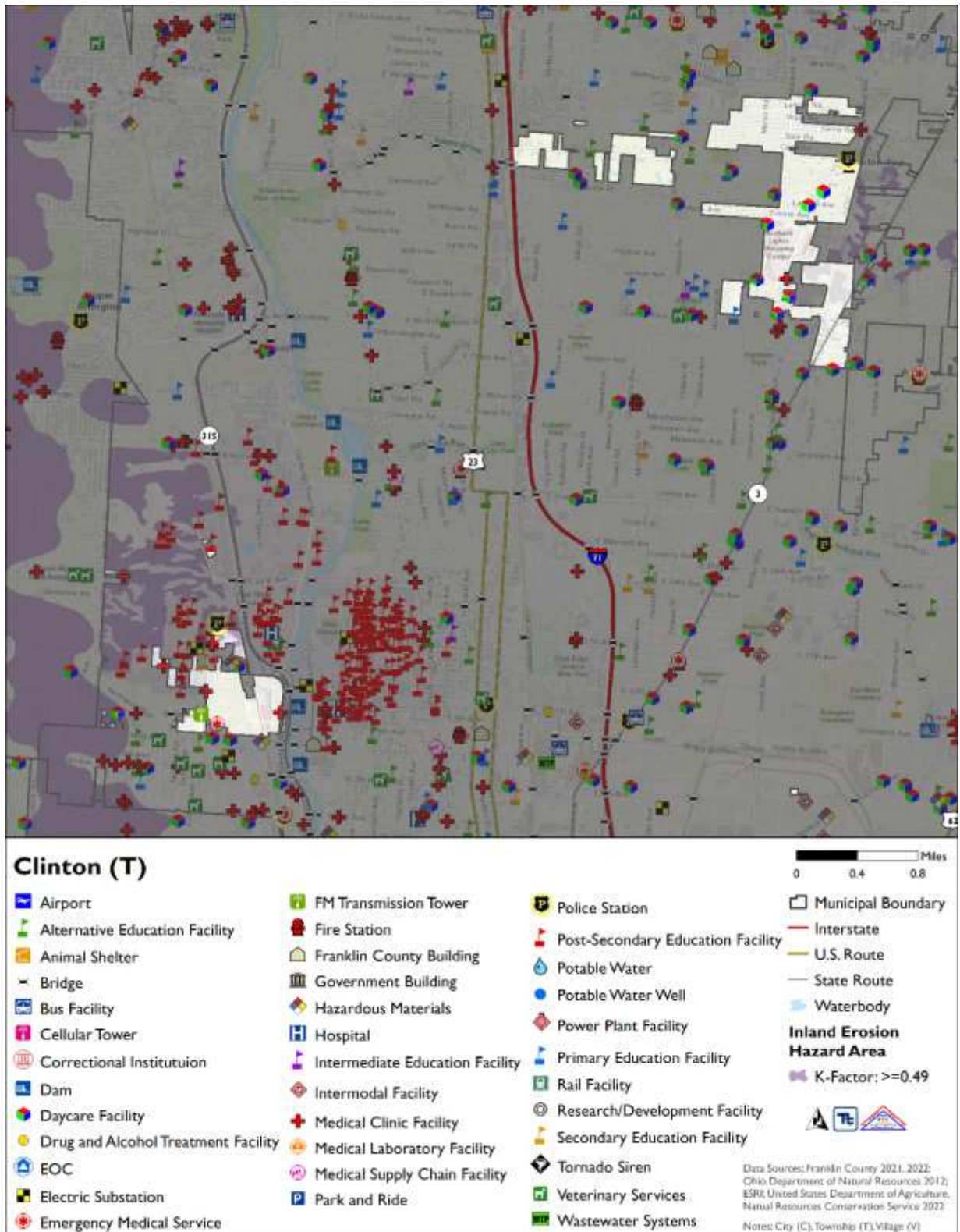
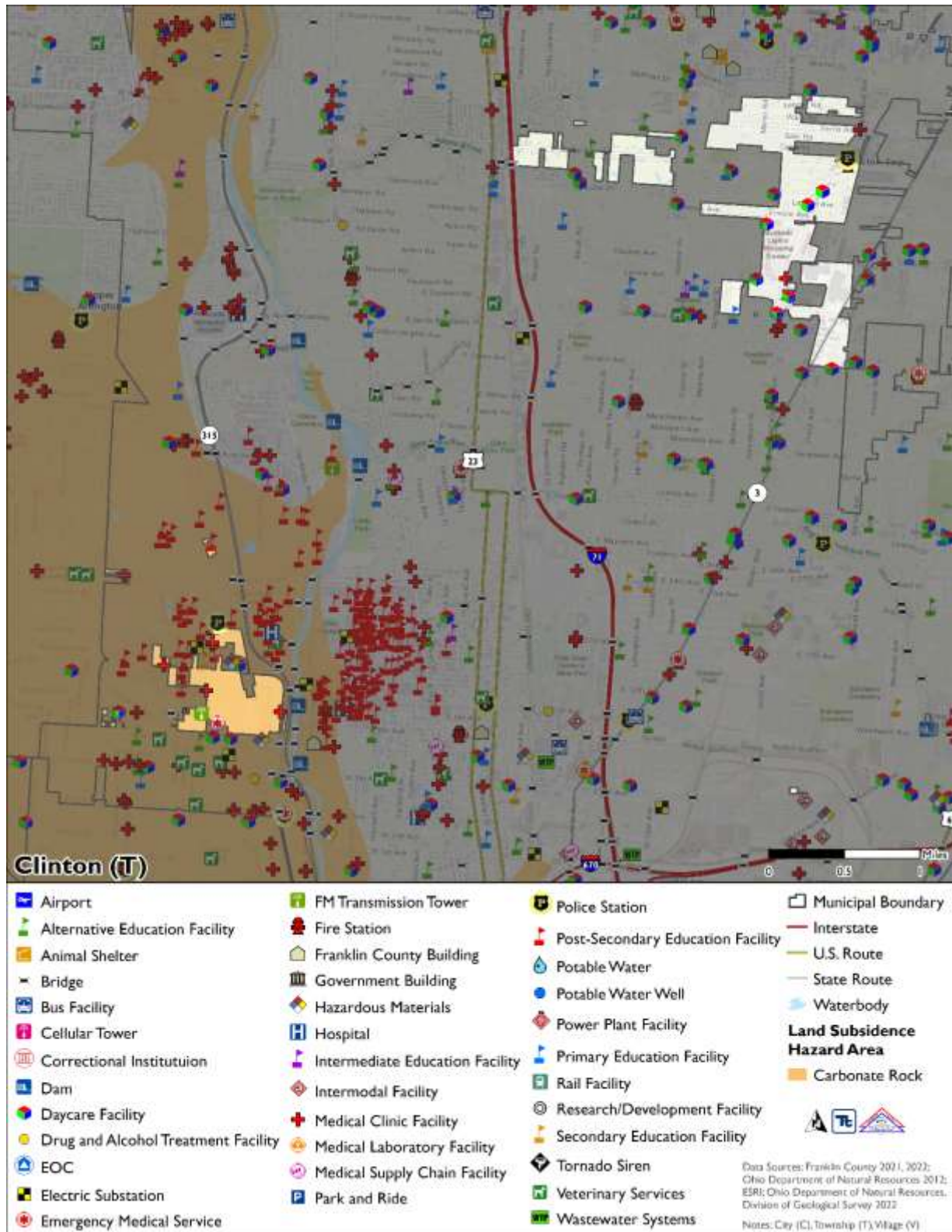


Figure 9.7-3. Clinton Township Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Township of Clinton’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Township of Clinton experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.7-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | Clinton Township did not incur any damages or losses from this event. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | Clinton Township did not incur any damages or losses from this event. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | Clinton Township did not incur any damages or losses from this event. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concerns based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; and community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below

summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Clinton Township. The Clinton Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Clinton Township indicated the following:

- The Township changed drought from low to medium due to increased drought events.
- The Township changed Flood from medium to low due to limited flooding issues.

Table 9.7-14. Hazard Ranking Input

| Hazard | Ranking |
|-----------------------|---------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Medium |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Low |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.7-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Township of Clinton

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | - |
| Inland Erosion (K-Factor: >= 0.49) Hazard Area | 1 | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 5 | 4 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | 2 | 2 |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the Township of Clinton identified the following vulnerabilities within its community:

- The Township does not provide information on the hazards of concern to residents, including information regarding flood insurance.
- The Township does not currently have hazard mitigation information on their website to help residents to prepare for and mitigate the hazards of concern.

- The Township does not have a Post-Disaster Recovery Plan that integrates the current HMP.

9.7.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the ‘Capability Assessment’ earlier in this annex.

Table 9.7-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|---------------------------|--|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding for public information including outreach projects and technical assistance to property owners. (15,000 / 1 year) | Township Trustee's Office | Ongoing | No | - | - |
| Work with Franklin County Emergency Management and Homeland Security to develop public outreach regarding all natural hazards, and the county's susceptibility to those hazards, and make available on website. (No cost, ongoing) | Township Trustee's Office | Ongoing | No | - | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Clinton Township identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, the Clinton Township has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Clinton Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.7-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | | | CRS | | | | |
|-----------------------|------|-----|-----|-----|----|----|-----|----|----|----|--|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES | |
| Dam/Levee | - | - | - | X | X | - | X | - | - | X | |
| Disease Outbreak | - | - | - | X | X | - | X | - | - | X | |
| Drought | - | - | - | X | X | - | X | - | - | X | |
| Earthquake | - | - | - | X | X | - | X | - | - | X | |
| Extreme Temp | - | - | - | X | X | - | X | - | - | X | |
| Flood | - | - | - | X | X | - | X | - | - | X | |
| Geologic | - | - | - | X | X | - | X | - | - | X | |
| Invasive Species | - | - | - | X | X | - | X | - | - | X | |
| Severe Summer Weather | - | - | - | X | X | - | X | - | - | X | |
| Severe Winter Weather | - | - | - | X | X | - | X | - | - | X | |
| Tornado | - | - | - | X | X | - | X | - | - | X | |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.7-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Township of Clinton will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.7-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------------|---|---|---|-----------|--------------------|---------------------------|---------------------------|--|-----------------|----------|---------------------|--------------|
| 2023-Clinton Township-001 | Public Information Outreach/ Technical Assistance | Problem: The Township does not provide information on the hazards of concern to residents, including information regarding flood insurance. Solution: The Township will seek funding for public information including outreach projects and technical assistance to property owners to complete DIY mitigation projects to protect property from the hazards. | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 4, 5 | 1 year | Township Trustee's Office | FEMA, HMGP | Township residents will become more aware of hazards of concern and will be provided technical assistance as needed. | \$15,000 | High | EAP | PI, PR |
| 2023-Clinton Township-002 | Update website to include hazard outreach | Problem: The Township does not currently have hazard mitigation information on their website to help residents to prepare for and mitigate the hazards of concern. Solution: The Township will work with Franklin County Emergency Management and Homeland Security to develop online public outreach and notification system regarding all natural hazards, and the County's susceptibility to those hazards, and will make available on a website. | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 5 | 6 months | Township Trustee's Office | Township, HMGP | Township residents will be able to prepare for hazards of concern by visiting the website. | \$500 | High | EAP | PI |
| 2023-Clinton Township-003 | Post-Disaster Recovery Plan | Problem: The Township does not have a Post-Disaster Recovery Plan that integrates the current HMP. | Dam/Levee, Disease Outbreak, Drought, | 1 | 1 Year | Township Trustee's Office | Township, HMGP | Township will be better prepared to | \$2,000 | High | EAP | ES |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------------|---------------------------------|--|---|-----------|--------------------|---|---|--|-----------------|--------------------------|---------------------|--------------|
| | | Solution: The Township will develop a Post-Disaster Recovery Plan that integrates the hazards of concern from the current HMP. | Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | | | | | handle post disaster clean up. | | | | |
| 2023-Clinton Township-004 | Repetitive Loss Area Mitigation | Problem: Portions of the Township experienced repetitive flooding. Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | Flood | 6 | 4 years | Township Trustee's Office, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | High | >\$100,000 per structure | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CRS Community Rating System
- FEMA Federal Emergency Management Agency
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.

- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.7-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-----------------------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023- Clinton Township- 001 | Public Information Outreach/Technical Assistance | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-Clinton Township-002 | Update website to include hazard outreach | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-Clinton Township-003 | Post-Disaster Recovery Plan | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 12 | High |
| 2023-Clinton Township-004 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.8 CITY OF COLUMBUS

This section presents the jurisdictional annex for the City of Columbus that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Columbus participated in the planning process, an assessment of the City of Columbus’s risk and vulnerability, the different capabilities used in the City of Columbus, and an action plan that will be implemented to achieve a more resilient community.

9.8.1 Hazard Mitigation Planning Team

The City of Columbus identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Columbus departments, including the Floodplain Administrator and the Department of Public Utilities. The Department of Public Utilities’ Emergency Preparedness Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.8-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|--|
| Name/Title: | Stephen Kranz, Department of Public Utilities’ Emergency Preparedness Chief | Name/Title: | Mike Fielding, Division of Fire’s Emergency Preparedness Chief |
| Address: | 910 Dublin Road, Columbus, Ohio 43215 | Address: | 3639 Parsons Ave., Columbus, Ohio 43207 |
| Phone Number: | (614) 645-6771 | Phone Number: | (614) 221-3132 |
| Email: | srkranz@columbus.gov | Email: | MJFielding@Columbus.gov |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Renee VanSickle, P.E., CFM; Floodplain Administrator and Stormwater Engineer | | |
| Address: | 1250 Fairwood Avenue Columbus, OH 43206 | | |
| Phone Number: | (614) 645-7385 | | |
| Email: | rmvansickle@columbus.gov | | |
| Additional Contributors: | | | |

| | |
|--------------------------|--|
| Name/Title: | Kristian Fenner, Deputy Director, Division of Power |
| Method of Participation: | Assisted in the completion of Worksheet A |
| Name/Title: | Rob Priestas, Director, Division of Sewers and Drains |
| Method of Participation: | Assisted in the completion of Worksheets A, B |
| Name/Title: | Alana Shockey, Deputy Director, Regulatory Compliance and Sustainability |
| Method of Participation: | Assisted in the completion of Proposed Hazard Mitigation Initiatives |

9.8.2 Municipal Profile

The City of Columbus is located in the center of Franklin County and encompasses or is bordered by Upper Arlington and parts of Clinton Township to the west, City of Bexley to the southeast, parts of Sharon and Mifflin Townships to the north and northeast. Due to Columbus annexing parts of Townships and Villages, the City encompasses many additional small parts of Townships and Villages. Columbus is the Ohio State Capital and is the most populated City in all of Ohio. The confluence of the Scioto and Olentangy rivers is just northwest of Downtown Columbus. Several smaller tributaries course through the Columbus metropolitan area, including Alum Creek, Big Walnut Creek, and Darby Creek.

According to the American Community Survey, the 2020 population for the City of Columbus was 873,569, an 11 percent increase from the 2010 Census population of 787,033. Data from the 2020 U.S. Census indicate that 7.1 percent of the population is 5 years of age or younger and 10.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.8.3 Jurisdictional Capability Assessment and Integration

The City of Columbus performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events
-

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an

opportunity for the City of Columbus to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Columbus provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.8-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | 4113.29 | LOCAL | Columbus Building and Zoning |
| <i>How does this reduce risk?</i> Sets requirements for structures located in special flood hazard areas. (1150.27) The department shall in no case grant any permit for the construction, alteration, or use of any building, structure or premises in the flood plain, as determined by the flood profile and flood boundary and floodway map on file in the department without a copy of the appropriate certificate of zoning clearance issued to the applicant, stating that said building, structure or premises, as proposed to be constructed, altered, or used, would not be in violation of any regulation established by Chapter 3385 of the Zoning Code. | | | | |
| Zoning/Land Use Code | Yes | 4123.51 | LOCAL | Columbus Building Zoning |
| <i>How does this reduce risk?</i> Sets requirements for structures located in special flood hazard areas. (1150.27) Construction documents (plans and specifications) and permits for structures to be located in the special flood hazard area shall comply with C.C. 1150 in addition to the provisions of Section 4123.50 through 4123.61, inclusive. For the purpose of Flood Plain Development only, the terms, phrases, words and their derivations as defined in C.C. Chapters 1150 shall apply. For the purpose of flood plain development only, where a conflict occurs, the most restrictive definition takes precedence. | | | | |
| Subdivision Ordinance | Unknown | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Site Plan Ordinance | Unknown | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Stormwater Management Ordinance | Yes | 1145.80-1145.89 | Local | Columbus DPU |
| <i>How does this reduce risk?</i> Regulations governing stormwater discharges from premises within the City of Columbus and where applicable, from premises outside of the City of Columbus, which are tributary to the sewer system. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | Unknown | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Real Estate Disclosure | Unknown | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Growth Management | Unknown | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Environmental Protection Ordinance | Unknown | 1150.00, 1115.00 | Local-Columbus | Columbus DPU |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|---|
| Columbus Stormwater drainage manual and floodplain code 1150 provide supportive risk reduction for floodplain management and watershed protection. | | | | |
| Flood Damage Prevention Ordinance | Yes | 1150.00 | Local – Columbus | Columbus DPU |
| <i>How does this reduce risk?</i> It makes people put the lowest floor of a building in the 100-year floodplain at least 1.5 feet above the BFE to reduce flooding risk. It only allows 4 uses in the floodway and no structures for human habitation are allowed in the floodway. That reduces risk by not allowing people to live in the Floodway which is the most dangerous part of the 100-year floodplain. | | | | |
| Wellhead Protection | Yes | 1115.01 | Local- Columbus | Columbus DPU |
| <i>How does this reduce risk?</i> Safeguard the public health, safety, and welfare by establishing a wellfield protection ordinance to protect the public water supply of the City of Columbus. This shall be accomplished by implementing regulations that control activities in defined Wellfield Protection Areas. | | | | |
| Emergency Management Ordinance | Yes | ORC: 5502.26 | State- Ohio Revised Code | FCEMHS |
| <i>How does this reduce risk?</i> Establishes All-hazards emergency operations planning countywide. | | | | |
| Climate Change Plan | Yes | Date: December 2021 | Local- Columbus | Mayor's Office, DPU |
| <i>How does this reduce risk?</i> Outlines Columbus' goals, strategies, and mitigation efforts to climate change. | | | | |
| Other | Yes | Historic Preservation Ordinance (3101.00) | Local- Columbus | City Council |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Columbus Comprehensive Plan, | Local- City of Columbus | Columbus Planning Division |
| <i>How does this reduce risk?</i> The plan is intended to serve as a guide with which to protect and enhance the quality of life in Columbus. It accomplishes this by fostering orderly, manageable, and cost-effective growth and establishing a framework for future land use decisions. | | | | |
| Capital Improvement Plan | Yes | Capital Improvement Program, 2022-2027 | Local | Columbus Finance and Management |
| <i>How does this reduce risk?</i> Identifies, prioritizes, and optimizes the financing of Capital projects and links strategic and comprehensive plans with fiscal capabilities. Allows the City to view all potential infrastructure projects and assess how they would impact the community. | | | | |
| Disaster Debris Management Plan | Unknown | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Floodplain Management or Watershed Plan | Yes | Watershed Management Program | Local- Columbus | Columbus DPU (Division of Water) and Recreation & Parks |
| <i>How does this reduce risk?</i> Watershed plan program provides framework and planning structure for protecting the watershed for the City of Columbus Department of Public Utilities. | | | | |
| Stormwater Management Plan | Yes | Stormwater Drainage Manual, 2022 | Local- Columbus | Columbus DPU (Division of Sewers and Drains) |
| <i>How does this reduce risk?</i> Provides framework and planning for stormwater management for the City of Columbus Department of Public Utilities. | | | | |
| Open Space Plan | Unknown | - | - | - |
| <i>How does this reduce risk?</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| N/A | | | | |
| Urban Water Management Plan | Unknown | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| N/A | | | | |
| Habitat Conservation Plan | Unknown | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| N/A | | | | |
| Economic Development Plan | Unknown | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| N/A | | | | |
| Shoreline Management Plan (Land Stewardship Program) | Yes | Land Stewardship Program, 2022 | Local- Columbus | Columbus DPU and Columbus Parks and Rec. |
| <i>How does this reduce risk?</i> | | | | |
| Maintaining a healthy native shoreline buffer adjacent to the water protects reservoir health. Vegetated Shoreline Buffers are a widely employed water resource management tool and naturally provide environmental benefits such as protecting water quality, stabilizing shoreline soils, mitigating flood flows, and providing habitat for fish and wildlife. | | | | |
| Community Wildfire Protection Plan | Unknown | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| N/A | | | | |
| Community Forest Management Plan | Unknown | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| N/A | | | | |
| Transportation Plan | Yes | Columbus Multimodal Thoroughfare Plan, 2019 | Local | Public Service |
| <i>How does this reduce risk?</i> | | | | |
| The Thoroughfare Plan includes updates to Columbus City Codes to ensure all Connect Columbus policy and Multimodal Thoroughfare Plan recommendations are reflected in Columbus City Codes and planning policies. Provides expansion of transportation modalities for future population growth. | | | | |
| Agriculture Plan | Unknown | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| N/A | | | | |
| Climate Action/ Resiliency/Sustainability Plan | Yes | Columbus Climate Action Plan, 2021 | Local- Columbus | Mayor's Office, Columbus DPU |
| <i>How does this reduce risk?</i> | | | | |
| It emphasizes the need to build a Columbus that is resilient to global climate change while mitigating future risks. | | | | |
| Tourism Plan | Unknown | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| N/A | | | | |
| Business/ Downtown Development Plan | Yes | Downtown Strategic Plan, 2010 | Local | Columbus Downtown Development Corporation |
| <i>How does this reduce risk?</i> | | | | |
| Provides structure for development of City of Columbus Downtown and reinforces the city codes for development in floodplain. | | | | |
| Other | - | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | Yes | Franklin County Emergency Operations Plan | Local- Franklin County | FCEMHS |
| <i>How does this reduce risk?</i> | | | | |
| Franklin County Emergency Operations Plan is an all-hazards operations plan maintained by FCEMHS. It is the principal guide for mitigating emergencies and disasters, ensuring the protection of health, safety, and property of the public and aiding in recovery operations for the agencies and jurisdictions in the community. It is intended to facilitate multiple-agency and multiple-jurisdictional coordination, particularly | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| among local, state, and federal agencies in emergency management and establish a framework for an effective system of comprehensive emergency management. | | | | |
| Continuity of Operations Plan | Unknown | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| N/A | | | | |
| Strategic Recovery Planning Report | Unknown | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| N/A | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | Yes | Unknown Date | Local- Franklin County | FCEMHS |
| <i>How does this reduce risk?</i> | | | | |
| Study that assesses most likely hazards and risk to Columbus/Franklin County. | | | | |
| Post-Disaster Recovery Plan | Unknown | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| N/A | | | | |
| Public Health Plan | Yes | Columbus Public Health Strategic Plan, 2022-2024 | Local- Columbus | Columbus Public Health |
| <i>How does this reduce risk?</i> | | | | |
| Columbus Public Health will expand the use of data to measure outcomes and impact, foster innovation, expand partnerships and engagement in the community, and invest in its workforce. The strategic plan assists in setting priorities and setting an operational overview for the Department’s various Divisions to establish an understanding of the risks and potential complications that may be anticipated. | | | | |
| Other | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| N/A | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the City of Columbus to oversee and track development.

Table 9.8-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? • If yes, what department is responsible? | Yes | Columbus Department of Development, City Zoning and Building |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | We don't have floodplain development permits per se. What we have is that we ask for a bunch of floodplain information on our plans & once they have met all the Columbus floodplain requirements we put "No Comments". |
| Do you have a buildable land inventory? • If yes, please describe | Yes | Land Bank Center-City of Columbus and Franklin County Land Banks |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Columbus and their current responsibilities that contribute to hazard mitigation.

Table 9.8-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|------------------------|---|
| Administrative Capability | | |
| Planning Board | Unknown | City of Columbus Development-The Planning Division is responsible for neighborhood planning, commercial overlays, boards, and commissions (Downtown, University District and East Franklinton), historic preservation, annexation, and public art. |
| Zoning Board of Adjustment | Yes | Columbus Board of Zoning Adjustment decide appeals from any persons affected by any order, requirement, decision, or determination made by the director in the administration or enforcement of this Zoning Code. |
| Planning Department | Yes | Columbus Department of development/ Development Commission- The Development Commission shall have all the powers, authority and duties granted to it by ordinances of council, and by Section 713.02 of the Ohio Revised Code, to the extent that the same are not in conflict with the Columbus City codes, the charter, or with ordinances or resolutions heretofore enacted by council. The Development Commission shall also serve as an advisory body to the Director and the city council in matters related to the preparation, execution and administration of urban renewal development, rehabilitation, and conservation plans. |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | Yes | Columbus Economic Development Division |
| Public Works/Highway Department | Yes | City of Columbus Public Service Department, manages city of Columbus roads, refuse, recycling, street sweeping, and snow/ice removal |
| Construction/Building/Code Enforcement Department | Yes | City of Columbus Building and Zoning Services |
| Emergency Management/Public Safety Department | Yes | Perform securities vulnerabilities assessments |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | FCEMHS- Mass notification (Everbridge), Outdoor tornado warning sirens |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | City of Columbus, Department of Public Utilities- Division of Sewers and Drains |
| Mutual aid agreements | Yes | OHWARN. Mutual aid and assistance agreements such as Water/Wastewater Agency Response Networks (WARNs) help local jurisdictions respond to incidents that call for resources beyond the capability of a local utility. The OH WARN Mutual Aid Agreement identifies the administration of the program, describes how to access mutual aid/assistance, specifies reimbursement procedures for the use of resources, and authorizes the creation of OH WARN Operational Plan. |
| Human Resources Manual | Yes | Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? No. |
| Other | - | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | Unknown if city has this type of trained personnel. |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | Construction personnel through Columbus Building and Zoning and Department of Finance and Management |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Planners or engineers with an understanding of natural hazards | No | Unknown |
| Staff with expertise or training in benefit/cost analysis | Yes | Columbus Department of Finance and Management manages costs/benefit analysis for the City of Columbus. |
| Professionals trained in conducting damage assessments | No | Unknown |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | Columbus DPU- Manager, GIS Analysts and Technicians |
| Environmental scientist familiar with natural hazards | No | Unknown |
| Surveyor(s) | No | Unknown |
| Emergency Manager | - | - |
| Grant writer(s) | Unknown | City of Columbus Department of Finance and Management has a Grants management office, which coordinates financial and regulatory aspects of the following grants: Community Development Block Grant (CDBG), the HOME Investment Partnerships Program (HOME), the Emergency Shelter Grant (ESG), the Housing Opportunities for Persons with AIDS Grant (HOPWA), the Neighborhood Stabilization Program (NSP), and the HOME-American Rescue Plan Program (HOME-ARP) |
| Resilience Officer | Yes | DPU maintains Sustainability And Regulatory Compliance office, managing Sustainable Columbus Initiatives/programs |
| Other (this could include stormwater engineer, environmental specialist, etc.) | Yes | Engineering teams that review stormwater design |
| <i>How do your administrative/technical capabilities contribute to risk reduction in your community?</i> | | |
| Utilizing DPU technical capabilities, improves critical infrastructure, management plans, watershed management, and hazard mitigation for emergency response planning. | | |

Fiscal Capability

The table below summarizes financial resources available to the City of Columbus.

Table 9.8-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Unknown |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Unknown |
| User fees for water, sewer, gas, or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | Unknown |
| Stormwater utility fee | Yes |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Unknown |
| Incur debt through private activity bonds | Unknown |
| Withhold public expenditures in hazard-prone areas | Unknown |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | Unknown |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | Yes |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Columbus.

Table 9.8-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|---|
| Public information officer or communications office | Yes | DPU Directors Office has three full time Public information Officers that manage public information for DPU Power, Water, and Sewers and Drains Divisions |
| Personnel skilled or trained in website development | Yes | DPU public relations/public information officers |
| Hazard mitigation information available on your website | Yes | Clearing Drains (Prevention of flooding) |
| Social media for hazard mitigation education and outreach | No | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Franklin County tornado sirens, Everbridge -Alert Franklin County (mass notification) |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | Yes | DPU Website, Social Media, etc. |

Community Classifications

The table below summarizes classifications for community programs available to the City of Columbus.

Table 9.8-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | - | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | - | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | - | - | - |
| Storm Ready Certification | - | - | - |
| Firewise Communities classification | - | - | - |
| Other | - | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.

- Weak: Capacity does not exist or could use substantial improvement.

Table 9.8-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.8.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Columbus.

Table 9.8-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|--------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Columbus (C) | 604 | 576 | \$3,821,431.58 | 41 | 0 |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)
^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Columbus.

Table 9.8-10. NFIP Summary

| NFIP Topic | Comments |
|---|----------|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> • Do you maintain a list of properties that have been damaged by flooding? | No. |

| NFIP Topic | Comments |
|--|---|
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No. |
| <p>Are any RiskMAP projects currently underway in your jurisdiction?</p> <ul style="list-style-type: none"> If so, state what projects are underway. | Unknown. |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | Look at the cost of the improvements in relation to the market value of the structure. If >50% then it is a SD/SI. We haven't had recent flood events in our jurisdiction. I have just done Substantial Improvements not Substantial Damage determinations. |
| <p>How many properties have been mitigated (elevation or acquisition) in your jurisdiction?</p> <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | 3 – unsure how they were funded. |
| <p>Do your flood hazard maps adequately address the flood risk within your jurisdiction?</p> <ul style="list-style-type: none"> If not, state why. | The flood maps do not adequately address the flood risk in the City of Columbus as there is flooding which occurs from stormwater runoff which is not accounted for in the FEMA maps. |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Department of Public Utilities |
| Are any certified floodplain managers on staff in your jurisdiction? | Yes, Renee VanSickle, P.E., CFM. |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No. |
| <p>Does your floodplain management staff need any assistance or training to support its floodplain management program?</p> <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | Yes, the floodplain administrator needs to go to Floodplain training every year to stay up to date on relevant floodplain issues and understand any changes to conducting floodplain reviews. Additional staffing would be helpful. |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | Permit review, research, helping residents with floodplain questions, inspections of illegal fill in the 100-year floodplain & engineering capability. |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Look at the cost of the improvements in relation to the market value of the structure. If >50% then it is a Substantial Improvement. |
| What are the barriers to running an effective NFIP program in the community, if any? | No barriers. |
| <p>Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed?</p> <ul style="list-style-type: none"> If so, state the violations. | No, but there is a scheduled visit to a house to see if it was built w/o an approved plan in the 100-year floodplain. |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | 2013 |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | 1150.00 is the code which was last amended in 2010. |
| <p>Does your floodplain management program meet or exceed minimum requirements?</p> <ul style="list-style-type: none"> If exceeds, in what ways? | Our program exceeds the minimum requirements. We require the lowest floor to be 1.5 feet above the BFE. Also, in the 2021 Columbus Stormwater Drainage Manual it requires |

| NFIP Topic | Comments |
|--|--|
| | equivalent compensatory storage for any fill in the 100-year floodplain. |
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | No. The only thing slightly related to that is the Columbus Building Commission can hear floodplain variance requests & decide on them based on the Floodplain Code. |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No. |

9.8.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.8-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------------------|-------------|-------------------|-------------|-------------------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | 0 | - | 0 | 27 | 0 | 2 | 0 | 23 | 0 |
| Multi-Family | - | 0 | - | 0 | 110 | 0 | 116 | 0 | 238 | 0 |
| Other (commercial, mixed-use, etc.) | - | 0 | - | 0 | 1009 [^] | 0 | 1445 [^] | 0 | 1433 [^] | 0 |
| Total Permits Issued | - | 0 | - | 0 | 1146 | 0 | 1563 | 0 | 1694 | 0 |

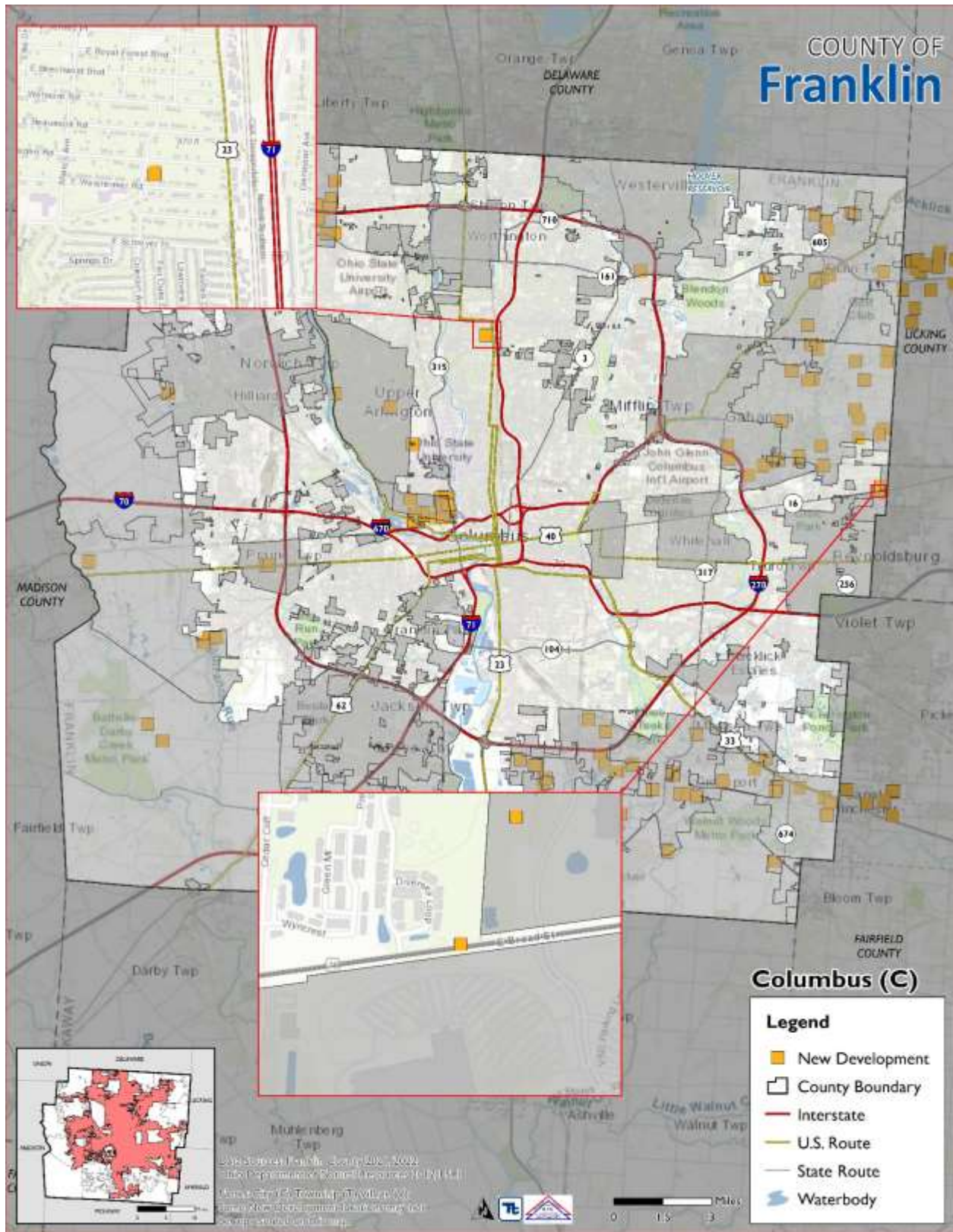
** These permits are not electronic, and the paper files are in extreme amounts.

[^] Some of the same plans were reviewed multiple times before we could approve them by putting “No floodplain Comments”.

Table 9.8-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g., Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|--------------------------|-------------------------|-----------------------|----------------------|---|
| Recent Major Development from 2018 to Present | | | | | |
| No Recent Major Development Occurred from 2018 to Present. | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| Intel | Commercial | Unknown | Unknown | Unknown | Electronic chip manufacturer. No major development in progress to report. |

Figure 9.8-1. City of Columbus New Development



9.8.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Columbus's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Columbus has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.8-2. City of Columbus Hazard Area Extent and Location Map - Flood

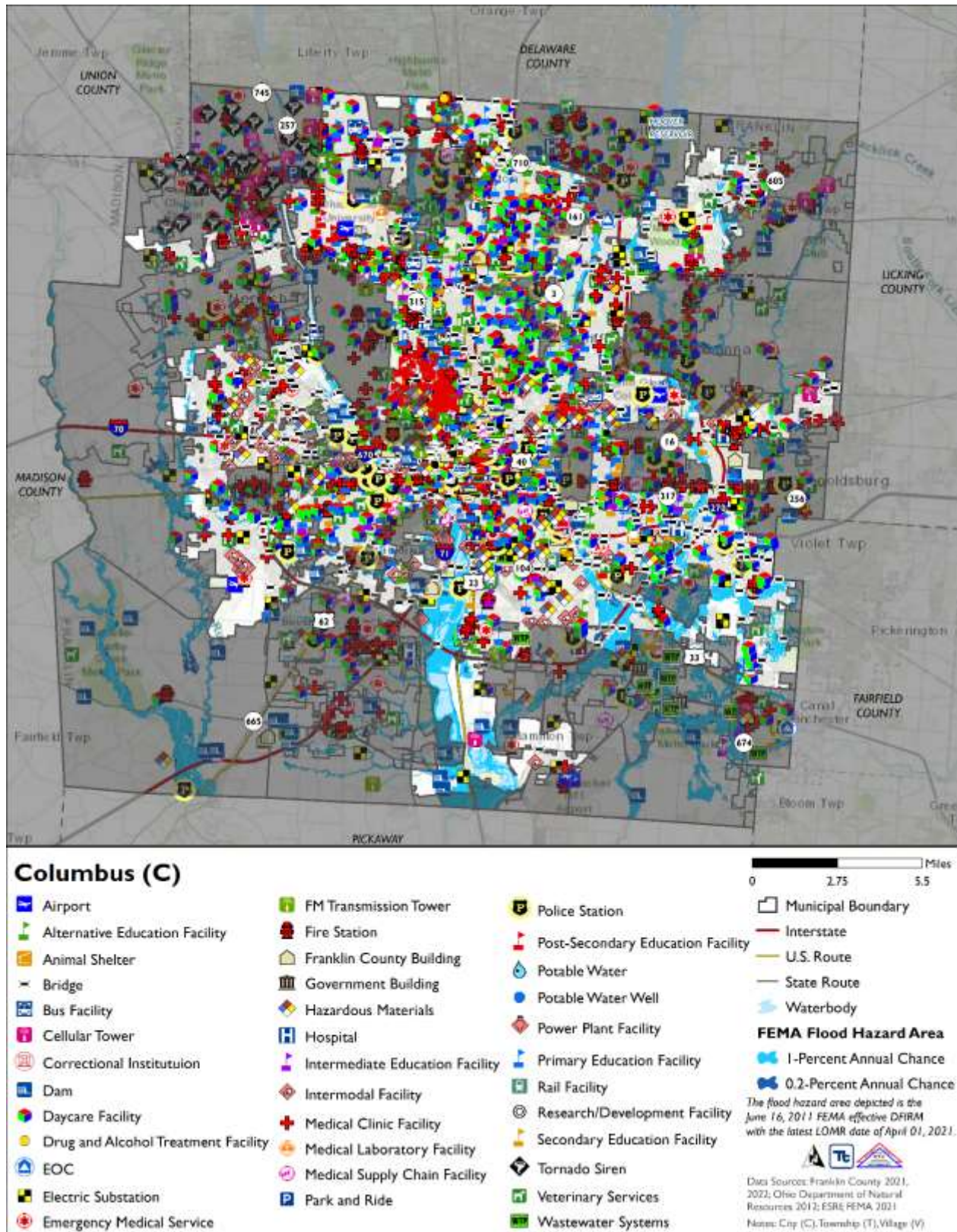


Figure 9.8-3. City of Columbus Hazard Area Extent and Location Map - Land Subsidence

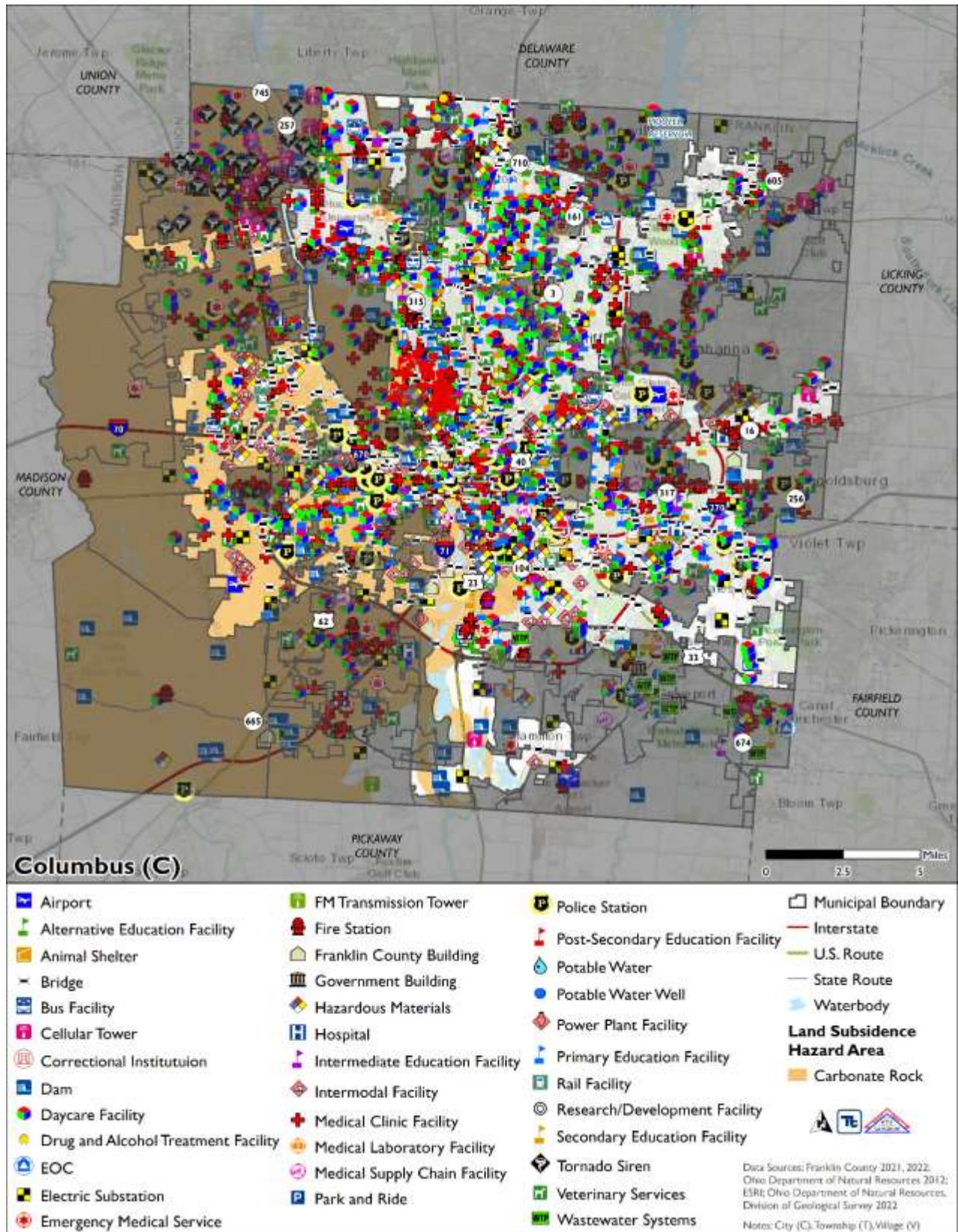
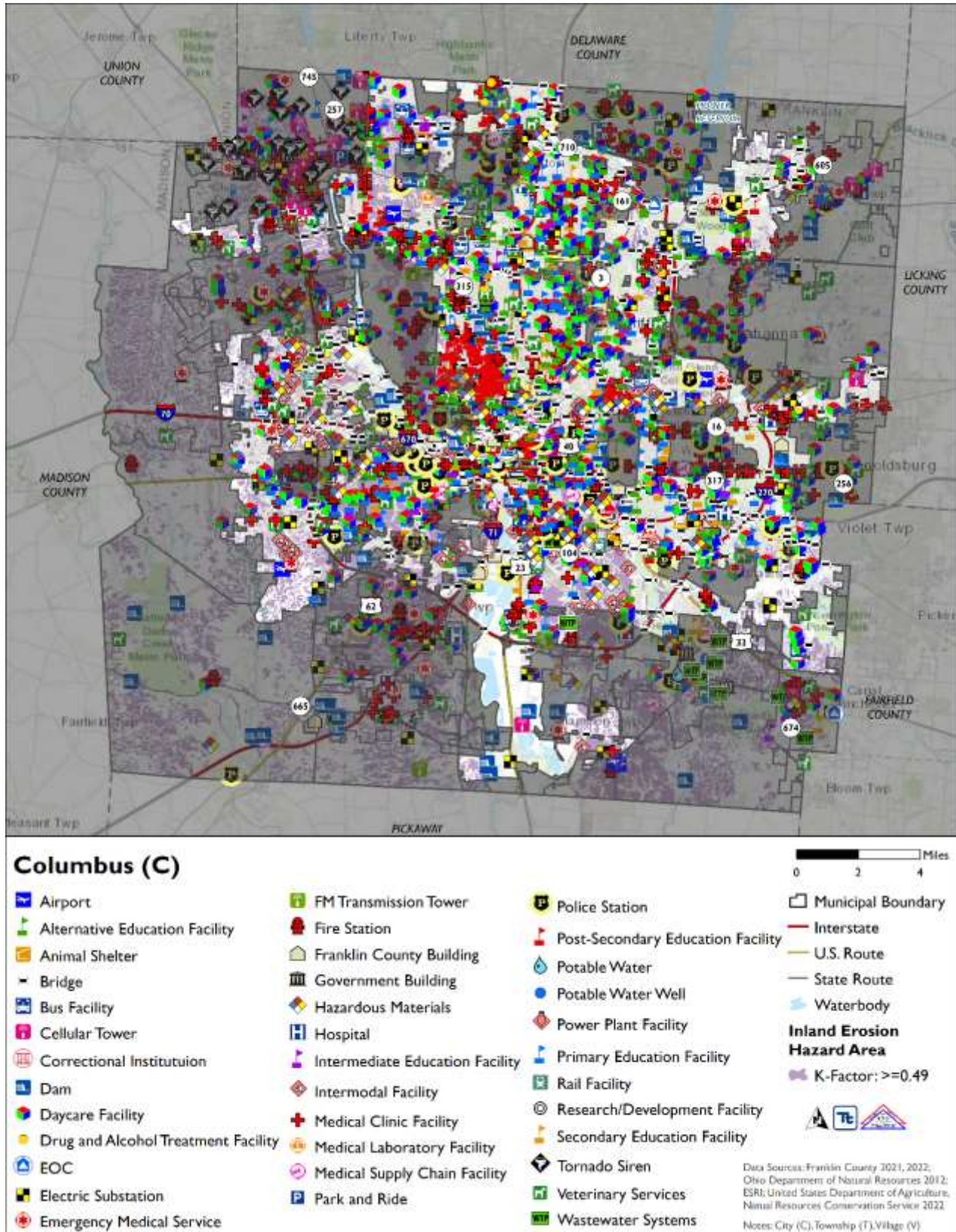


Figure 9.8-4. City of Columbus Hazard Area Extent and Location Map - Inland Erosion



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Columbus' history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Columbus experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.8-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The City did not experience any notable damages or losses. |
| March 2020-present | COVID-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | As of May 01, 2023, Columbus has had 197,567 confirmed cases and 2,002 reported deaths. There has been a total of 4,646 hospitalizations. Of those who have reported to have had COVID-19, 45% were Male and 55% were Female. The median age range is 32 years old. Healthcare workers account for roughly 3% of the total number of confirmed cases. |
| March 2020 | Flooding | N/A | Record rainfall in Central Ohio causing significant flooding in March (2020). 2.89" was recorded, shattering the old daily record of 1.60" set in 1984. Several rivers and streams in central and southern Ohio recorded above flood stage for several days. | The City did not experience any notable damages or losses. |
| May 2020 | Floodwall Event | N/A | On May 20, 2020, record-breaking rainfall around the city causing historic flooding in parts of Columbus/Franklin County. This caused the Scioto River to crest at more than 24 feet, necessitating implementation of two stoplog gates to provide our established line of | The City did not experience any notable damages or losses. |

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|----------------|---|--------------------|--|--|
| | | | protection for the Franklinton and West Columbus areas. | |
| June 13, 2022 | Heatwave | N/A | A significant heat dome brought blistering temperatures that have toppled records. Highs have spiked 10 to 20 degrees above average in spots, and some places have endured their hottest and most humid weather ever observed during June. This heat wave resulted in massive power outages. | The City did not experience any notable damages or losses. |

Source: Columbus Public Health, 2023

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Columbus. The City of Columbus reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Columbus indicated the following:

- The City agreed with the ranking of the hazards.

Table 9.8-14. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee | Medium |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.8-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Columbus

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 226 | 219 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 325 | 310 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | 438 | 375 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 1,067 | 978 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | 205 | 174 |
| Delaware Dam Inundation (MH Breach) Hazard Area | 598 | 577 |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Columbus identified the following vulnerabilities within its community:

- Flooding occurs at all intersections between Morse Road and Cooke Road.
- Flooding occurs at all intersections between Olentangy River Road and Henderson Road.
- There have been deficiencies identified in the West Columbus Local Protection Project, including deteriorating sills, which are intended to provide flood protection.
- The Jackson Pike and Southerly Wastewater Treatment Plants need to have fill removed from previous plant work to be compliant with FEMA requirements.
- The Class II dams located at Greenlawn and College Avenues need embankment and structural repairs.
- The Frank Road Pump Station, Greenlawn Ave Pump Station, and Dublin Rd. Pump Station do not have back-up generators.
- Division of Sewers and Drains stormwater and sanitary pumping stations are needing to be evaluated and upgraded to ensure uninterrupted collection of stormwater.
- The tree ordinance and Urban Forestry Master Plan should be updated.
- Sewer dams cross the Columbus waterways at several locations making them vulnerable to natural hazards.
- Critical facilities are built in areas susceptible to erosion and land subsidence.
- Residents may not be informed or educated on how to protect themselves and their property from the various hazards which may impact the City.
- Flooding during peak flows occurs at the City owned detention basins.
- The Harmon Avenue Floodwall gate sill has become damaged.
- Sections of the SR 315 floodwall for the Franklinton Wall has become damaged.

- Flooding is experienced in urban areas of the City, where riverine or inland flooding would not be experienced.
- The Log Gate at CSX Railroad for the Franklinton Wall has become damaged.
- There is not a defined location(s) for residents in need to seek assistance during an emergency.
- There is not an alert system the City can use to alert residents for time sensitive warnings.
- Residents do not have back-up power to remain resilient during severe storms.
- Columbus and Franklin County buildings are not currently designed to survive and thrive in extreme heat, floods, and adverse weather conditions.
- Street flooding occurs in the Franklinton area.
- Fill in the Jackson Pike and Southerly floodplains impact their surrounding areas.
- There are three known properties in the City which experience repetitive losses due to floods.
- Properties in Sharon Woods are located in the SFHA.
- The Gould Park area repeatedly floods.
- The City does not have an Emergency Action Plan for the North Bank Park / Arena District Area.
- There are flood prone properties in the Gould Park and Annadale / Martindale Areas.
- City staff does not have the resources to monitor real-time weather and road conditions to support the City's annual snow and ice plan.
- The City struggles with training staff to ensure they are prepared to operate the machinery properly.

9.8.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.8-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|-----------------------|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Provide pre-identified locations for heating and cooling shelters, in events of extreme cold/extreme heat, generators and other expendable resources (blankets, water, etc.) for public consumption | Public Health | Completed | No | - | - |
| Seek funding for repetitive loss structures to permanently reduce damage to these structures. (3 known properties est. at \$425,000 /2 years) | Mayor's Office | No Progress | Yes | There are three known properties in the City which experience repetitive losses due to floods. | Mayor's office |
| Acquisition project in Sharon Woods (4,000,000 / 3 years) | Mayor's Office | No Progress | Yes | Properties in Sharon Woods are located in the SFHA. | Mayor's office |
| Study cause of repeated flooding in Gould Park area and explore possible solutions to the flooding. (100,000 / 1year) | Mayor's Office | No Progress | Yes | The Gould Park area repeatedly floods. | Mayor's office |
| Develop & implement an Emergency Action Plan to provide for flood protection of the North Bank Park / Arena District Area. (\$750,000) | Mayor's Office | No Progress | Yes | The City does not have an Emergency Action Plan for the North Bank Park / Arena District Area. | Mayor's office |
| Buyout of flood prone properties in the Gould Park and Annadale / Martindale Areas. (\$3.0 Mil.) | Mayor's Office | No Progress | Yes | There are flood prone properties in the Gould Park and Annadale / Martindale Areas. | Mayor's office |
| Retrofit of city owned detention basins for water quality and peak flows. (\$1.0 Mil) | Public Utilities-DOSD | In Progress BRIC/HMGP/ Local Funds \$1,000,000 | Yes | Flooding City owned detention basins needing retrofitting in the stormwater system to prevent flooding in peak flows. | Department of Public Utilities- Division of Sewerage and Drainage |

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|------------------------|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Repair of Harmon Avenue Floodwall gate sill. (\$500,000) | DPU-DOSD | In Progress BRIC/HMGP/ Local Funds \$500,000 | Yes | Flooding Repair and improve the sill of the Harmon floodwall gate to ensure proper function of the Franklinton Floodwall. | Department of Public Utilities- Division of Sewerage and Drainage |
| Repair S.R. 315 floodwall. (\$300,000) | Public Utilities- DOSD | In Progress BRIC/HMGP/ Local Funds \$300,000 | Yes | Flooding Repair and improve sections of the SR 315 floodwall to ensure proper function of the Franklinton Floodwall. | Department of Public Utilities- Division of Sewerage and Drainage |
| Stormwater five-year capital projects (\$15 Mil./yr.) | Public Utilities-DOSD | In Progress BRIC/HMGP/ Local Funds \$15,000,000 | Yes | Flooding Capital Investment to improve stormwater collection system to prevent flooding in urban areas. | Department of Public Utilities- Division of Sewerage and Drainage |
| Repair of log gate across CSX Railroad. (\$500,000) | Public Utilities-DOSD | In Progress BRIC/HMGP/ Local Funds \$500,000 | Yes | Flooding Repair and improve the Log Gate at CSX Railroad crossing to ensure proper function of the Franklinton Floodwall. | Department of Public Utilities- Division of Sewerage and Drainage |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Columbus identified the following mitigation efforts completed since the last HMP:

- Additional Community Centers are having HVAC systems upgraded to accommodate additional designated warming and cooling centers.

Since the adoption of the County's first HMP, the City of Columbus has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Columbus participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.8-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | - | X | X | X | - | - | X | X | X | X |
| Disease Outbreak | - | - | - | X | - | - | X | - | - | X |
| Drought | - | - | - | X | - | - | X | - | - | X |
| Earthquake | - | X | - | X | - | - | X | - | X | X |
| Extreme Temp | X | X | - | X | - | X | X | - | - | X |
| Flood | X | X | - | X | - | X | X | - | X | X |
| Geologic | - | X | - | X | - | - | X | - | X | X |
| Invasive Species | - | - | - | X | - | - | X | - | - | X |
| Severe Summer Weather | X | X | - | X | X | X | X | X | - | X |
| Severe Winter Weather | X | X | - | X | X | X | X | X | - | X |
| Tornado | X | X | - | X | - | X | X | - | X | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.8-18)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Columbus will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.8-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------|---|---|---------------------------|-----------|--------------------|--|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-Columbus-01 | Northeast Stormwater Study | Problem: Flooding along roadway between Morse Road and Cooke Road, which includes Clinton Estates (Shanley drive and Maize rd.) and all intersections in that neighborhood flood during heavy rain. Solution: Complete Northeast Stormwater Study to understand the extent of the flooding issue and review recommendations for flooding around Maize-Morse & Clinton Estates roadways to mitigate stormwater accumulation in that area. | Flood | 2 | 2 years | Department of Public Utilities-Division of Sewerage and Drainage | Local Funds | High | Medium | Medium | SIP | SP |
| 2023-Columbus-02 | Northwest Stormwater Study | Problem: Flooding along roadway between Olentangy River Road and Henderson Road and intersections in that neighborhood flood during heavy rain. Solution: Complete Northwest Stormwater Study to understand the extent of the flooding issue and review recommendations for flooding around Henderson Road and Olentangy River road to mitigate stormwater accumulation in that area. | Flood | 2 | 2 years | Department of Public Utilities-Division of Sewerage and Drainage | Local Funds | High | Medium | Medium | SIP | SP |
| 2023-Columbus-03 | Waste Treatment Plant Stormwater and Floodplain Improvements* | Problem: Jackson Pike and Southerly WWTP Stormwater and Flood plain needing improvements to comply with FEMA Requirements to remove fill from past plant work. Solution: Past work at the plants have placed fill in the floodplain that must be mitigated with compensatory cuts to comply with FEMA requirements. The project will create and require CLOMR and LOMR documents | Flood | 2, 6 | 5 years | Department of Public Utilities-Division of Sewerage and Drainage | BRIC, HMGP, Local Funds | High | High | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------|--|---|--|-----------|--------------------|--|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | for floodplain and compensatory cuts. Stormwater Master Plan and BMP will account for all expected construction at the site for twenty years. | | | | | | | | | | |
| 2023-Columbus-04 | Emergency Generators for Critical Facilities* | <p>Problem: Pump station needs redundancy during loss of power to ensure continued operation of the Frank Road Pump Station, Greenlawn Ave Pump Station, and Dublin Rd. Pump Station.</p> <p>Solution: Identify and develop permanent standby generator system, which meet NEC Article 708 requirements for Critical Operations Power Systems at the City's Frank Road Pump Station, Greenlawn Ave Pump Station, and Dublin Rd. Pump Station.</p> | Flood, Severe Summer Weather, Extreme Temperature, Tornado | 6 | 2 years | Department of Public Utilities-Division of Sewerage and Drainage | BRIC, HMGP, Local Funds | High | High | High | SIP | SP |
| 2023-Columbus-05 | West Columbus Local Protection Project (WCLPP) Improvements* | <p>Problem: There are deficiencies in existing West Columbus Local Protection Project (WCLPP). Visual inspections indicate that the existing sills of the stop log gates along the Franklinton Floodwall are deteriorating. This deterioration presents a safety concern due to the undermining and settlement of various elements within the sills, which create flow paths for flood waters below the stop log gates when installed. The existing sills are intended to provide flood protection for the Franklinton area as part of the WCLPP. This project will address flood protection concerns created by the deteriorating concrete and undermined/settling steel sections of the sills which support the stop log gates along McKinley Avenue, Souder Avenue, Rich Street, and Greenlawn Avenue as part of the WCLPP.</p> <p>Solution: This project will re-design and replace the existing sills to ensure that flood waters can be effectively retained by the stop log gates when installed. These improvements will 1) meet the current Army Corps of Engineers requirements; 2) eliminate the</p> | Flood | 6 | 3 years | Department of Public Utilities-Division of Sewerage and Drainage | BRIC, HMGP, Local Funds | High | High | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------|-------------------------------------|--|---------------------------|-----------|--------------------|--|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | current safety concerns presented by the deteriorating sills; 3.) address concerns/issues with the post-pocket designs, and 4) allow for reliable flood protection. In addition to the gate sill repairs, this project will address the concrete wall sections of the WCLPP which shall consist of visually inspecting both sides of the Floodwall (wet and dry), identifying and quantifying the areas where spalling and cracking have occurred, and developing standard details and specifications for the various types of concrete repairs that will be necessary. | | | | | | | | | | |
| 2023-Columbus-06 | Pump Stations Evaluation & Upgrade* | <p>Problem: Division of Sewers and Drains stormwater and sanitary pumping stations are needing to be evaluated and upgraded to ensure uninterrupted collection of stormwater.</p> <p>Solution: DOSD Stormwater and Sanitary Pump Stations have been constructed at various times and are used in various degrees. As such, a programmatic approach will be used to evaluate each pump station on a regular basis to ensure that it continues to operate as originally intended and is maintained regularly to ensure its integrity in order to continue the uninterrupted operation of collecting the City's stormwater and the City's sewage for transfer to the City's wastewater treatment facilities in preparation of a natural hazard, such as flooding.</p> | Flood | 6 | 1 year | Department of Public Utilities-Division of Sewerage and Drainage | Local Funds | High | High | High | SIP | SP |
| 2023-Columbus-07 | Green Lawn Ave Dam Project* | <p>Problem: Greenlawn avenue Class II dam are needing embankment and structural repairs to prevent property damage to surrounding neighborhoods.</p> <p>Solution: Green Lawn Ave Dam Project will provide repairs to reinforce the dam embankment and provide upgrades to the existing dam structure to prevent property damage.</p> | Dam and Levee Failure | 6 | 2 years | Department of Public Utilities-Division of Sewerage and Drainage | Local Funds | High | High | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------|--|--|--|-----------|--------------------|---|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-Columbus-08 | College Ave Dam* | Problem: College avenue Class II dam are needing embankment and structural repairs to prevent property damage to surrounding neighborhoods. Solution: College Ave Dam project will upgrade existing infrastructure of the dam and provide structural reinforcement of its core physical components. | Dam and Levee Failure | 6 | 2 years | Department of Public Utilities- Division of Sewerage and Drainage | Local Funds | High | High | High | SIP | SP |
| 2023-Columbus-09 | Canopy Preservation and Maintenance | Problem: Updating tree ordinances and Urban Forestry Master Plan to better balance canopy preservation with the impact to public safety aspects of management of trees trimming/ tree removal around critical infrastructure facilities, powerlines, and substations. Solution: Review infrastructure protection needs for tree mitigation and management of trees/tree limbs and update Urban Forestry Master Plan to ensure infrastructure protection needs are met. | Severe Summer Weather, Severe Winter Weather | 1 | 3 years | Department of Public Utilities, Columbus Parks & Recreation | | Medium | Medium | High | LPR | PR, NR |
| 2023-Columbus-10 | Sewer Line Relocation Feasibility Study | Problem: Sewer dams cross the Columbus waterways at several locations making them vulnerable to natural hazards (ice, debris, etc.), which if breached will release sewage into waterways and cause disruption to sanitary sewer systems. Solution: Study feasibility of relocating sewer lines that cross Columbus/Franklin County waterways to protect environment from failure of a sanitary system into the rivers/streams, while also providing protection of the sanitary sewer infrastructure. | Dam and Levee Failure | 6 | 3 years | Department of Public Utilities- Division of Sewerage and Drainage | Local Funds | High | High | Medium | SIP, NSP | SP, NR |
| 2023-Columbus-11 | Critical Infrastructure Susceptibility Study | Problem: Review critical infrastructure facilities built in areas susceptible to erosion and land subsidence, such as Jackson Pike Waste Water Treatment Plant and its substation. | Geologic Hazards | 6 | 2 years | Department of Public Utilities, Columbus Parks & Recreation | Local Funds, HMGP | Medium | Medium | Medium | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------------------------|---|---|--|-----------|--------------------|---|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | Solution: Study and assess Columbus DPU critical infrastructure constructed on land susceptible to ground subsidence (K Factor (≥ 0.49) or rests on land that risks the to the critical facilities, substations, or other critical structure. | | | | | | | | | | |
| 2023-Columbus-12 | All-Hazards Education Campaign | Problem: Residents may not be informed or educated on how to protect themselves and their property from the various hazards which may impact the City. Solution: Work with Franklin County EM&HS to provide residents of the City of Columbus with the necessary information to protect themselves and their property from the threats of all hazards. | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 2, 4, 5 | 2 years | Franklin County EM&HS, Department of Public Safety, and Department of Neighborhoods | HMGP | High | Low | High | EAP | PI |
| 2023-Columbus-13 (2018 Action #7) | Retrofit of city owned detention basins for water quality and peak flows* | Problem: Flooding during peak flows occurs at the City owned detention basins. Solution: Retrofit the City-owned detention basins to the appropriate size to mitigate future flooding. | Flood | 6 | 4 to 5 years | Department of Public Utilities-Division of Sewerage and Drainage | BRIC/HMGP/Local Funds | High | High | High | SIP | SP |
| 2023-Columbus-14 (2018 Action #8) | Repair of Harmon Avenue Floodwall gate sill* | Problem: The Harmon Avenue Floodwall gate sill has become damaged. Solution: Repair and improve the sill of the Harmon floodwall gate to ensure proper function of the Franklinton Floodwall. | Flood | 6 | 4 to 5 years | Department of Public Utilities-Division of Sewerage and Drainage | BRIC/HMGP/Local Funds | High | High | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---|---|---|---|-----------|---|--|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-Columbus-15 (2018 Action #9) | Repair S.R. 315 floodwall* | Problem: Sections of the SR 315 floodwall for the Franklinton Wall has become damaged. Solution: Repair and improve sections of the SR 315 floodwall to ensure proper function of the Franklinton Floodwall. | Flood | 6 | 4 to 5 years | Department of Public Utilities- Division of Sewerage and Drainage | BRIC/HMGP/ Local Funds | High | High | High | SIP | SP |
| 2023-Columbus-16 (2018 Action #10) | Stormwater five-year capital projects. | Problem: Flooding is experienced in urban areas of the City, where riverine or inland flooding would not be experienced. Solution: Utilize capital Investments to improve stormwater collection system to prevent flooding in urban areas. | Flood | 6 | 4 to 5 years | Department of Public Utilities- Division of Sewerage and Drainage | BRIC/HMGP/ Local Funds | High | High | High | SIP | SP |
| 2023-Columbus-17 (2018 Action #11) | Repair of log gate across CSX Railroad. | Problem: The Log Gate at CSX Railroad for the Franklinton Wall has become damaged. Solution: Repair and improve the Log Gate at CSX Railroad crossing to ensure proper function of the Franklinton Floodwall. | Flood | 6 | 4 to 5 years | Department of Public Utilities- Division of Sewerage and Drainage | BRIC/HMGP/ Local Funds | High | High | High | SIP | SP |
| 2023-Columbus-18 | Sustainable Columbus Resilience Hubs | Problem: In the event of a natural disaster where Columbus and Franklin County residents lose power, residents need a place to go to seek assistance (food/water/access to internet/medical services). Solution: Establish a coordinated network of resilience hubs by 1) developing an implementation plan for priority resilience hub locations by 2025, 2) implementing resilience hubs within a 15-minute walk of all residents by 2050. | Extreme Temperature, Flood, Severe Summer Weather, Tornado, Severe Winter Storm | 6 | 2 to 3 years for the priority hubs; long-term for full implementation | Public Health, Sustainable Columbus | Local Funds, BRIC | High | High | High | SIP | ES |
| 2023-Columbus-19 | Regional Alert System* | Problem: Residents need to be able to receive time sensitive warnings in a manner that will be accessible to all. Solution: Implement a regional alert system for climate hazards by 2025. | Dam and Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme | 6 | 2 to 3 years | Public Health, Department of Technology | Local Funds | High | High | High | EAP | ES |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------|-------------------------------------|---|---|-----------|--|---|--|--------------------|-----------------|----------|---------------------|--------------|
| | | | Temperature, Flood, Geological Hazards, Invasive Species, Severe Summer Weather, Tornado, Severe Winter Storm | | | | | | | | | |
| 2023-Columbus-20 | Microgrid Prioritization Study | Problem: Residents need to have resilient power in the event of high winds, tornados, and extreme weather events. Solution: Complete a microgrid and energy storage prioritization study by 2025. Implement 5 microgrid pilot projects by 2030. | Extreme Temperature, Flood, Severe Summer Weather, Tornado, Severe Winter Storm | 6 | 2 to 3 years for the prioritization study; long-term for full implementation | AEP Ohio, Sustainable Columbus | BRIC, Utility Funds, Other Federal IRA | High | High | High | SIP | PP |
| 2023-Columbus-21 | Resilient Building Design Checklist | Problem: Columbus and Franklin County buildings need to be designed to survive and thrive in extreme heat, floods, and adverse weather conditions. Solution: Develop and pilot a resilience design checklist in 2025. | Extreme Temperature, Flood, Severe Summer Weather, Tornado, Severe Winter Storm | 6 | 2 to 3 years | Building and Zoning, Public Utilities | Local Funds | Medium | Low | High | LPR | PP |
| 2023-Columbus-22 | Franklinton Stormwater Improvements | Project: Street flooding occurs in the Franklinton area. Solution: This project will evaluate and improve the overall stormwater system in the Franklinton Area. Scope - This project will design and construct new storm sewers and storm water detention facilities in the Franklinton area to increase storm sewer capacity and mitigate street flooding . Justification - The Franklinton area has frequent street flooding and flooding-related complaints as results of large impervious coverage and insufficient storm sewer conveyance. In addition, large scale re-development has been proposed in Scioto | Flood | 2, 4, 6 | 36 months | Department of Public Utilities- Division of Sewerage and Drainage | BRIC/HMGP/ Local Funds | High | High | High | SIP | SP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------------------------|------------------------------------|---|---------------------------|-----------|--------------------|--|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | Peninsula and East Franklinton area. Blueprint program in West Franklinton also require stormwater outlets for upcoming green infrastructures. This project is to evaluate the stormwater system within Franklinton area holistically, including storm and combine sewer conveyance system and two pump stations in Dodge Park and Renick Run. The project has the potential to protect 262 buildings, totaling over \$18 million in valuation. | | | | | | | | | | |
| 2023-Columbus-23 | Jackson Pike Stormwater Floodplain | Problem: Fill in the floodplain impacts the surrounding area. Solution: Address historical impacts from fill in the floodplain and develop a stormwater master plan. Alternatives will look at the construction of full build conditions and determine the need and timing for a ring levy surrounding the facility. | Flood | 2, 3, 6 | 36 months | Department of Public Utilities-Division of Sewerage and Drainage | BRIC/HMGP/Local Funds | High | High | High | LPR | PP |
| 2023-Columbus-24 | Southerly Stormwater Floodplain | Problem: Fill in the floodplain impacts the surrounding area. Solution: Address historical impacts from fill in the floodplain and develop a stormwater master plan. Alternatives will look at the construction of full build conditions and determine the need and timing for a ring levy surrounding the facility. | Flood | 2, 3, 6 | 60 months | Department of Public Utilities-Division of Sewerage and Drainage | BRIC/HMGP/Local Funds | High | High | High | LPR | PP |
| 2023-Columbus-25 (2018 Action #2) | Repetitive Loss Funding | Problem: There are three known properties in the City which experience repetitive losses due to floods. Solution: Seek funding for repetitive loss structures to permanently reduce damage to these structures. (3 known properties est. at \$425,000 /2 years) | Flood | 4, 6 | 2 years | Mayor's office | BRIC | High | Medium | High | SIP | PP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--|---|---|---------------------------|-----------|--------------------|--|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-Columbus-26 (2018 Action #3) | Sharon Woods Acquisitions | Problem: Properties in Sharon Woods are located in the SFHA. Solution: Acquisition project in Sharon Woods (4,000,000 / 3 years) | Flood | 4, 6 | 3 years | Mayor's office | BRIC/HMGP/ Local Funds | High | High | High | SIP | PP |
| 2023-Columbus-27 (2018 Action #4) | Gould Park Flood Study | Problem: The Gould Park area repeatedly floods. Solution: Study cause of repeated flooding in Gould Park area and explore possible solutions to the flooding. (100,000 / 1year) | Flood | 1, 3, 4 | 1 year | Mayor's office | BRIC/HMGP/ Local Funds | High | High | High | LPR | PP |
| 2023-Columbus-28 (2018 Action #5) | Emergency Action Plan | Problem: The City does not have an Emergency Action Plan for the North Bank Park / Arena District Area. Solution: Develop and implement an Emergency Action Plan to provide for flood protection of the North Bank Park / Arena District Area. (\$750,000) | Flood | 1, 6 | Short Term | Mayor's office | BRIC/HMGP/ Local Funds | High | High | High | LPR | PP |
| 2023-Columbus-29 (2018 Action #6) | Gould Park, Annadale, Martindale Flood Prone Properties | Problem: There are flood prone properties in the Gould Park and Annadale / Martindale Areas. Solution: Buyout of flood prone properties in the Gould Park and Annadale / Martindale Areas. (\$3.0 Mil.) | Flood | 4, 6 | Short Term | Mayor's office | BRIC/HMGP/ Local Funds | High | High | High | SIP | PP |
| 2023-Columbus-30 | Road Weather Information and Friction Sensors | Problem: During winter snow and ice season, City crews must clear more than 4,600 lane miles of freeways, arterial streets, collector residential streets, and residential streets during and after severe winter weather events. Staff spend months developing the City's annual snow and ice plan, but staff lack the means to monitor real-time weather and road conditions. Staff must rely upon conditions reported by a small number of spotters and supervisors, as well as previous experience to decide the best way to treat road surfaces and deploy limited personnel. This provides an incomplete picture of what is necessary to | Severe Winter Weather | 6 | 1.5 years | City of Columbus, Department of Public Service, Division of Infrastructure Management. | BRIC/HMGP/ Local Funds | High | High | High | LPR | PR |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------|------------------------------------|---|---------------------------|-----------|--------------------|---|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | <p>treat current conditions and ensure critical corridors remain open.</p> <p>Solution: This project will provide Columbus and other Central Ohio agencies with the ability to monitor real-time weather and road conditions using multiple sensors, including mobile sensors mounted to snow plows. This will significantly enhance Columbus' ability to determine the best way to treat road surfaces and deploy limited personnel and resources as quickly as possible. This project will complement Columbus' current pilot to get better roadway weather information (https://www.xweather.com/blog/article/wx-horizon-x-columbus).</p> | | | | | | | | | | |
| 2023-Columbus-31 | Winter Weather Training Simulators | <p>Problem: During winter snow and ice season, City crews must clear more than 4,600 lane miles of freeways, arterial streets, collector residential streets, and residential streets during and after severe winter weather events. Columbus' fleet of snow plows are at the heart of the region's response to severe winter weather, and finding enough CDL drivers to operate these plows is an annual challenge, and making sure they are adequately prepared to operate the plows in severe winter conditions is an additional annual challenge.</p> <p>Solution: The City will purchase a simulator to create a training experience that can replicate many of the challenges faced when driving in severe winter weather and other hazards. The technology can provide a training environment designed to prepare drivers for the hazards they will face on the public roads during an emergency, without having to put the drivers or the public at risk during this training. The simulator can also be programmed to prepare other first responders</p> | Severe Winter Weather | 6 | 1.5 years | City of Columbus, Department of Public Service, Division of Infrastructure Management | BRIC | High | High | Medium | LPR | ES |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|----------------------------|---|---------------------------|-----------|--------------------|---------------------------|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | for severe winter weather and other emergency conditions, e.g., flooded roadways. Training on these simulators will help improve emergency readiness and allow all first responders to be more ready to respond during severe winter weather or other emergencies. The simulator would not be limited to severe winter weather scenarios. Training programs can also be developed to simulate other emergency scenarios that city staff – including police and fire – must be ready to address. | | | | | | | | | | |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CRS Community Rating System
- FEMA Federal Emergency Management Agency
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.

- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.8-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|------------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Columbus-01 | Northeast Stormwater Study | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 7 | Medium |
| 2023-Columbus-02 | Northwest Stormwater Study | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 7 | Medium |
| 2023-Columbus-03 | Waste Treatment Plant Stormwater and Floodplain Improvements | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 12 | High |
| 2023-Columbus-04 | Emergency Generators for Critical Facilities | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 11 | High |
| 2023-Columbus-05 | West Columbus Local Protection Project (WCLPP) Improvements | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 11 | High |
| 2023-Columbus-06 | Pump Stations Evaluation & Upgrade | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 12 | High |
| 2023-Columbus-07 | Green Lawn Ave Dam Project | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 12 | High |
| 2023-Columbus-08 | College Ave Dam | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 12 | High |
| 2023-Columbus-09 | Canopy Preservation and Maintenance | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 11 | High |
| 2023-Columbus-10 | Sewer Line Relocation Feasibility Study | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | Medium |
| 2023-Columbus-11 | Critical Infrastructure Susceptibility Study | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 6 | Medium |



| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|------------------------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Columbus-12 | All-Hazards Education Campaign | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 11 | High |
| 2023-Columbus-13 (2018 Action #7) | Retrofit of city owned detention basins for water quality and peak flows. | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 9 | High |
| 2023-Columbus-14 (2018 Action #8) | Repair of Harmon Avenue Floodwall gate sill. | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 9 | High |
| 2023-Columbus-15 (2018 Action #9) | Repair S.R. 315 floodwall. | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 9 | High |
| 2023-Columbus-16 (2018 Action #10) | Stormwater five-year capital projects. | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 9 | High |
| 2023-Columbus-17 (2018 Action #11) | Repair of log gate across CSX Railroad. | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 9 | High |
| 2023-Columbus-18 | Sustainable Columbus Resilience Hubs | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 9 | High |
| 2023-Columbus-19 | Regional Alert System | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 11 | High |
| 2023-Columbus-20 | Microgrid Prioritization Study | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 10 | High |
| 2023-Columbus-21 | Resilient Building Design Checklist | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-Columbus-22 | Franklinton Stormwater Improvements | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 10 | High |
| 2023-Columbus-23 | Jackson Pike Stormwater Floodplain | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 10 | High |
| 2023-Columbus-24 | Southerly Stormwater Floodplain | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 10 | High |
| 2023-Columbus-25 (2018 Action #2) | Repetitive Loss Funding | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 10 | High |
| 2023-Columbus-26 (2018 Action #3) | Sharon Woods Acquisitions | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 10 | High |
| 2023-Columbus-27 (2018 Action #4) | Gould Park Flood Study | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 10 | High |
| 2023-Columbus-28 (2018 Action #5) | Emergency Action Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 9 | High |



| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|--------------------------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Columbus-29 (2018 Action #6) | Gould Park, Annadale, Martindale Flood Prone Properties | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 10 | High |
| 2023-Columbus-30 | Road Weather Information and Friction Sensors | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 11 | High |
| 2023-Columbus-31 | Winter Weather Training Simulators | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 8 | Medium |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.9 CITY OF DUBLIN

This section presents the jurisdictional annex for the City of Dublin that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Dublin participated in the planning process, an assessment of the City of Dublin’s risk and vulnerability, the different capabilities used in the City of Dublin, and an action plan that will be implemented to achieve a more resilient community.

9.9.1 Hazard Mitigation Planning Team

The City of Dublin identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Dublin departments/divisions. The Emergency Management Coordinator/Law Enforcement Planner represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. Several departments and divisions were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.9-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|--|
| Name/Title: | Tom Hirschy, Emergency Management Coordinator/Law Enforcement Planner | Name/Title: | Megan O'Callaghan, City Manager/(Emergency Management Director – per 36.04A) |
| Address: | 6565 Commerce Parkway, Dublin, Ohio 43017 | Address: | 5555 Perimeter Drive, Dublin, Ohio 43017 |
| Phone Number: | 614-410-4808 | Phone Number: | 614-410-4420 |
| Email: | thirschy@dublin.oh.us | Email: | mocallaghan@dublin.oh.us |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Paul Hammersmith | | |
| Address: | 6555 Shier Rings Road, Dublin, Ohio 43017 | | |
| Phone Number: | 614-410-4617 | | |
| Email: | phammersmith@dublin.oh.us | | |
| Additional Contributors: | | | |
| Name/Title: | Robert Ranc, Deputy City Manager | | |
| Method of Participation: | Capability Assessment Worksheet, Mitigation Action Review Worksheet, Annex Support Meetings for Mitigation Strategies, Future Mitigation Strategy Development | | |

| | |
|---|---|
| Name/Title: Method of Participation: | Jenny Rauch, Director of Planning Capability Assessment Worksheet, Building Permits and New Development Worksheet, NFIP Floodplain Worksheet, New Development Input, Annex Support Meetings for Mitigation Strategies, Review Dublin HMP Annex |
| Name/Title: Method of Participation: | Bradley Fagrell, Director of Building Standards Capability Assessment Worksheet, Building Permits and New Development Worksheet, Annex Support Meetings for Mitigation Strategies, Review Dublin HMP Annex |
| Name/Title: Method of Participation: | Jay Anderson, Director of Public Service Capability Assessment Worksheet, Mitigation Action Review Worksheet, Annex Support Meetings for Mitigation Strategies, Future Mitigation Strategy Development, Review Dublin HMP Annex |
| Name/Title: Method of Participation: | Justin Paez, Chief of Police Risk Assessment and Mitigation Strategy Workshop, Annex Support Meetings for Mitigation Strategies |
| Name/Title: Method of Participation: | Matt Stiffler, Chief Financial Officer/Director of Finance Capabilities Assessment Worksheet |
| Name/Title: Method of Participation: | Matt Earman, Director of Parks and Recreation Capability Assessment Worksheet, Mitigation Action Review Worksheet |
| Name/Title: Method of Participation: | Jeannie Willis, Director of Transportation & Mobility Capability Assessment Worksheet, Review Dublin HMP Annex |
| Name/Title: Method of Participation: | Jennifer Klus, Director of Economic Development (resigned) Capabilities Assessment Worksheet |
| Name/Title: Method of Participation: | Michael Hendershot, Deputy Director of Engineering Building Permits and New Development Worksheet |
| Name/Title: Method of Participation: | Charles Stanford, Deputy Director of Engineering (resigned) Capability Assessment Worksheet |
| Name/Title: Method of Participation: | Mike Riebel, Battalion Chief with Washington Township Fire Department Capability Assessment Worksheet |
| Name/Title: Method of Participation: | Brandon Brown, Director of Innovation and Performance Analytics (Interim I.T. Director) Critical Facilities/Community Lifelines Input |
| Name/Title: Method of Participation: | Lindsay Weisenauer, Director of Communications & Public Information Mitigation Action Review Worksheet, Public Outreach Survey, Future Mitigation Strategy Development |
| Name/Title: Method of Participation: | Ron Whittington, Safety Administrator/Risk Manager with Human Resources Hazard Event History Worksheet |
| Name/Title: Method of Participation: | Michael Farrar, Director of Information Technology (resigned) Mitigation Action Review Worksheet |
| Name/Title: Method of Participation: | Bob Taylor, Director of Asset Management & Quality Assurance Problem Area Input, Review Dublin HMP Annex |
| Name/Title: Method of Participation: | Tracey Gee, Director of Recreation Services Future Mitigation Strategy Development |
| Name/Title: Method of Participation: | Kendel Blake, Management Analyst Review Dublin HMP Annex |

9.9.2 Municipal Profile

The City of Dublin is in the northwest corner of Franklin County. The City of Dublin is located in Franklin, Delaware, and Union counties. Located 17 miles northwest of downtown Columbus, the City of Dublin is known for its parks, including scenic bike trails and developed parks with wooded natural areas and river frontage. The City of Dublin has a total area of 24.8 square miles, 24.44 square miles of land and 0.36 square miles of water.

According to the U.S. Census, the 2020 population for the City of Dublin was 49,359, an 18% percent increase from the 2010 Census. Data from the 2020 U.S. Census indicate that 5.6 percent of the population is 5 years of age or younger and 12.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.9.3 Jurisdictional Capability Assessment and Integration

The City of Dublin performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Dublin to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Dublin and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.9-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Chapter 150 – Building Regulations | Local | Building Standards |
| The City of Dublin enforces the latest State of Ohio adopted Building Codes. Statewide adoption of codes consistently enforced by trained personnel in conjunction with design professionals familiar with this basic design program tool, modern building regulations, substantially contribute to the decades long continuing decrease in fire deaths and property loss in Ohio, maintenance of affordable construction, as well as assure essential economic growth in the state. | | | | |
| Zoning/Land Use Code | Yes | Chapter 153 – Zoning Regulations & Title XV – Land Use | Local | Planning and Engineering |
| The Zoning Code outlines permitted uses for each zoning district(s), as well as designated review process. As part of the review process, development applications are required to provide information about topography, water courses, wetlands, flood plain and flood hazard information (i.e., Code Section 153.054(C)(8)(a)). Applications are required to ensure adequate provisions are made for storm drainage within and throughout the site so as to maintain, as far as practicable, usual and normal swales, water courses and drainage areas (i.e. Code Section 153.055(A)(11)). Additionally, that adequate provision for storm drainage within and through the site complies with the applicable | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|--|---|--|
| code regulations and any design criteria established by the city or any other government entity (i.e., Code Sections 153.055(B)(8) and 153.066(F)(4)(I)). Development projects also require compliance with the City's Stormwater Management Design Manual. | | | | |
| Subdivision Ordinance | Yes | Chapter 152 – Subdivision Regulations | Local | Planning |
| The City of Dublin restricts the subdivision of land within or adjacent to natural hazard areas. The subdivision ordinance requires compliance with Chapter 53 for storm drainage (Code Section 152.050). | | | | |
| Site Plan Ordinance | Yes | Chapter 153 – Zoning Regulations and Chapter 152 – Subdivision Regulations | Local | Planning |
| The City of Dublin restricts site plans within or adjacent to natural hazard areas. | | | | |
| Stormwater Management Ordinance | Yes | Chapter 53 – Stormwater Management and Stream Protection | Local | Engineering |
| Stormwater Management and Stream Protection, Chapter 53 regulates stormwater from areas of new development and redevelopment for the purpose of protecting the public health, safety, and welfare; defining appropriate stormwater control measures for the quantity and quality of stormwater runoff in the city; providing for waivers; providing requirements for the protection of water resources; imposing application fees and procedures; requiring adherence to the plans approved by the City Engineer; providing for maintenance; and providing for enforcement and penalties for violation. | | | | |
| In order to protect, maintain, and enhance both the immediate and the long-term health, safety, and general welfare of the citizens of Dublin, it is the intent of the city to enact this chapter so as to accomplish the following objectives: | | | | |
| (1) To prevent loss of life and loss of property due to flooding; | | | | |
| (2) To protect, restore, and maintain the chemical, physical, and biological quality of ground and surface waters; | | | | |
| (3) To encourage productive and enjoyable harmony between humanity and nature thus enhancing the scenic beauty and environment of the city; | | | | |
| (4) To prevent individuals, business entities, and governmental entities from causing harm to the community by activities which adversely affect water resources; | | | | |
| (5) To encourage the protection of natural systems, including groundwater and the use of those natural systems in ways which do not impair their beneficial functioning; | | | | |
| (6) To assist in stabilizing the banks of streams to reduce bank erosion and the downstream transport of sediments eroded from watercourse banks; | | | | |
| (7) To provide areas for natural meandering and lateral movement of stream channels; | | | | |
| (8) To minimize the transport of sediments and pollutants to surface water and groundwater; | | | | |
| (9) To provide high quality stream habitats with shade and food to a wide array of wildlife by maintaining diverse and connected riparian vegetation; | | | | |
| (10) To provide economic benefits to the city by minimizing encroachment on stream channels and reducing the need for costly engineering solutions such as dams and riprap; | | | | |
| (11) To protect structures and reduce property damage and threats to the safety of watershed residents; | | | | |
| (12) To add to the quality of life of the residents of the city and corresponding property values; | | | | |
| (13) To ensure the attainment of these objectives by requiring the approval and implementation of stormwater management plans for all activities, which may have an adverse impact upon groundwater and surface water. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | N/A | N/A | N/A |
| N/A | | | | |
| Real Estate Disclosure | No | Nothing local, but the state has laws pertaining to this. Ohio Revised Code 4735.57 – Agency Disclosure Statement – Dual Agency Disclosure & 4735.58 – When Disclosure Statements To Be Provided & 5302.30 – Property Disclosure Form Required for All Residential Real Property Transfers | State | State Agency |
| | | | | |
| Growth Management | Yes | City of Dublin Community Plan - https://communityplan.dublinohiousa.gov/ https://www.envisiondublin.org/ | Local | Planning And |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| | | <p>City of Dublin Parks and Recreation Master Plan - https://dublinohiousa.gov/dev/dev/wp-content/uploads/2012/05/Parks-Rec-Master-Plan-2009.pdf</p> <p>The city is in the process of updating the community plan.</p> <p>The city is in the process of updating the Parks and Recreation Plan.</p> <p>https://dublinohiousa.gov/strategic-plans-documents/</p> | | Parks Operations |
| <p>The Community Plan is the key policy guide for decision-making about Dublin’s built and natural environments. The Community Plan text and associated maps contain detailed recommendations for future development including the appropriate location and density or intensity of residential and commercial uses; the general location and character of roads; the general location of parks, open space and public buildings; and the general sites for and extent of public water and sanitary sewer utilities. It also contains recommendations to guide development strategies for the unincorporated areas to the northwest of Dublin and for unincorporated ‘islands’ of land surrounded by the city.</p> <p>The Community Plan is a guide for City Council and the Planning and Zoning Commission as they assess the location, character, and extent of proposed public and private development in Dublin. The Plan’s policies and recommendations will be implemented over time through rezoning and subdivisions of land and the location and construction of public improvements. The Plan is designed as a short-, medium- and long-range guide for decision-making. As a guiding document, the Community Plan should be adjusted and reassessed at least every five years.</p> <p>Recommendations throughout this Plan are based upon a review of existing conditions and evaluation of future development scenarios for their impacts on infrastructure, roads and the City’s fiscal health. Dublin’s ability to maintain high quality of services and quality of life depends on a careful review of development proposals for conformance with the Community Plan.</p> <p>https://communityplan.dublinohiousa.gov/home/2007-community-plan/ https://communityplan.dublinohiousa.gov/ https://www.envisiondublin.org/ https://dublinohiousa.gov/strategic-plans-documents/</p> <p>-----</p> <p>Historically, the development and evolution of the Dublin park system has been a combination of sound planning, policy-formulated development directives and market/product awareness. This occurred with an intuitive, non-technical sense of community needs and opportunistic events. With advancements in technology, we now are better equipped to evaluate and assess all components of the park system as we move forward. As a result, this master plan study has produced a more focused, strategic planning document, integrated with the Dublin Community Plan. There are various recommended ongoing study elements (i.e., research data, surveys, etc.) that will be completed in the future and will supplement this study document. This master plan encompasses three key concepts: Understand the past, assess the present and envision the future. Within each concept, we address the physical aspects (i.e., land, facilities and built environment); recreation services; and operations and maintenance components. This study planning document has been formatted to easily accommodate internal, ongoing updates. Revised and new information and data can be introduced; recommendations and adjustments can be implemented in real time.</p> <p>https://dublinohiousa.gov/dev/dev/wp-content/uploads/2012/05/Parks-Rec-Master-Plan-2009.pdf https://dublinohiousa.gov/strategic-plans-documents/</p> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Environmental Protection Ordinance | Yes | Chapter 151 – Flood Control and Chapter 53 – Stormwater Management and Stream Protection | Local | Engineering |
| <p>In addition to local code, there is state code – see below.</p> <p>Ohio Revised Code 3745 – Environmental Protection Agency (State)</p> <p>It is the intent of the general assembly that the environmental protection agency shall:</p> <ul style="list-style-type: none"> (A) Promulgate and put into execution a long-term comprehensive plan and program to conserve, protect, and enhance the air, water, and other natural resources of the state; (B) Prevent and abate pollution of the environment for the protection and preservation of the health, safety, welfare, and property of the people of the state; (C) Administer the air, water, and other natural resources of the state for the use and benefit of the people of the state; (D) Promote the development of technology for environmental protection and management; (E) Operate the state government in ways designed to minimize environmental damage, and assist and cooperate with governmental agencies to restore, protect, and enhance the quality of the environment; (F) Provide for enforcement of the right of the people to environmental quality consistent with human health and welfare. <p>The director of environmental protection may designate one of his staff to serve directly under the director as an ombudsman and expeditor between the citizens and the environmental protection agency in all matters of the environment.</p> | | | | |
| Flood Damage Prevention Ordinance | Yes | Chapter 151 – Flood Control and Chapter / 153.111 – Flood Plain Regulations / 151.09 – Methods of Reducing Flood Losses | Local | Engineering |
| <p>CHAPTER 151: FLOOD CONTROL</p> <p>It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ul style="list-style-type: none"> (A) Protect human life and health; (B) Minimize expenditure of public money for costly flood control projects; (C) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; (D) Minimize prolonged business interruptions; (E) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazards; (F) Help maintain a stable tax base by providing for the proper use and development of areas of special flood hazard so as to minimize future flood blight areas; (G) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions. <p>151.09 METHODS OF REDUCING FLOOD LOSSES.</p> <p>In order to accomplish its purposes, this chapter includes methods and provisions for:</p> <ul style="list-style-type: none"> (A) Restricting or prohibiting uses which are dangerous to health, safety and property due to water hazards, or which result in damaging increases in flood heights or velocities; (B) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; (C) Controlling the alteration of natural floodplains, stream channels and natural protective barriers, which help accommodate or channel flood waters; (D) Controlling filling, grading, dredging and other development which may increase flood damage; and (E) Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas. | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|---|
| The link below outlines the purpose of the section and requirements to be met. https://codelibrary.amlegal.com/codes/dublin/latest/dublin_oh/0-0-0-93839#JD_Chapter151 | | | | |
| Wellhead Protection | No | N/A | N/A | N/A |
| There is state code - Ohio Revised Code 3750.11(G) that states that a political subdivision that owns, operates, or is served by a public water system as defined in section 6109.01 of the Revised Code may establish and enforce requirements that provide for the protection of ground water resources that serve as a source of drinking water for its public water system and that are located within scientifically derived wellhead protection areas. | | | | |
| Emergency Management Ordinance | Yes | Chapter 36 – Emergency Management | Local | City Manager |
| It is the intent and purpose of this chapter to assign responsibility to ensure the complete and efficient utilization of all of the city's resources to cope with a disaster, whether it be man-made, technological, or natural. | | | | |
| Climate Change Ordinance | No | N/A | N/A | N/A |
| As part of the future parks and recreation master plan, there is a 2-page section titled, "Climate Change Assessment". | | | | |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | <p>City of Dublin 2013 Community Plan – https://communityplan.dublinohiousa.gov/ https://www.envisiondublin.org/</p> <p>and</p> <p>City of Dublin Parks and Recreation Master Plan - https://dublinohiousa.gov/dev/dev/wp-content/uploads/2012/05/Parks-Rec-Master-Plan-2009.pdf</p> <p>The city is in the process of updating the community plan.</p> <p>The city is in the process of updating the Parks and Recreation Plan.</p> <p>https://dublinohiousa.gov/strategic-plans-documents/</p> | Local | Planning, Engineering, and Parks and Recreation |
| <p>The Community Plan is the key policy guide for decision-making about Dublin's built and natural environments. The Community Plan text and associated maps contain detailed recommendations for future development including the appropriate location and density or intensity of residential and commercial uses; the general location and character of roads; the general location of parks, open space and public buildings; and the general sites for and extent of public water and sanitary sewer utilities. It also contains recommendations to guide development strategies for the unincorporated areas to the northwest of Dublin and for unincorporated 'islands' of land surrounded by the city.</p> <p>The Community Plan is a guide for City Council and the Planning and Zoning Commission as they assess the location, character, and extent of proposed public and private development in Dublin. The Plan's policies and recommendations will be implemented over time through rezoning and subdivisions of land and the location and construction of public improvements. The Plan is designed as a short-, medium- and long-range guide for decision-making. As a guiding document, the Community Plan should be adjusted and reassessed at least every five years.</p> <p>Recommendations throughout this Plan are based upon a review of existing conditions and evaluation of future development scenarios for their impacts on infrastructure, roads and the City's fiscal health. Dublin's ability to maintain high quality of services and quality of life depends on a careful review of development proposals for conformance with the Community Plan.</p> <p>https://communityplan.dublinohiousa.gov/home/2007-community-plan/ https://communityplan.dublinohiousa.gov/ https://www.envisiondublin.org/ https://dublinohiousa.gov/strategic-plans-documents/</p> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| <p>The Community Plan highlights the importance of natural features and makes recommendations to protect these areas. The Future Land Use Plan identifies the types of development and uses, and the appropriate locations. Where there are natural features to preserve the Special Area Plans also make recommendations to minimize impacts. See attached Community Character and Environment chapter for additional information.</p> <p>Historically, the development and evolution of the Dublin Park system has been a combination of sound planning, policy-formulated development directives and market/product awareness. This occurred with an intuitive, non-technical sense of community needs and opportunistic events. With advancements in technology, we now are better equipped to evaluate and assess all components of the park system as we move forward. As a result, this master plan study has produced a more focused, strategic planning document, integrated with the Dublin Community Plan. There are various recommended ongoing study elements (i.e., research data, surveys, etc.) that will be completed in the future and will supplement this study document. This master plan encompasses three key concepts: Understand the past, assess the present and envision the future. Within each concept, we address the physical aspects (i.e., land, facilities and built environment); recreation services; and operations and maintenance components. This study planning document has been formatted to easily accommodate internal, ongoing updates. Revised and new information and data can be introduced; recommendations and adjustments can be implemented in real time.</p> <p>https://dublinohiousa.gov/dev/dev/wp-content/uploads/2012/05/Parks-Rec-Master-Plan-2009.pdf</p> | Yes | Chapter 8.03 – Capital Program | Local | Finance and City Manager |
| <p>The City of Dublin maintains a five-year capital improvements program/plan (CIP) that is updated annually. Projects may be included in this CIP for risk reduction.</p> <p>Dublin City Council has adopted the 2023-2027 Five-Year Capital Improvements Program (CIP), which allocates \$225 million dollars for new and existing infrastructure in the city. It was developed to advance the City's Strategic Framework supporting the Sustainability of our City's finances and environment as well as funding projects that will Connect our residents through infrastructure and mobility projects. Finally, it was also designed to build a resilient community focusing on safety and resident's needs with regard to mental and physical health.</p> <p>"The 2023-2027 CIP provides funding to advance our Strategic Framework on a number of fronts including sufficient funding for the maintenance of current assets, funding for parks and recreation opportunities, and new projects to enhance the City's infrastructure and improve mobility while staying within the fiscal resources available to us" said Matthew Stiffler, Chief Financial Officer/Director of Finance.</p> <p>The CIP is a five-year outlook for anticipated capital projects and is reviewed and updated annually by the City. These projects are primarily related to improvements in transportation, parks, utilities and facilities. The CIP represents a long-term financial plan, which establishes priorities, identifies project costs and phasing, identifies funding sources, and serves as a planning document for capital improvements. The projects and their timing are reviewed annually by City Council, and adopted by Ordinance. As a planning document, the CIP is a fluid document being revisited many times during the course of the year by City Council, and the City's Administration. Annual revisions to the CIP are based on many considerations, including adjustments in funding sources, construction timing, and the changing needs and priorities of the City.</p> <p>In developing the Five-Year CIP, several elements are taken into consideration:</p> <ul style="list-style-type: none"> • City Council goals • Community surveys • Economic development opportunities • Current economic climate • Grant funding opportunities • Commitments made by the City of Dublin • Maintenance and rehabilitation of existing City facilities and infrastructure • Technology improvements • Enhancements within the community <p>https://dublinohiousa.gov/capital-improvements-program/</p> | No | N/A | N/A | N/A |
| Disaster Debris Management Plan | No | N/A | N/A | N/A |

| | | | | |
|--|-----|---|-------|-------------------------------|
| N/A | | | | |
| Floodplain Management or Watershed Plan | Yes | Chapter 151 – Flood Control and Chapter / 153.111 – Flood Plain Regulations / 151.09 – Methods of Reducing Flood Losses | Local | Engineering |
| <p>CHAPTER 151: FLOOD CONTROL</p> <p>It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:</p> <ul style="list-style-type: none"> (A) Protect human life and health; (B) Minimize expenditure of public money for costly flood control projects; (C) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; (D) Minimize prolonged business interruptions; (E) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazards; (F) Help maintain a stable tax base by providing for the proper use and development of areas of special flood hazard so as to minimize future flood blight areas; (G) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions. | | | | |
| Stormwater Management Plan | Yes | Chapter 53 – Stormwater Management and Stream Protection / Chapter 53.110 Stormwater Management Plan | Local | Engineering |
| <p>CHAPTER 53: STORMWATER MANAGEMENT AND STREAM PROTECTION</p> <p>Regulates stormwater from areas of new development and redevelopment for the purpose of protecting the public health, safety, and welfare; defining appropriate stormwater control measures for the quantity and quality of stormwater runoff in the city; providing for waivers; providing requirements for the protection of water resources; imposing application fees and procedures; requiring adherence to the plans approved by the City Engineer; providing for maintenance; and providing for enforcement and penalties for violation.</p> <p>In order to protect, maintain, and enhance both the immediate and the long-term health, safety, and general welfare of the citizens of Dublin, it is the intent of the city to enact this chapter so as to accomplish the following objectives:</p> <ul style="list-style-type: none"> (1) To prevent loss of life and loss of property due to flooding; (2) To protect, restore, and maintain the chemical, physical, and biological quality of ground and surface waters; (3) To encourage productive and enjoyable harmony between humanity and nature thus enhancing the scenic beauty and environment of the city; (4) To prevent individuals, business entities, and governmental entities from causing harm to the community by activities which adversely affect water resources; (5) To encourage the protection of natural systems, including groundwater and the use of those natural systems in ways which do not impair their beneficial functioning; (6) To assist in stabilizing the banks of streams to reduce bank erosion and the downstream transport of sediments eroded from watercourse banks; (7) To provide areas for natural meandering and lateral movement of stream channels; (8) To minimize the transport of sediments and pollutants to surface water and groundwater; (9) To provide high quality stream habitats with shade and food to a wide array of wildlife by maintaining diverse and connected riparian vegetation; (10) To provide economic benefits to the city by minimizing encroachment on stream channels and reducing the need for costly engineering solutions such as dams and riprap; (11) To protect structures and reduce property damage and threats to the safety of watershed residents; (12) To add to the quality of life of the residents of the city and corresponding property values; (13) To ensure the attainment of these objectives by requiring the approval and implementation of stormwater management plans for all activities, which may have an adverse impact upon groundwater and surface water. <p>The ordinance serves as the city's stormwater management plan. There are future plans to possibly promote a city engineer position that would focus on stormwater management.</p> | | | | |
| Open Space Plan | Yes | City of Dublin 2013 Community Plan – https://communityplan.dublinohiousa.gov/ https://www.envisiondublin.org/ and City of Dublin Parks and Recreation Master Plan - | Local | Planning and Parks Operations |

| | | | | |
|---|-----|---|-------|----------------------|
| | | https://dublinohiousa.gov/dev/dev/wp-content/uploads/2012/05/Parks-Rec-Master-Plan-2009.pdf The City of Dublin is in the process of updating the community plan and the parks and recreation master plan. https://dublinohiousa.gov/strategic-plans-documents/ | | |
| <p>The Community Plan is the key policy guide for decision-making about Dublin’s built and natural environments. The Community Plan text and associated maps contain detailed recommendations for future development including the appropriate location and density or intensity of residential and commercial uses; the general location and character of roads; the general location of parks, open space and public buildings; and the general sites for and extent of public water and sanitary sewer utilities. It also contains recommendations to guide development strategies for the unincorporated areas to the northwest of Dublin and for unincorporated ‘islands’ of land surrounded by the city.</p> <p>The Community Plan is a guide for City Council and the Planning and Zoning Commission as they assess the location, character, and extent of proposed public and private development in Dublin. The Plan’s policies and recommendations will be implemented over time through rezoning and subdivisions of land and the location and construction of public improvements. The Plan is designed as a short-, medium- and long-range guide for decision-making. As a guiding document, the Community Plan should be adjusted and reassessed at least every five years.</p> <p>Recommendations throughout this Plan are based upon a review of existing conditions and evaluation of future development scenarios for their impacts on infrastructure, roads and the City’s fiscal health. Dublin’s ability to maintain high quality of services and quality of life depends on a careful review of development proposals for conformance with the Community Plan.</p> <p>https://communityplan.dublinohiousa.gov/home/2007-community-plan/ https://communityplan.dublinohiousa.gov/ https://www.envisiondublin.org/ https://dublinohiousa.gov/strategic-plans-documents/ -----</p> <p>Historically, the development and evolution of the Dublin park system has been a combination of sound planning, policy-formulated development directives and market/product awareness. This occurred with an intuitive, non-technical sense of community needs and opportunistic events. With advancements in technology, we now are better equipped to evaluate and assess all components of the park system as we move forward. As a result, this master plan study has produced a more focused, strategic planning document, integrated with the Dublin Community Plan. There are various recommended ongoing study elements (i.e., research data, surveys, etc.) that will be completed in the future and will supplement this study document. This master plan encompasses three key concepts: Understand the past, assess the present and envision the future. Within each concept, we address the physical aspects (i.e., land, facilities and built environment); recreation services; and operations and maintenance components. This study planning document has been formatted to easily accommodate internal, ongoing updates. Revised and new information and data can be introduced; recommendations and adjustments can be implemented in real time.</p> <p>https://dublinohiousa.gov/dev/dev/wp-content/uploads/2012/05/Parks-Rec-Master-Plan-2009.pdf</p> | | | | |
| Urban Water Management Plan | No | N/A | N/A | N/A |
| The City of Dublin receives water from the City of Columbus. | | | | |
| Habitat Conservation Plan | Yes | Chapter 53.200 – Establishment of a Stream Corridor Protection Zone | Local | Engineering |
| In addition to this city code, see the Community Plan and the Parks and Recreation Master Plan. | | | | |
| Economic Development Strategic Plan | Yes | Published in October 2019 The City of Dublin is in the process of updating the Economic Development Strategic Plan. | Local | Economic Development |
| Selected Portions from the Economic Development Strategic Plan: | | | | |
| ... each of the attributes that have driven Dublin’s past success also expose the city to risks that can jeopardize the future growth trajectory in the face of new disruptive socioeconomic headwinds. | | | | |

... Dublin's reliance on leading anchor companies to ground the employment footprint of the industrial base presents the risk of outsized negative economic impacts from any business dynamics that affect those companies or their site locations in the absence of efforts to diversify the industry and company mix.

... Multiple disruptive trends affecting economic development, demographics, and the changing nature of work are driving the economic risks that Dublin faces as a city.

... proactively preparing for a future of work that is more decentralized, virtual, and less dependent on large bases of single employer labor can help mitigate significant risk of negative economic consequences if key companies experience disruptive effects to their business models or consider new site location models in the face of technological changes.

... Mitigating these risks will require ongoing investment and a clear economic development strategy in order to maintain the city's current identity as a destination community.

Internal Link: N:\Economic Development\Economic Development Programs\Awards\IEDC Awards\2021\IEDC Excellence Awards_Category 25_EDO of the Year_City of Dublin\Supplemental Material_EDO of the Year\9. Strategic Plan\City of Dublin Economic Development Strategy.pdf

| | | | | |
|----------------------------------|----|-----|-----|-----|
| Shoreline Management Plan | No | N/A | N/A | N/A |
|----------------------------------|----|-----|-----|-----|

N/A

| | | | | |
|---|----|-----|-----|-----|
| Community Wildfire Protection Plan | No | N/A | N/A | N/A |
|---|----|-----|-----|-----|

N/A

| | | | | |
|---|-----|-----|-------|----------------|
| Community Forest Management Plan | Yes | N/A | Local | Public Service |
|---|-----|-----|-------|----------------|

The Community Forest Management Plan includes a Woodlot Management Program w/Priority Ranking for each Woodlot to remove invasive species, and remove downed dead wood within 50 yards of the paths.

| | | | | |
|----------------------------|-----|--------------------------|-------|---------------------------|
| Transportation Plan | Yes | Title VII, Chapter 70.20 | Local | Transportation & Mobility |
|----------------------------|-----|--------------------------|-------|---------------------------|

All traffic-control devices placed pursuant to the provisions of this Traffic Code shall conform to the Ohio Manual of Uniform Traffic Control Devices for Streets and Highways, as set forth in ORC 4511.09.

All traffic signals have battery back-up power systems.

Dublin has conducted a number of transportation studies throughout the community.

| | | | | |
|-------------------------|----|-----|-----|-----|
| Agriculture Plan | No | N/A | N/A | N/A |
|-------------------------|----|-----|-----|-----|

N/A

| | | | | |
|---|----|-----|-----|-----|
| Climate Action/ Resiliency/Sustainability Plan | No | N/A | N/A | N/A |
|---|----|-----|-----|-----|

The Community Plan is the key policy guide for decision-making about Dublin's built and natural environments. The Community Plan text and associated maps contain detailed recommendations for future development including the appropriate location and density or intensity of residential and commercial uses; the general location and character of roads; the general location of parks, open space and public buildings; and the general sites for and extent of public water and sanitary sewer utilities. It also contains recommendations to guide development strategies for the unincorporated areas to the northwest of Dublin and for unincorporated 'islands' of land surrounded by the city.

The Community Plan is a guide for City Council and the Planning and Zoning Commission as they assess the location, character, and extent of proposed public and private development in Dublin. The Plan's policies and recommendations will be implemented over time through rezoning and subdivisions of land and the location and construction of public improvements. The Plan is designed as a short-, medium- and long-range guide for decision-making. As a guiding document, the Community Plan should be adjusted and reassessed at least every five years.

Recommendations throughout this Plan are based upon a review of existing conditions and evaluation of future development scenarios for their impacts on infrastructure, roads and the City's fiscal health. Dublin's ability to maintain high quality of services and quality of life depends on a careful review of development proposals for conformance with the Community Plan.

<https://communityplan.dublinohiousa.gov/home/2007-community-plan/>

<https://communityplan.dublinohiousa.gov/>

<https://www.envisiondublin.org/>

| | | | | |
|---|-----|--|-------|--|
| <p>Historically, the development and evolution of the Dublin park system has been a combination of sound planning, policy-formulated development directives and market/product awareness. This occurred with an intuitive, non-technical sense of community needs and opportunistic events. With advancements in technology, we now are better equipped to evaluate and assess all components of the park system as we move forward. As a result, this master plan study has produced a more focused, strategic planning document, integrated with the Dublin Community Plan. There are various recommended ongoing study elements (i.e., research data, surveys, etc.) that will be completed in the future and will supplement this study document. This master plan encompasses three key concepts: Understand the past, assess the present and envision the future. Within each concept, we address the physical aspects (i.e., land, facilities and built environment); recreation services; and operations and maintenance components. This study planning document has been formatted to easily accommodate internal, ongoing updates. Revised and new information and data can be introduced; recommendations and adjustments can be implemented in real time.</p> <p>https://dublinohiousa.gov/dev/dev/wp-content/uploads/2012/05/Parks-Rec-Master-Plan-2009.pdf</p> <p>As part of the future parks and recreation master plan, there is a 2-page section titled, "Climate Change Assessment".</p> | | | | |
| Tourism Plan | Yes | https://www.visitdublinohio.com/ | N/A | Dublin Convention and Visitors Bureau (DCVB) |
| https://www.visitdublinohio.com/ - Visit Dublin Ohio is a non-government organization | | | | |
| Business/ Downtown Development Plan | Yes | <p>The Business development plan is contained within the Economic Development Strategic Plan.</p> <p>The City of Dublin is in the process of updating the Economic Development Strategic Plan.</p> | Local | Economic Development |
| <p>See Economic Development Plan. The Business development plan is contained within the Economic Development Strategic Plan.</p> <p>Internal Link: N:\Economic Development\Economic Development Programs\Awards\IEDC Awards\2021\IEDC Excellence Awards_Category 25_EDO of the Year_City of Dublin\Supplemental Material_EDO of the Year\9. Strategic Plan\City of Dublin Economic Development Strategy.pdf</p> | | | | |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | Yes | Chapter 36.06 Local Emergency Operations Plan | Local | City Manager |
| <p>It is the intent of this Plan that the services, equipment, facilities, and personnel of all existing departments and divisions shall be utilized to the fullest extent possible to respond to an emergency incident within the city. The Local Emergency Operations Plan shall include a hazard analysis, which is analysis of potential hazards to determine the probable impact each of those hazards could have on people and property and includes actions taken to eliminate or reduce the degree of long-term risk to human life and property from natural, man-made and technological hazards; actions taken in advance of a disaster to develop operational capabilities and facilitate an effective response in the event a disaster occurs; actions taken immediately before, during or directly after a disaster occurs, to save lives, minimize damage to property, and enhance the effectiveness of recovery; and activity to return vital life support systems or minimum operating standards and long-term activity designed to return life to normal or improved levels. The City of Dublin maintains a comprehensive emergency operations plan (EOP).</p> | | | | |
| Continuity of Operations Plan | Yes | N/A | Local | City Manager |
| <p>Section XIX in the City of Dublin Emergency Operations Plan (EOP) addresses continuity of operations and continuity of government.</p> <p>The City of Dublin also has a Business Recovery Plan. This plan identifies requirements for all city departments and staff to effectively perform and deliver essential services, and how to do so, if a critical incident disrupts normal operations. The plan allows for the city to be resilient and have the capacity to withstand and recover from an adverse occurrence. This resilience allows the city to build the essential strength, stability, and capacity needed to retain certain capabilities throughout the course of a major disaster – and to recuperate as quickly and as efficiently as possible during the post-disaster recovery phase. The City of Dublin has established resilience through a number of different divisions, departments, and citywide strategies and programs.</p> | | | | |
| Strategic Recovery Planning Report | Yes | N/A | Local | I.T. |
| <p>The city has a Business Recovery Plan and I.T. Disaster Recovery Plan that delineates policies and procedures for technological disaster recovery, as well as process-level plans for recovering critical system infrastructure and applications. The purpose of this plan is to provide documented tasks and resources that will recover the City's technology with the recovery time objectives as established by the City.</p> | | | | |

| | | | | |
|--|-----|---|----------------|--------|
| This plan protects city information, the city employees and the city itself in the event of an emergency. This plan is documented for the Information Technology Team. The goals and objectives of this printed plan is to recover the City's technology at the recovery location. The purpose of this Plan is to provide documented tasks and resources that will recover the City's technology within the recovery time objectives as established by the business departments. | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | Yes | The City of Dublin contracts with FCEMHS, Dublin is part of the county-wide THIRA; In addition, the City of Dublin also completes a supplemental hazard analysis (Chapter 36.06C) | FCEMHS & Local | FCEMHS |
| As the city contracts with FCEMHS, Dublin is part of the countywide THIRA; In addition, the city also completes a supplemental hazard analysis (Chapter 36.06C) as part of the city's local emergency operations plan. | | | | |
| Post-Disaster Recovery Plan | No | N/A | N/A | N/A |
| N/A | | | | |
| Public Health Plan | No | Dublin contracts public health services through Franklin County Public Health (FCPH). | FCPH | FCPH |
| Dublin contracts public health services through Franklin County Public Health (FCPH). | | | | |
| Other | N/A | N/A | N/A | N/A |
| N/A | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the City of Dublin to oversee and track development.

Table 9.9-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--|
| Do you issue development permits? • If yes, what department is responsible? | Yes | Building Standards and Planning |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | Special flood hazard area permits may be issued as needed or as required. |
| Do you have a buildable land inventory? • If yes, please describe | Yes | <p>https://communityplan.dublinohiousa.gov/future-land-use-map/</p> <p>The Future Land Use Map classifies all parcels within the Dublin planning area with a recommended land use, each shown with a different color. The map is supported by a detailed description of Land Use Classifications, which explain the general character of each land use type, including typical ranges for residential and non-residential densities.</p> <p>In some cases, the recommended future land use is the same as the existing land use. However, in certain locations throughout the planning area, the Future Land Use Map and special area plans contain parcels with existing uses that are proposed for a change in land use, or for redevelopment as part of a larger site. In either case, it is not the intent of this Plan to place existing uses in a situation where their value or the quality of life of residents is adversely affected. Rather, the intent is to demonstrate to potential purchasers or developers the City's long-range view of how particular properties should be reconfigured and used should it become feasible to do so.</p> |

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|--|--------|--|
| | | <p>Accordingly, where existing uses are thriving, redevelopment proposals will generally only be considered under a narrow range of conditions. Specifically, new development plans will only be considered for properties that are either already adjacent to or part of another new development, or, when a development proposal includes all of the existing, affected properties.</p> <p>Existing uses should not be isolated or surrounded by development that would significantly alter their usefulness. Similarly, larger developments should not be planned that leave behind small, isolated pockets of incompatible uses. To do so would severely limit the redevelopment potential for these sites and possibly interrupt traffic flow, natural feature protection, pedestrian movement, or other operation of the adjacent project. For more information regarding the Land Use Plan, maps, policies and intent, please contact Land Use and Long Range Planning.</p> |
| Describe the level of build-out in your jurisdiction. | N/A | <p>See Community Plan https://communityplan.dublinohiousa.gov/ https://communityplan.dublinohiousa.gov/home/2007-community-plan/ https://www.envisiondublin.org/</p> <p>See Community Plan – Future Land Use</p> <p>The city is in the process of updating the community plan. https://dublinohiousa.gov/strategic-plans-documents/</p> |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Dublin and their current responsibilities that contribute to hazard mitigation.

Table 9.9-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|----------------------------------|------------------------|--|
| Administrative Capability | | |
| Planning Board | Yes | <p>Planning & Zoning Commission https://dublinohiousa.gov/boards-commissions/planning-zoning-commission/</p> <p>The principal responsibility of the PZC is to review certain applications for land development approvals as determined by the City of Dublin Zoning Code and Subdivision Regulations. For most applications, the Commission is a recommending body for City Council.</p> <p>The Planning and Zoning Commission (PZC) consists of seven members who are residents of the City of Dublin and appointed by City Council.</p> <p>Plans/projects are reviewed by Engineering to ensure floodplain and stormwater management requirements are met. Planning and Zoning Commission makes determination based on review criteria to ensure compliance.</p> |
| Zoning Board of Adjustment | Yes | Board of Zoning Appeals |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--------------------------------|------------------------|---|
| | | <p>https://dublinohiousa.gov/boards-commissions/board-of-zoning-appeals/</p> <p>The city is made up of thousands of individual properties, all of which are subject to the requirements of the Dublin Zoning Code. In some situations, a property's physical character will make it impractical to meet those requirements. It is the job of the Board of Zoning Appeals (BZA) to ensure that the Zoning Code is fairly applied to all properties and to grant modifications, or "variances" to the Code when warranted by these conditions. The BZA consists of five members who are Dublin residents and appointed by City Council. In addition to reviewing variance requests, the Board reviews and takes action on administrative appeals on any zoning or building decisions issued by the City. The Board also reviews special permits, which typically are a request for the operation of a model home or sales trailer, but could also include the operation of heliports, dish antennas, portable classrooms or construction trailers.</p> |
| Planning Department | Yes | <p>https://dublinohiousa.gov/ova_dep/community-development/</p> <p>20 staff assigned to the Division of Planning.</p> <p>Planning and Engineering work together to ensure projects meet the floodplain and stormwater management requirements.</p> <p>Code Enforcement (1 supervisor and 3 code enforcement officers) works with staff to ensure all City Codes are met.</p> |
| Mitigation Planning Committee | No | N/A |
| Environmental Board/Commission | Yes | <p>Community Services Advisory Commission</p> <p>https://dublinohiousa.gov/boards-commissions/community-services-advisory-commission/</p> <p>A Community Services Advisory Commission of the City of Dublin is hereby formed to address and to make recommendations to Council on community services, parks and recreation services, natural resources, and related issues at the request of Council.</p> |
| Open Space Board/Committee | Yes | <p>Community Services Advisory Commission</p> <p>https://dublinohiousa.gov/boards-commissions/community-services-advisory-commission/</p> <p>A Community Services Advisory Commission of the City of Dublin is hereby formed to address and to make recommendations to Council on community services, parks and recreation services, natural resources and related issues at the request of Council.</p> <p>Planning & Zoning Commission</p> <p>https://dublinohiousa.gov/boards-commissions/planning-zoning-commission/</p> <p>The principal responsibility of the PZC is to review certain applications for land development approvals as determined by the City of Dublin Zoning Code and Subdivision Regulations. For most applications, the Commission is a recommending body for City Council.</p> <p>The Planning and Zoning Commission (PZC) consists of seven members who are residents of the City of Dublin and appointed by City Council.</p> |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Economic Development Commission/Committee | No | N/A |
| Public Works/Highway Department | Yes | 62 road ready staff |
| Construction/Building/Code Enforcement Department | Yes | <ul style="list-style-type: none"> • Director, Building Standards 1 • Commercial Plans Examiner 1 • Senior Building Inspector 1 • Building Inspector 4 • Electrical Inspector 1 FT & 1 PT • Residential Plans Examiner 1 • Development Review Specialist 1 • Review Services Coordinator 1 Permit Technician 2 |
| Emergency Management/Public Safety Department | No | The City of Dublin contracts with Franklin County Emergency Management & Homeland Security (FCEMHS) agency. |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | <p>Dublin maintains 29 outdoor warning sirens (Dublin Emergency Warning System – DEWS / tornado sirens).</p> <p>Dublin maintains lightning prediction systems in its major parks that alerts parks users to nearby lightning.</p> <p>Four Electrical Workers and one crew leader responsible for the routine maintenance and operations of the emergency warning siren system.</p> <p>To enhance citizen awareness during emergencies, Dublin residents are encouraged to sign up for the ALERT Franklin County mass notification and warning system and Dublin's Smart911 community notification system.</p> <ul style="list-style-type: none"> • https://dublinohiousa.gov/dev/emergency-preparedness/dublin-emergency-calling-system/ |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Stormwater maintenance program is part of the Capital Improvements Plan (CIP Budget) and tree trimming is part of the city's operations budget. |
| Mutual aid agreements | Yes | Police and Public Works mutual aid agreements; Ohio Revised Code IMAC & EMAC |
| Human Resources Manual | Yes | 1 safety administrator / risk manager |
| Other | N/A | N/A |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | <p>2 engineers and 1 planner in Transportation & Mobility staff; 2 engineers in Division of Engineering</p> <p>All planners and engineering staff working in the development department understand the need to ensure compliance with requirements.</p> |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | 6 engineers in Division of Engineering |
| Planners or engineers with an understanding of natural hazards | Yes | <p>8 engineers in Division of Engineering</p> <p>All planners and engineering staff working in the development department understand the need to ensure compliance with requirements.</p> |
| Staff with expertise or training in benefit/cost analysis | No | N/A |
| Professionals trained in conducting damage assessments | Yes | Division of Building Standards |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | 4 | 1 Director, 1 Manager, and 2 Analysts; Dublin does not use HAZUS |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|--|
| Environmental scientist familiar with natural hazards | No | N/A |
| Surveyor(s) | Yes | 1 in the Division of Engineering |
| Emergency Manager | Yes | By code (36.04A&B), the City of Dublin's City Manager serves as the City's Emergency Management Director. |
| Grant writer(s) | No | Dublin does not have full-time grant writers, but Dublin does have employees capable of completing grant applications. |
| Resilience Officer | No | N/A |
| Other (this could include stormwater engineer, environmental specialist, etc.) | Yes | In the future, an engineer will be devoted to stormwater. |

Fiscal Capability

The table below summarizes financial resources available to the City of Dublin.

Table 9.9-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | Yes |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | Yes |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | N/A |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Dublin.

Table 9.9-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|--|
| Public information officer or communications office | Yes | The city of Dublin has a Communications and Public Information (CPI) Division that reports to the City Manager. The division provides public information officers to various city departments/divisions. |
| Personnel skilled or trained in website development | Yes | The city of Dublin has a Communications and Public Information (CPI) Division that reports to the City Manager. The division has personnel skilled in website development. |
| Hazard mitigation information available on your website | Yes | https://dublinohiousa.gov/emergency-preparedness/ |
| Social media for hazard mitigation education and outreach | Yes | Dublin participates in Ohio and National public emergency preparedness campaigns. |

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|---|
| Citizen boards or commissions that address issues related to hazard mitigation | Yes | A Community Services Advisory Commission of the City of Dublin was formed to address and to make recommendations to Council on community services, parks and recreation services, natural resources and related issues at the request of Council. |
| Warning systems for hazard events | Yes | Tornado Sirens and several major parks have lightning prediction systems. The Transportation & Mobility division maintains the tornado sirens while the parks division maintains the lightning prediction systems. |
| Natural disaster/safety programs in place for schools | Yes | Dublin City Schools conduct regular fire evacuation drills, tornado drills, and lock down drills. |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? | Yes | https://dublinohiousa.gov/emergency-preparedness/ |

Community Classifications

The table below summarizes classifications for community programs available to the City of Dublin.

Table 9.9-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|--|------------------------------------|
| Community Rating System (CRS) | No | N/A | N/A |
| Building Code Effectiveness Grading Schedule (BCEGS) | Yes | Dublin does participate. Our Building Code Effectiveness Grading Classification is a 3 for Commercial and Industrial property and a 4 for 1 and 2 family residential property. Date of Classification 1/29/2020. | 1/29/2020 |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | ISO Class One | 12/6/2022 |
| Storm Ready Certification | No | N/A | N/A |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.9-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------|--|
| Dam/Levee | Moderate |

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.9.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Dublin.

Table 9.9-9. NFIP Summary

| Municipality | Policies in Force | Number of Paid Claims* | Amount of Paid Claims* | Number of NFIP RL Properties | Number of NFIP SRL Properties |
|--------------|-------------------|------------------------|------------------------|------------------------------|-------------------------------|
| Dublin City | 52 | 8 | \$40,054.99 | 1 | 0 |

Sources: a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Dublin.

Table 9.9-10. NFIP Summary

| NFIP Topic | Comments |
|--|-----------|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | No |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No N/A |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |

| NFIP Topic | Comments |
|---|--|
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | <p>SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director.</p> <p>According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value).</p> |
| <p>How many properties have been mitigated (elevation or acquisition) in your jurisdiction?</p> <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | <p>None</p> |
| <p>Do your flood hazard maps adequately address the flood risk within your jurisdiction?</p> <ul style="list-style-type: none"> If not, state why. | <p>Yes</p> |
| <p>NFIP Compliance</p> | |
| <p>What local department is responsible for floodplain management?</p> | <p>Division of Engineering and Division of Public Service</p> |
| <p>Are any certified floodplain managers on staff in your jurisdiction?</p> | <p>No</p> |
| <p>Do you have access to resources to determine possible future flooding conditions from climate change?</p> | <p>Dublin has access to outside resources as necessary (e.g., The Ohio State University)</p> |
| <p>Does your floodplain management staff need any assistance or training to support its floodplain management program?</p> <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | <p>FEMA sponsored training</p> |
| <p>Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)</p> | <p>Chapter 151 – Flood Control – provides outline of administrative services – e.g., performance of reviews</p> |
| <p>How do you determine if proposed development on an existing structure would qualify as a substantial improvement?</p> | <p>This is determined through the plan review process conducted by Review Services.</p> |
| <p>What are the barriers to running an effective NFIP program in the community, if any?</p> | <p>Residents contacting the city to ask.</p> |
| <p>Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed?</p> <ul style="list-style-type: none"> If so, state the violations. | <p>No</p> |
| <p>When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?</p> | <p>N/A</p> |

| NFIP Topic | Comments |
|---|--|
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | Chapter 151: Flood Control 151.09 – Methods of Reducing Flood Losses Jul 17, 1995 Provisions for Flood Hazard Reduction 151.20 to 151.23 Chapter 153.111 – Flood Plain Regulations |
| Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? | Exceeds. The review process involving Review Services. |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Chapter 151 – Flood Control Chapter 153.111 – Flood Plain Regulations Chapter 53 – Stormwater Management and Stream Protection All development applications are reviewed for compliance with floodplain regulations, stormwater management, and other applicable hazards risks. This analysis is provided to the required reviewing body for review prior to a determination on a development application. |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.9.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.9-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | 1 | - | 0 | - | 0 | - | 1 | - | 0 |
| Multi-Family | - | 0 | - | 0 | - | 0 | - | 0 | - | 0 |
| Other (commercial, mixed-use, etc.) | - | 1 | - | 0 | - | 0 | - | 1 | - | 1 |
| Total Permits Issued | - | 2 | - | 0 | - | 0 | - | 2 | - | 1 |

Table 9.9-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|--------------------------|----------------------|---|
| Recent Major Development from 2018 to Present | | | | | |
| Towns on the Parkway | Residential | 154 townhomes | 273-013211 273-008811 | N/A | Status: Zoning Approval and under construction Desc: 154 attached single-family units in 29 building on an 11-acre site. |
| Hyland Glen | Residential | 102 single family homes | 7270 Hyland Croy Road | N/A | Status: Zoning Approval Desc: 102 single family homes on 42.5-acres |

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|------------------------------|-------------------------|--|--|----------------------|--|
| Mount Carmel Hospital | Commercial | 203,000SF Hospital 51,500 SF Medical Office building | 4105 Emerald Parkway | N/A | Status: Zoning Approval and under construction. Desc: 230,000 SF inpatient hospital with ambulatory care facility and 51,500SF outpatient medical office building on 35-acres |
| Van Trust Industrial | Flex/Industrial | 140,000 SF Flex/Industrial Bldg | 6777 Crosby Ct. | N/A | Status: Zoning approvals, under construction Desc: 140,000SF flex/industrial building. |
| The Bailey | Residential | 87 senior housing units in a 6-story building | | N/A | Status: Zoning approvals, in permit review Desc: 87 senior housing units in a 6-story building on 1.77-acres |
| Oak Park | Residential | 12 single family lots | | N/A | Status: Zoning approvals, no permits issued Desc: 12 single family lots within an existing subdivision on 3.47-acres. |
| Ayrshire Farms | Residential | 30 single family lots | SE corner Shier Rings Road and Cosgray Road | N/A | Status: Zoning approvals, pursuing building permits. Desc: 30 single family lots on an 11.37-acre site. |
| Bridge Park, Block G | Mixed Use | Three buildings: 123,000SF commercial and office uses, 327-space parking garage, four story residential building | North of Bridge Park Avenue between Dale Drive and Mooney Street | N/A | Status: Zoning approval, under construction. Desc: Mixed-use development on 2.29-acre site. |
| Primrose Daycare | Commercial | 16,000SF, two-story daycare | 273009147 | N/A | Status: Zoning approval, under construction. Desc: Development on 1.37-acres |
| Turkey Hill Gas Station | Commercial | Gas station, car wash and drive thru restaurant | 6201-6233 Avery Rd. | N/A | Status: Construction complete Desc: Development on 5.48-acre site. |
| Overlook at Tartan Ridge | Residential | 56 single family lots | NE corner Hyland Croy and McKitrick Road | N/A | Status: Zoning approvals, under construction. Desc: Development on 24-acre site. |
| All R Friends | Commercial | One building: 8,100 SF adult day care | 273-012214 | N/A | Status: Zoning approvals, pursuing construction |
| Chase Bank | Commercial | One building: 4,100SF bank | 6515 Sawmill Rd | N/A | Status: Constructed Desc: Development on a 0.85-acre site. |
| Avery Road Car Wash | Commercial | One building: 1,500SF car wash | 5740 Avery Road | N/A | Status: Constructed Desc: Development on 3.08-acres. |
| The Corners | Commercial | Three buildings: 23,500SF commercial uses | West of Frantz Rd, North of Rings Road | N/A | Status: Constructed |
| North Pool | Recreation | Pool building and swimming pools | 5660 Dublinshire Dr. | N/A | Status: Constructed |
| OSU Medical Campus | Institutional | 271,850SF medical office and ambulatory care facility | University Blvd | N/A | Status: Constructed Desc: Development located on 33.73-acres. |
| Columbus Oncology | Commercial | 32,000SF medical office building | 6700 Perimeter Dr | N/A | Status: Constructed |

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|---|---|----------------------|--|
| | | | | | Desc: Development located on 3.27-acres. |
| Dublin Rehab Hospital | Institutional | 46,000SF rehabilitation hospital building | Emerald Parkway | N/A | Status: Constructed Desc: Development located on 5.76-acres |
| Hamlet on Jerome | Residential | 18 single family lots | SW Manley Road and Corazon Drive | N/A | Status: Constructed Desc: Development on 8.69-acres |
| Schoedinger Funeral Home | Commercial | 12,000 SF funeral home | 6100 Perimeter Center Drive | N/A | Status: Constructed Desc: Development on 2.94-acres |
| Bridge Park, Block D | Commercial/Residential | Four buildings: 12,000SF office, 45,000SF retail, 35,000SF restaurant, 186 residential units and 671 space parking garage | 273-012703 | N/A | Status: Constructed Desc: Developed on 5.3-acres |
| Bridge Park, Block A1 | Commercial | Four story, 80,000SF office | 273-012721 | N/A | Status: Constructed Desc: Developed on 0.77-acres |
| VA Data, Building 5 | Industrial | 260,000SF data center | 6645 Crosby Ct. | N/A | Status: Constructed Desc: 5th building on a 68-acre site |
| VA Data, Building 4 | Industrial | 210,000SF data center | 6645 Crosby Ct. | N/A | Status: Constructed Desc: 4 th building on a 68-acre site |
| Urban Air Adventure Park | Commercial | 20,000SF indoor recreation use | 7679 & 7685 Dublin Plain City Road | N/A | Status: Constructed |
| Riverside Crossing Park, East Plaza | Recreation | Pavilion, open space, seating, water feature, paths and landscaping | West side of Riverside Drive, north of West Dublin Granville Rd | N/A | Status: Phase 1 constructed |
| 36-38 N High St | Mixed Use | Two-story commercial building and two attached residential units | 36-38 N. High Street | N/A | Status: Zoning approval, permits required |
| CoHatch | Commercial | 2.5 story, 10,174SF office building | 56 N. High Street | N/A | Status: constructed |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| Crawford Hoying Condo/Hotel | Residential/Commercial | 3 buildings over podium parking | 273-012909 273-008269 | N/A | Status: Introductory phase (no zoning approval) Desc: Hotel, condo and conference buildings with podium parking |
| Casto Village Parkway | Residential | 184 multiple family units | 6801 Village Parkway | N/A | Status: Concept Plan approval, additional zoning approvals required Desc: Multiple family development with 184 units on a 3.71-acre site. |
| Multi-Tenant Commercial | Commercial | 6,760 SF commercial building | 4000 W. Dublin Granville Road | N/A | Status: Preliminary approval, Final approval needed. Desc: One-story 6,760SF commercial building on a 1.98-acre site. |
| Bright Road Senior Housing | Institutional | 408,000SF institutional use for 55+ residents | NE corner Bright Rd and Emerald Pkwy | N/A | Status: Introductory phase (no zoning approval) Desc: Multiple building for 55+ residents on 22-acres. |

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|------------------------------|-------------------------|--|--|----------------------|---|
| Amlin Crossing | Residential | 500 residential units | East side of Cosgray Rd. south of the intersection with Rings Road | N/A | Status: Introductory phase (no zoning approval) Desc: Single-family development with 500 detached and attached units on a 101-acre site. |
| Cardinal South | Residential/Commercial | Residential, office and parking garage | West side of Dublin Road, south of Emerald Parkway | N/A | Status: Introductory phase (no zoning approval) |

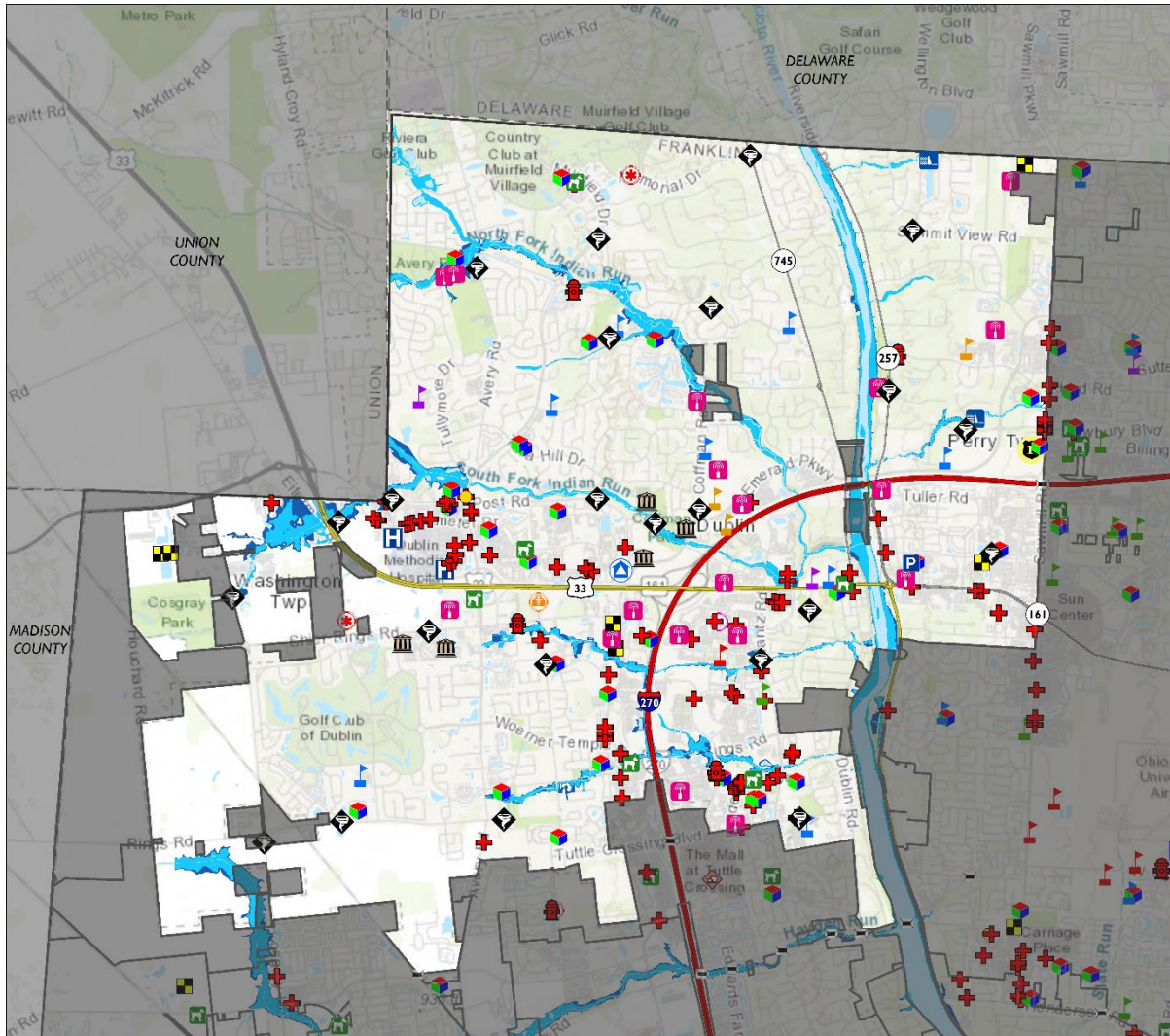
Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.9.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Dublin’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Dublin has significant exposure. The maps also show the location of potential new development, where available.

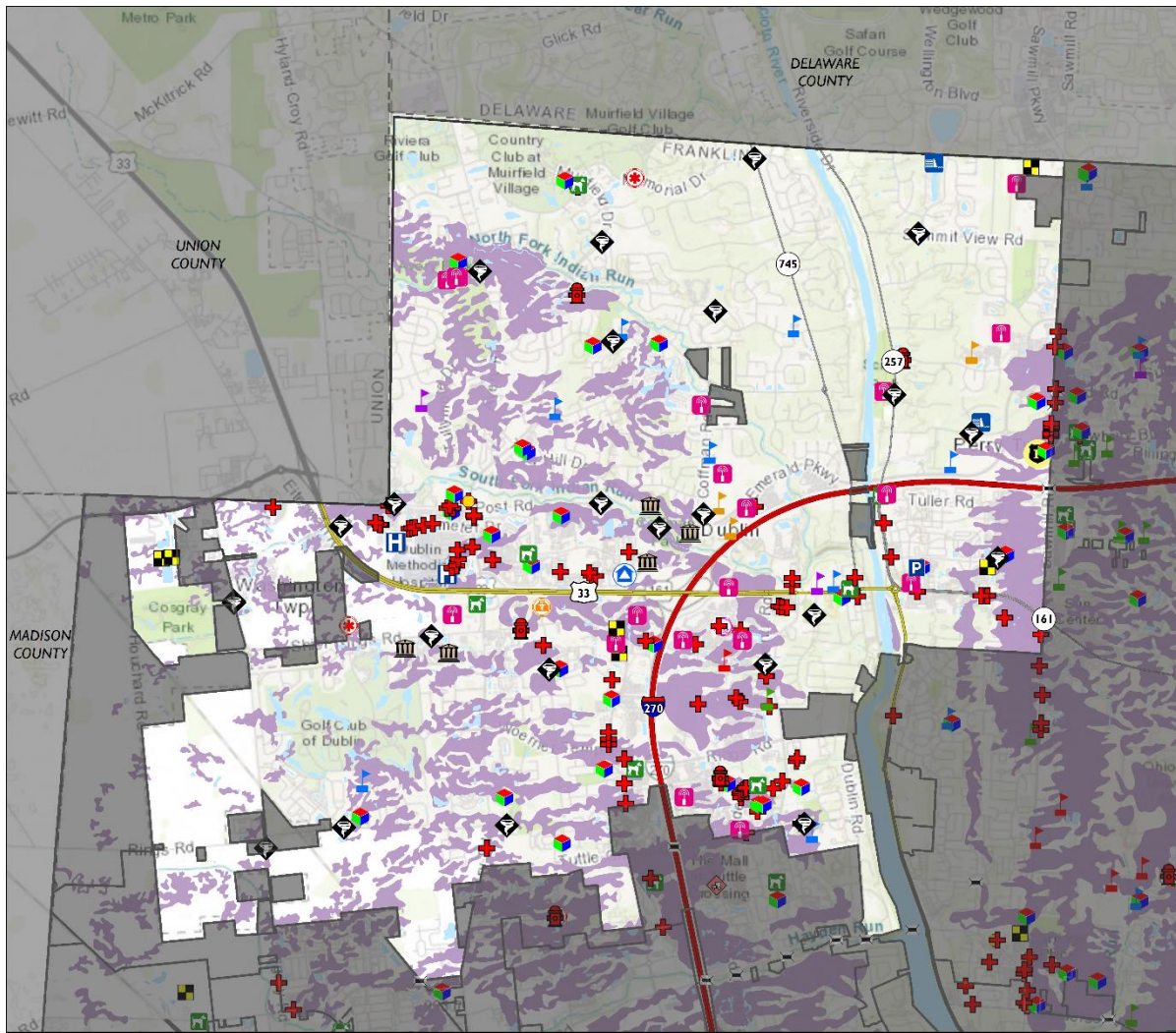
Figure 9.9-1. City of Dublin Hazard Area Extent and Location Map - Flood



Dublin (C)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | FEMA Flood Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | 1-Percent Annual Chance |
| Dam | Intermodal Facility | Research/Development Facility | 0.2-Percent Annual Chance |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | <i>The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.</i> |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | |
| EOC | Medical Supply Chain Facility | Veterinary Services | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021 |
| Electric Substation | Park and Ride | Wastewater Systems | Notes: City (C), Township (T), Village (V) |
| Emergency Medical Service | | | |

Figure 9.9-2. City of Dublin Hazard Area Extent and Location Map – Inland Erosion



Dublin (C)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Inland Erosion Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | K-Factor: ≥ 0.49 |
| Dam | Intermodal Facility | Research/Development Facility | |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; United States Department of Agriculture, Natural Resources Conservation Service 2022 |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | Notes: City (C), Township (T), Village (V) |
| EOC | Medical Supply Chain Facility | Veterinary Services | |
| Electric Substation | Park and Ride | Wastewater Systems | |
| Emergency Medical Service | | | |

0 0.5 1 Miles

Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Dublin’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Dublin experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.9-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|---------------------|---|--------------------|--|---|
| March 2020-May 2023 | Covid-19 Pandemic (DR-4507) | Yes | <p>The COVID-19 pandemic was a global health crisis that originated in late 2019 in the city of Wuhan, Hubei Province, China. The disease was caused by a novel coronavirus called SARS-CoV-2. It quickly spread throughout China and eventually reached countries worldwide, leading to the declaration of a global pandemic by the World Health Organization (WHO) on March 11, 2020.</p> <p>As of June 15, 2023, there have been over 550 million confirmed cases of COVID-19 and over 6.3 million deaths worldwide.</p> <p>The United States has been the most heavily affected country, with over 80 million cases and over 1 million deaths.</p> <p>The COVID-19 pandemic had profound social, economic, and political impacts globally. Countries faced significant challenges in terms of healthcare capacity, vaccine distribution, and mitigating the economic fallout. The pandemic disrupted industries, leading to business closures, job losses, and economic recessions in many parts of the world.</p> | <p>The City of Dublin incurred financial losses in recreation and hotel motel revenues, some of which are likely permanent such as the reduction in business travel.</p> <p>The City of Dublin received \$2,567,777.37 in 2020 and \$4,279.60 in 2021 from the COVID Relief Reimbursement</p> <p>The City of Dublin received \$2,568,338.84 in 2021 and \$2,588,845.63 in 2022 from the Local Fiscal Relief Funding (ARPA).</p> <p>In total, the City of Dublin received \$7,729,241.44 in federal dollars under both grant programs.</p> |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Dublin. The City of Dublin reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Dublin indicated the following:

Table 9.9-14. Hazard Ranking Input

| Hazard/Vulnerability | Ranking |
|-----------------------|---------|
| Dam/Levee | Medium |
| Disease Outbreak | Low |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Low |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.9-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Dublin

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 3 | 3 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 6 | 5 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | 87 | 79 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 205 | 181 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Dublin identified the following vulnerabilities within its community:

- Planning for the O'Shaughnessy Dam
- Planning for debris management
- Managing invasive species
- Providing support to vulnerable populations in extreme heat/cold
- Stormwater management
- *The entire watershed of Indian Run Creek has been compromised by excessive development and storm water runoff into bodies of water that were never meant to handle the excess and have been inadequately prepared for it.
- *I think it's really great that steps are being taken to be prepared. It's not really common knowledge to take the steps to mitigate & be prepared. I think incentives & more campaigns are important.

9.9.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan

update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.9-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|---|--|---|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Install safe rooms/wind shelters in all public parks/existing buildings | Parks/City of Dublin | No Progress | No | This project is too large for the city to take on due to the large number of parks, costs, and the requirements necessary to build "safe rooms" and/or "wind resistant shelters". This should NOT be included in the 2023 HMP - DISCONTINUE | Parks Development / Parks and Recreation |
| Replace wood poles with concrete ones if damaged. Wind resistant and meet specifications | AEP; Contractor; /Public Works | No Progress | No | Poles are owned by a private entity (e.g., AEP – American Electric Power) and the decision on replacement materials is up to them. *Note some poles have replaced by metal ones. This should NOT be included in the 2023 HMP - DISCONTINUE | American Electric Power (AEP) – Private Entity |
| Bury select electric utility lines and poles | AEP; Contractor; Public Works, Engineering, City of Dublin | Ongoing | No | Poles and lines are owned by a private entity (e.g., AEP – American Electric Power) and the decision on replacement materials is up to them. *Note some poles have replaced by metal ones. Dublin does encourage and supports this, but does not have final say on private company determination. This should NOT be included in the 2023 HMP - DISCONTINUE | American Electric Power (AEP) – Private Entity |
| Stormwater retention pond mucking/cleaning/sediment removal | Public Works, Engineering, City of Dublin | Ongoing | Yes | Prevention of flooding and prevention of losing capacity if not functioning properly. | Division of Engineering |
| Seek funding for back-up generators for critical public buildings and/or infrastructure | Facilities and Engineering | Complete | No | City facilities have back-up power and all traffic signals in the city have battery back-up power. This | Division of Facilities and Division of Transportation & Mobility |

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|-------------------|--|---|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| | | | | project has been completed and should not be a part of the 2023 HMP. DISCONTINUE | |
| Seek funding for the purchase, replacement, and/or upgrading of Lightning detection/warning systems for city parks/pools, | Parks | Ongoing Capability | No | Lighting risks to park and pool patrons. These systems have routine maintenance, repair, and replacement. Additional parks may be added in the future. | Public Service |
| Develop and implement public education programs to increase public awareness and understanding of the risks associated with natural hazards | CPI | Ongoing Capability | No | This is an ongoing capability for public education (we do this as needed and regularly, such as weather awareness weeks, etc.). | Communications & Public Information (CPI) |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Dublin identified the following mitigation efforts completed since the last HMP:

- None

Since the adoption of the County’s first HMP, the City of Dublin has made significant mitigation progress in the following areas:

- Flood mitigation
- Back-up power resources
- Public Education

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Dublin participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.9-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | - | X | - | X | X | - | - | - | - | X |
| Disease Outbreak | - | X | - | X | X | - | - | - | - | X |
| Drought | - | X | - | X | X | - | - | - | - | X |
| Earthquake | - | X | - | X | X | - | - | - | - | X |
| Extreme Temp | - | X | X | X | X | - | - | - | - | X |
| Flood | - | X | X | X | X | - | - | - | X | X |
| Geologic | - | X | X | X | X | - | - | - | - | X |
| Invasive Species | X | | - | X | X | X | - | - | - | |
| Severe Summer Weather | - | X | - | X | X | - | - | - | X | X |
| Severe Winter Weather | - | X | - | X | X | - | - | - | X | X |
| Tornado | - | X | - | X | X | - | - | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.9-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Dublin will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.9-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------|---|--|----------------------------------|-----------|------------------------|---|--|--|---|----------|---------------------|--------------|
| 001-Dublin-2023 | O'Shaughnessy Dam Emergency Action Plan Annex | <p>Problem: Dams and levees are important infrastructure that can provide a variety of benefits, such as flood control, water supply, and hydropower. However, they also pose a risk of failure, which can have devastating consequences. The consequences of dam or levee failure can be devastating. A dam failure can release a large volume of water, which can cause widespread flooding and destruction. The O'Shaughnessy Dam is located north of Dublin and owned/operated by the City of Columbus.</p> <p>Solution: The O'Shaughnessy Dam is located north of the City of Dublin. A failure of the dam could have negative impacts on the City of Dublin. In order to prepare for a response to a dam failure, an annex will be added to the City of Dublin's Emergency Operations Plan (All-Hazard Plan) that contains select elements from the O'Shaughnessy Emergency Action Plan. This annex will enhance Dublin's local emergency operations plan.</p> | Dam and Levee Failure, and Flood | 2,4,5 | 2024 | Emergency Management Coordinator and the Office of the City Manager | FPMS, National Dam Safety Program, Small Flood Control | The benefit of adding this annex will be increased awareness for city staff in preparations for a response to a dam failure event. It will help recognize and identify the potential impact(s) of a dam failure to the city. | No cost other than employee time adding the annex. | Medium | LPR | PR |
| 002-Dublin-2023 | Immunization/Vaccination Communication | <p>Problem: Disease outbreaks can have a significant impact on public health, causing illness, death, and economic disruption.</p> | Disease Outbreak | 4, 5 | On-going; 2023 to 2027 | Communications and Public Information (City of Dublin), Franklin County | Unknown | The promotion of immunization/vaccination throughout the Dublin community will hopefully reduce | None other than the employee costs of performing this | Medium | EAP | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------|-------------------------------|---|---------------------------|-----------|---|--|-------------------------------|--|--|----------|---------------------|--------------|
| | | <p>They can also lead to social unrest and fear.</p> <p>Solution: In an attempt to lessen the impact of disease outbreaks, the City of Dublin in cooperation with the Franklin County Health Department will promote immunization/vaccination throughout the Dublin community. The intent of this communication is to promote awareness and education about the benefits of immunization/vaccination to assist in lessening the impact (illness, death, economic disruption, etc.) of disease outbreaks in the community.</p> | | | | Public Health (contracted by the City of Dublin) | | illness, death, economic disruption, and promote better public health in the community. | function and the use of any video-audio strategies through social media. | | | |
| 003-Dublin-2023 | Earthquake Exercise Promotion | <p>Problem: Earthquakes are a natural hazard that can cause widespread damage and loss of life. They are caused by the sudden release of energy in the Earth's crust, and can occur anywhere on Earth. Earthquakes can cause: ground shaking, landslides, fires, building collapses, structural damage, and injuries/deaths. Ohio is on the periphery of the New Madrid Seismic Zone.</p> <p>Solution: The City of Dublin will promote the "Great Shake Out" Earthquake drill to residents, businesses, and schools. Great ShakeOut earthquake drills are an opportunity to practice how to be safer during earthquakes: "Drop, Cover and Hold On." ShakeOut also has been organized to encourage you, your community, your school, or your organization to update emergency plans and supplies, and to</p> | Earthquake | 4, 5 | Annual exercise promotion for 2023 to 2027. | Communications and Public Information (CPI) | Emergency Relief (ER) Program | Many areas of the globe are prone to earthquakes (see links below) You could be anywhere when an earthquake strikes: at home, at work, at school or even on vacation. The purpose of the exercise is to promote preparedness to survive and to recover quickly from an earthquake event. | No cost other than employee work to promote the exercise. | Medium | EAP | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------|---------------------------------|---|---|-----------|---|--|--|---|-------------------------------|----------|---------------------|--------------|
| | | secure your space in order to prevent damage and injuries. | | | | | | | | | | |
| 004-Dublin-2023 | Salt Barn Storage Capacity | <p>Problem: In the City of Dublin, there is a need to increase storage capacity in the City's salt barns. Current capacity is 4,000 tons and the barns are in fair to poor condition.</p> <p>Solution: The City of Dublin plans to design and build a new salt barn with a capacity level of 8,000 – 10,000 tons. This facility will also house our liquid wetting systems.</p> | Severe Winter Weather | 2, 4 | This project is currently in the City of Dublin's Capital Improvements Program (CIP) budget for 2026. Completion could occur in 2026 or 2027. | Public Service | Unknown | Increased storage and salt capacity for severe winter weather events. | \$1,130,000.00 | Medium | SIP | PP |
| 005-Dublin-2023 | Debris Management Plan | <p>Problem: The City of Dublin currently does not have a formalized comprehensive Debris Management Plan.</p> <p>Solution: The City will work in conjunction with consultants and other local and county agencies to develop a written formalized and comprehensive Debris Management Plan.</p> | Tornado, Severe Summer Weather, Flood, Dam and Levee Failure, Severe Winter Weather, and Earthquake | 6, 4 | End of 2025 | Public Service | Disaster Assistance Programs, Emergency Watershed Protection Program (EWPP), Public Assistance 404 and 406 Program, Public Assistance (PA) Program | Establish formalized procedures and guidelines for debris management. | \$12,000.00+ | Medium | LPR | PR |
| 006-Dublin-2023 | Invasive Species - Tree Program | <p>Problem: About 22% or more than 500 species are not native to Ohio. Without natural controls, invasive non-native plants are able to spread and out compete native species Within Dublin, several invasive species are readily present. Honeysuckle, Autumn-olive, Garlic Mustard & Multiflora Rose are all examples of non-native plants that we focus on.</p> <p>Solution: There is currently no solution to this problem. The City attempts to manage</p> | Invasive Species | 3, 4, 5 | Ongoing - 2023 to 2027 and beyond | Public Service, Engineering, Communications & Public Information | Five Star and Urban Waters Restoration Grant Program, Urban Canopy Restoration Grant | Attempt to manage invasive spread throughout Dublin and its impacts on native trees and plants. | \$20,000 - \$30,000+ annually | Low | NSP/EAP | NR, PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------|----------------------------|---|----------------------------------|-----------|-------------------------|---------------------------|--|---|---|----------|---------------------|--------------|
| | | invasive through several programs and maintenance functions. Examples of these programs include the Storm water Maintenance Program, Woodlot Maintenance Program and Volunteer Programs. City staff also works throughout the year on invasive management with City parks and on City property. | | | | | | | | | | |
| 007-Dublin-2023 | Warming/Cooling Center | <p>Problem: Extreme temperatures are a major problem that can have a significant impact on human health, infrastructure, and the environment. They can be caused by a variety of factors, including: climate change, natural variability, and human activity. The effects of extreme temperature can lead to: heat stress, heat stroke, cold stress, health problems, infrastructure damage, and environmental damage.</p> <p>Solution: The City of Dublin will utilize the Dublin Community Recreation Center (DCRC) as a designated warming and/or cooling center in the event of an extreme temperature event. In addition to providing a warming and/or cooling center, citizens could also plug electronic devices (e.g., cell phones) in for re-charging. Also, water fountains and/or bottled water "may" be available. The warming and/or cooling center would only be available during regular DCRC operating times. The Recreation Services division will create a memo/directive to operate this warming/cooling center.</p> | Drought, and Extreme Temperature | 4, 5 | On-Going - 2023 to 2027 | Recreation Services | Private Donations (e.g., American Electric Power - AEP donating bottled water) | Citizens affected by extreme temperatures would have a location they could go to for warming and/or cooling, they would be able to re-charge electronic devices (e.g., cell phones), and they would have access to water fountains and restroom facilities. | Costs limited to purchasing of any items related to extreme temperature events (<\$5,000.00). | Medium | LPR/EAP | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------|---|--|------------------------------|-----------|--|---------------------------|--|---|---|----------|---------------------|--------------|
| 008-Dublin-2023 | Waterways Maintenance Program | <p>Problem: Erosion occurring along the banks of waterways, open channels and streams located in City-owned areas or areas where the City has maintenance responsibility through an established easement.</p> <p>Solution: The City has developed and instituted a Waterways Maintenance Program, which provides for the maintenance of waterways, open channels, and streams located in City-owned areas or areas where the City has maintenance responsibility through an established easement. The Program provides funding to address areas of erosion identified through waterway inspections and provides for bank stabilization. The proper operation of our waterways is critical to ensuring the conveyance of stormwater runoff and reduction of the occurrence of flooding and damage to infrastructure due to channel erosion. Reducing areas of erosion can improve the sediment loading on a waterway, improving aquatic habitat, and reducing turbidity in the water.</p> | Flood, and Geologic | 3, 5 | Ongoing – 2023 - 2027 and beyond through the Capital Improvements Program | Engineering | CIP Budget; HDBE, State of Ohio (Recovery Strategies, Assistance Programs), SCRPs, FEMA FMA, HMGP, and BRIC, Five Star and Urban Waters Restoration Grant Program, Rivers, Trails, and Conservation Assistance Program, Partners in Watershed Management Grant Program, Emergency Watershed Protection (EWP) Program, Flood Plain Management Services (FPMS) Program, Small Flood Control, Disaster Supplemental Funding | Ensuring the conveyance of stormwater runoff and the reduction of erosion and flooding. | Approximately \$350,000.00 to \$400,000.00 annually | Medium | NSP | NR |
| 009-Dublin-2023 | Stormwater Management & Stream Protection | <p>Problem: Flooding caused by rainfall events producing stormwater runoff that exceeds the capacity of the City's stormwater management system (catch basins, pipes, and detention/retention basins), culverts, waterways, open channels and streams.</p> <p>Solution: Enforcement of Chapter 53 of the Dublin Codified Ordinances –</p> | Flood, Severe Summer Weather | 3 | Ongoing – 2023 - 2027 and beyond through the Capital Improvements Program. | Engineering | CIP Budget, State Recovery Strategies (Ohio), Assistance Programs (Ohio), Community Challenge Planning Grants, SCRPs Grants; FEMA's BRIC, FMA, PA, and HMGP; Five Star and Urban Waters Restoration | Reduce occurrence and/or frequency of flooding. | Approximately \$500,000 to \$650,000 annually | High | NSP | NR |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------|--|--|---------------------------------------|-----------|--|---------------------------|---|--|--|----------|---------------------|--------------|
| | | Stormwater Management and Stream Protection, enforcement of Chapter 151 of the Dublin Codified Ordinances – Flood Control, enforcement of the City's Stormwater Design Manual, implementation and execution of the City's Waterways Maintenance Program, execution of the City's Annual Stormwater Maintenance Program, and routine maintenance of the City's stormwater management system by City maintenance staff. | | | | | Grant Program, Rivers, Trails, and Conservation Assistance Program, Partners in Watershed Management Grant Program, Emergency Watershed Protection (EWP) Program, Flood Plain Management Services (FPMS) Program, Small Flood Control, Disaster Supplemental Funding, National Flood Insurance Program (NFIP) | | | | | |
| 010-Dublin-2023 | Public Water and Sanitary Sewer Extensions | <p>Problem: Reduced and/or diminished domestic water supply from residential ground water wells serving homes in the City during a period of abnormally dry weather sufficiently prolonged for the lack of water to cause a serious hydrologic imbalance in the affected area. Homes whose water supply is provided by wells are typically located in areas of Dublin where City provided water service is not available.</p> <p>Solution: The City has an adopted Public Water and Sanitary Sewer Extensions to Existing Developed Property Policy, which has defined project areas to extend public water system infrastructure to residential properties not having public water service. The purpose of the policy is to establish an equitable, documented, uniform and</p> | Flood, Severe Summer Weather, Drought | 4, 5 | Ongoing – 2023 - 2027 and beyond Capital Improvements Program. | Engineering | City Budget | Provide public water system infrastructure to properties not currently served to allow for the removal of existing ground water wells. | Approximately \$2,000,000 to \$4,000,000 annually. | Medium | SIP | PP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------|---------------------------------|--|---------------------------|-----------|--------------------|--|---|--|--------------------------|----------|---------------------|--------------|
| | | systematic mechanism by which the City of Dublin can plan and extend its public water and/or sanitary sewer utility services to those developed areas not currently served. This will allow for the removal of existing ground water wells and will provide additional fire protection services. | | | | | | | | | | |
| 010-Dublin-2023 | Repetitive Loss Area Mitigation | <p>Problem: Portions of the City experienced repetitive flooding.</p> <p>Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity.</p> | Flood | 6 | 4 years | City Manager, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, City budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.

- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.9-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-----------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 001-Dublin-2023 | O'Shaughnessy Dam Emergency Action Plan Annex | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 10 | Medium |
| 002-Dublin-2023 | Immunization/Vaccination Communication | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 9 | Medium |
| 003-Dublin-2023 | Earthquake Exercise Promotion | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 8 | Medium |
| 004-Dublin-2023 | Salt Barn Storage Capacity | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 4 | Medium |
| 005-Dublin-2023 | Debris Management Plan | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 10 | Medium |
| 006-Dublin-2023 | Invasive Species - Tree Program | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 6 | Low |
| 007-Dublin-2023 | Warming/Cooling Center | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 8 | Medium |
| 008-Dublin-2023 | Waterways Maintenance Program | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 7 | Medium |
| 009-Dublin-2023 | Stormwater Management & Stream Protection | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 9 | High |
| 010-Dublin-2023 | Public Water and Sanitary Sewer Extensions | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 6 | Medium |
| 010-Dublin-2023 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.10 TOWNSHIP OF FRANKLIN

This section presents the jurisdictional annex for the Township of Franklin that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Township of Franklin participated in the planning process, an assessment of the Township of Franklin’s risk and vulnerability, the different capabilities used in the Township of Franklin, and an action plan that will be implemented to achieve a more resilient community.

9.10.1 Hazard Mitigation Planning Team

The Township of Franklin identified the hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Township of Franklin departments. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.10-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--------------------------------------|----------------------------|---|
| Name/Title: | Steve Mazer, Township Administrator | Name/Title: | - |
| Address: | 2193 Frank Road Columbus, Ohio 43223 | Address: | - |
| Phone Number: | 614-279-9411 | Phone Number: | - |
| Email: | smazer@franklin-township.com | Email: | - |
| NFIP Floodplain Administrator | | | |
| Name/Title: | - | | |
| Address: | - | | |
| Phone Number: | - | | |
| Email: | - | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.10.2 Municipal Profile

The Township of Franklin is in the center of Franklin County and is bordered by Montgomery Township to the east, Jackson Township to the south, Prairie Township to the west and Norwich, Perry and Clinton Townships to the north. Parts of Franklin Townships. With few exceptions, these islands are completely surrounded by the city of Columbus, as a majority of the Township has been annexed by the City of Columbus.

According to the American Community Survey, the 2021 population for the Township of Franklin was 11,312, a 10.14 percent increase from the 2010 Census population of 10,271. Data from the 2021 American Community Survey indicates that 8.1 percent of the population is 5 years of age or younger and 13.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.10.3 Jurisdictional Capability Assessment and Integration

The Township of Franklin performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Township of Franklin to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Township of Franklin and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.10-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Franklin County Building Code 2019 Residential Code of Ohio O.R.C. 4101.08 Franklin Township Manages Commercial Building Board of Building Standards O.R.C. 3781.10 (E) | Franklin County | Franklin County Zoning |
| <i>How does this reduce risk?</i> | | | | |
| Zoning/Land Use Code | No | Franklin County Zoning O.R.C. 303.02 | Franklin County | Franklin County Zoning |
| <i>How does this reduce risk?</i> | | | | |
| Subdivision Ordinance | No | Franklin County Subdivision Regulations O.R.C. 711 | Franklin County | Franklin County Zoning |
| <i>How does this reduce risk?</i> | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | No | Franklin County Stormwater Partnership. County Resolution 503.03 | Franklin County | Franklin County Engineer |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | Franklin County Planning Commission. Chapter 711 of the O.R.C. | Franklin County | Franklin County and the township |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | Franklin County Planning Commission. Chapter 711 of the O.R.C. | Franklin County | Franklin County and the township |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | No | Franklin County Flood Plain Administration. Implemented on September 20, 1978 | Franklin County | Franklin County Zoning |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|--|---|--|
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | Yes | Franklin County Emergency Management & Homeland Security. Township resolution pending | Franklin County | Franklin County Emergency Management and Franklin Township |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Southwest Area Plan Westland Area Interim Development Framework | Local | Southwest Area Commission Franklin Township |
| <i>How does this reduce risk?</i> | | | | |
| Capital Improvement Plan | No | Franklin County Stormwater Partnership. County resolution 503.03. Franklin County Subdivision Regulations. Chapter 711 of the O.R.C. | Franklin County | County and township |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | Franklin County Flood Plain Administration. Implemented September 20, 1978 | Franklin County | Franklin County Zoning |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | Yes | Ohio Emergency Management Agency. Develop a stormwater management. Chapter 5502 of the O.R.C. | State of Ohio | State, county, and township |
| <i>How does this reduce risk?</i> | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | Yes | Franklin County Flood Plain Administration and Franklin County Engineer O.R.C. chapter 711 | Franklin Township | Franklin County |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | O.R.C. 1503 | State of Ohio | State of Ohio |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | Yes | Pending Resolution | Township | Township |
| <i>How does this reduce risk?</i> | | | | |
| Continuity of Operations Plan | Yes | Pending Resolution | Township | Township |
| <i>How does this reduce risk?</i> | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | Yes | Pending resolution | Township | Township |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|-----------------------------------|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the Township of Franklin to oversee and track development.

Table 9.10-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--|
| Do you issue development permits? • If yes, what department is responsible? | No | Franklin County Zoning |
| If you do not issue development permits, what is your process for tracking new development? | N/A | Franklin County Zoning |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | Franklin County Zoning |
| Do you have a buildable land inventory? • If yes, please describe | Yes | Township acquires land for residential home building |
| Describe the level of build-out in your jurisdiction. | N/A | Minimal commercial and residential building at this time |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Franklin and their current responsibilities that contribute to hazard mitigation.

Table 9.10-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|---------------------|---|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | No | - |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | Yes | Township's affiliation with MORPC |
| Public Works/Highway Department | No | - |
| Construction/Building/Code Enforcement Department | Yes | Contracted services. Approves all commercial building permits. Township staff monitors zoning and building permits. Franklin County Zoning for residential building |
| Emergency Management/Public Safety Department | No | - |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Tornado sirens |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Township road department maintains areas prone to flooding. Adds additional drainage and involved with vegetation removal |
| Mutual aid agreements | Yes | Franklin County Engineer. Area fire departments. Local law enforcement |
| Human Resources Manual | Yes | Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? N/A |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | - |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | Contracted services |
| Planners or engineers with an understanding of natural hazards | Yes | Contracted services |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | Yes | Contracted services |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | Yes | Fire Chief |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to the Township of Franklin.

Table 9.10-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | No |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | No |
| Incur debt through special tax bonds | No |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Township of Franklin.

Table 9.10-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|---|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | Yes | Administrative assistant proficient with social media outlets and website development |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | No | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Tornado sirens |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | No | - |

Community Classifications

The table below summarizes classifications for community programs available to the Township of Franklin.

Table 9.10-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.10-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.10.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Township of Franklin.

Table 9.10-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|----------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Franklin (Twp) | NR | NR | NR | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Township of Franklin.

Table 9.10-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | Yes. List of homeowners with addresses are maintained by the township. Whims Ditch |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | At this time there are no homeowners seeking mitigation Franklin County maintains a list of property owners |

| NFIP Topic | Comments |
|---|--|
| Are any RiskMAP projects currently underway in your jurisdiction? • If so, state what projects are underway. | None at this time |
| • How do you make Substantial Damage determinations? • How many were declared for recent flood events in your jurisdiction? | Through assistance from Franklin County 3 recent floods dating back to 2007 |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded? | 21 properties have been acquired in the township. Funded through the Franklin County Engineer |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why. | No maps. Maps are maintained by Franklin County |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Franklin County Zoning. Franklin County Engineer |
| Are any certified floodplain managers on staff in your jurisdiction? | NA |
| Do you have access to resources to determine possible future flooding conditions from climate change? | Rely on information available from state and county agencies |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed? | Rely on county agencies for support |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | Building permits reviewed by the township and Franklin County Zoning The township communicates with homeowners within the flood plain. |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Franklin County Zoning and the Franklin County Engineer |
| What are the barriers to running an effective NFIP program in the community, if any? | Personnel and funding |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | N/A |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | Franklin County Flood Plain Administration. September 1978 |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | Meet |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | N/A |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | Interested in improving the township CRS classification |

9.10.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.10-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 1 | - | 3 | - | 0 | - | 2 | - | 2 | - |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |
| Other (commercial, mixed-use, etc.) | 70 | - | 68 | - | 58 | - | 73 | - | 48 | - |
| Total Permits Issued | 71 | - | 71 | - | 58 | - | 75 | - | 50 | - |

Table 9.10-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

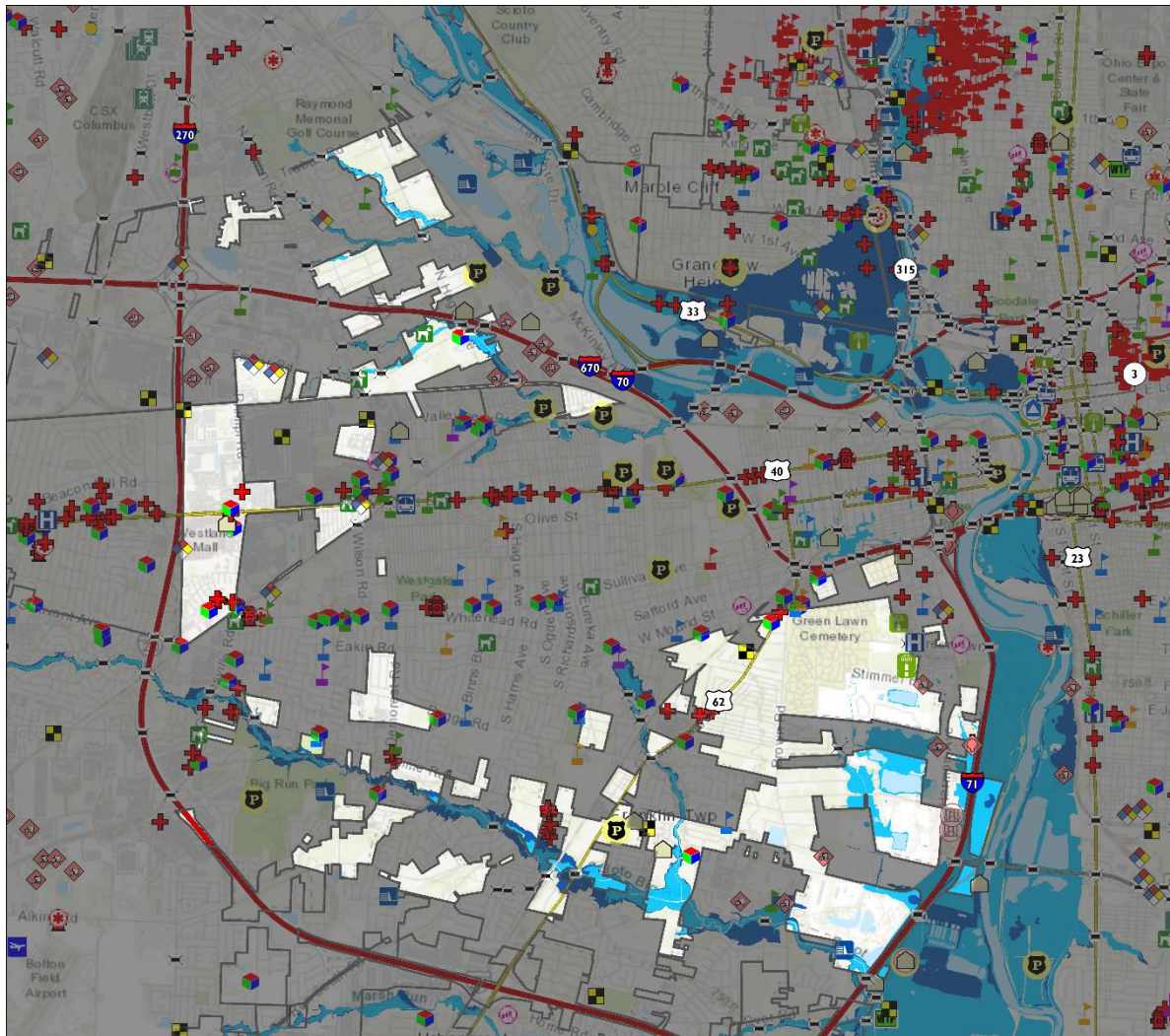
Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.10.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Township of Franklin’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Township of Franklin has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.10-1. Township of Franklin Hazard Area Extent and Location Map



Franklin (T)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service

- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems

0 0.5 1 Miles

- Municipal Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody

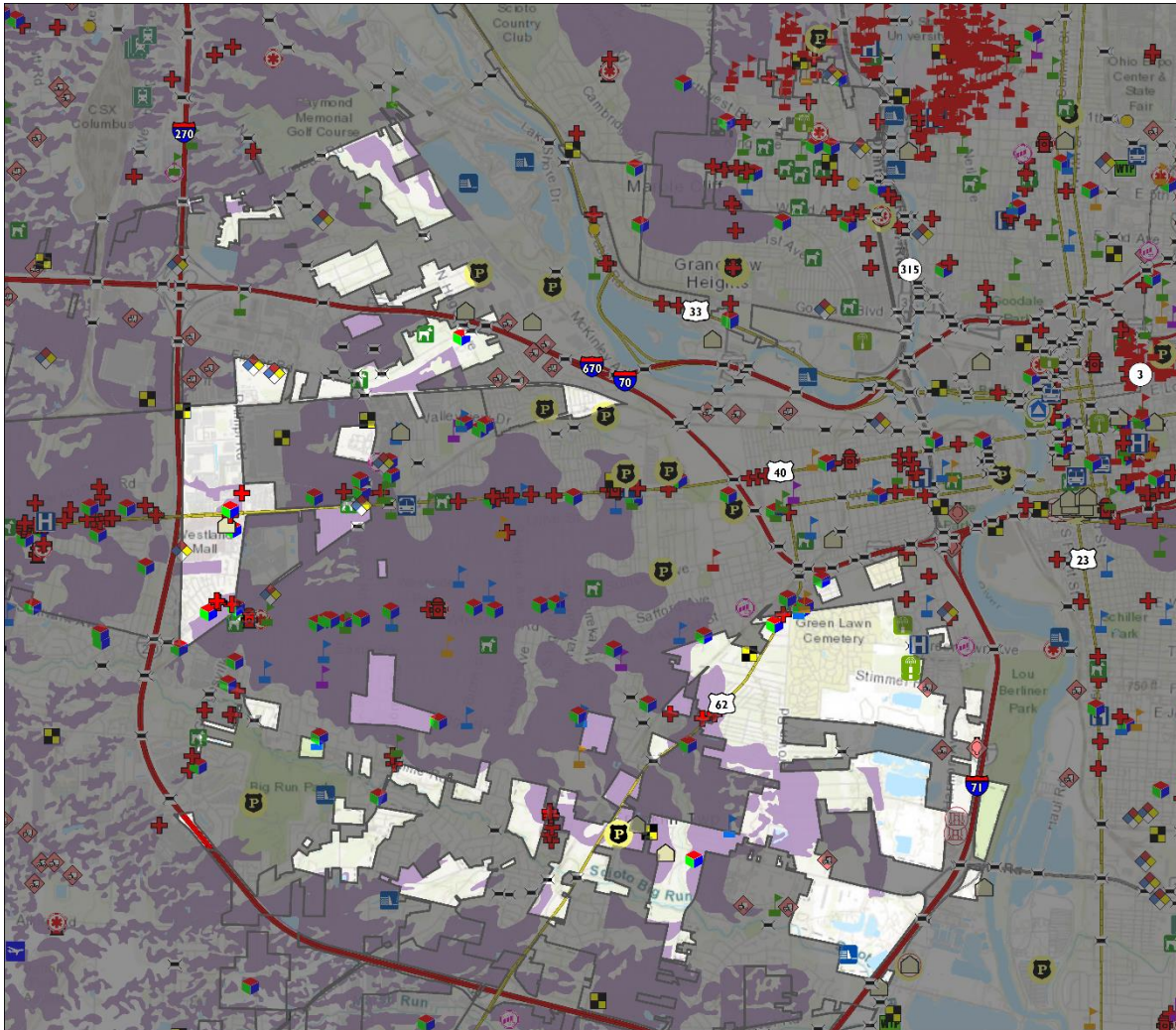
FEMA Flood Hazard Area

- 1-Percent Annual Chance
- 0.2-Percent Annual Chance

The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.

Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021
Notes: City (C), Township (T), Village (V)

Figure 9.10-2. Township of Franklin Hazard Area Extent and Location Map



Franklin (T)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service

- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems

0 0.5 1 Miles

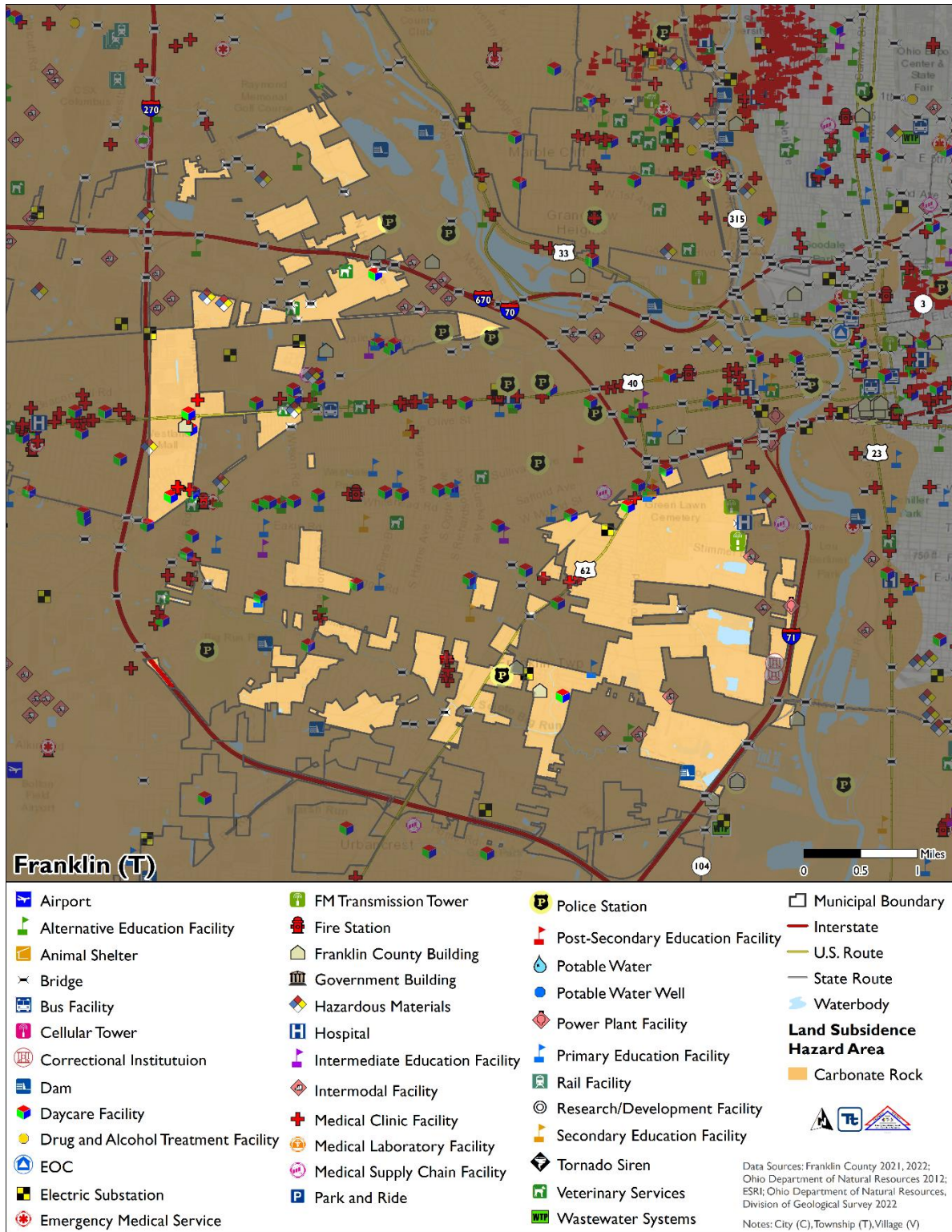
- Municipal Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody

Inland Erosion Hazard Area
 K-Factor: >=0.49



Data Sources: Franklin County 2021, 2022;
 Ohio Department of Natural Resources 2012;
 ESRI; United States Department of Agriculture,
 Natural Resources Conservation Service 2022
 Notes: City (C), Township (T), Village (V)

Figure 9.10-3. Township of Franklin Hazard Area Extent and Location Map



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Franklin Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Franklin Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.10-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Township did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Township did not experience any notable damages or losses. |
| May 2020 | Flood | N/A | Thunderstorms caused extensive flooding in the Whims Ditch due to heavy rainfall. 40 people were ordered to leave their home | Thunderstorms caused extensive flooding in the Whims Ditch due to heavy rainfall. 40 people were ordered to leave their home |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Township did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below

summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Township of Franklin. The Township of Franklin reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Township of Franklin agreed with all of the following hazard risk rankings.

Table 9.10-14. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee | Medium |
| Disease Outbreak | Medium |
| Drought | Medium |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.10-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Franklin Township

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 5 | 5 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 6 | 6 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | 22 | 19 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 70 | 64 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | 6 | 6 |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Franklin Township identified the following vulnerabilities within its community:

- Franklin Township is trying to address the flood prone issues concerning the Whims Ditch. Improved drainage is being added in an attempt to alleviate some of the flooding during heavy rains.
- The Township does not have a Debris Management Plan developed to address the aftermath of the hazards of concern.
- The Township does not have a Post Disaster Recovery Plan to address the hazards of concern.

- The Township does not have a warning system to notify their residents of incoming hazards or issues relating to the hazards of concerns.

9.10.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.10-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|---------------------------|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding for three repetitive loss structures to permanently reduce damage to these structures. (3 structures @ 300,000 / 2 years) | Township Trustee's Office | No Progress | No | - | - |
| Develop a comprehensive plan to address habitual flooding in the Whims Ditch area. (100,000 / 1 year) | Township Trustee's Office | Ongoing | Yes | After heavy rains, the Whims Ditch area experiences significant flooding issues. The Township does not have a Post Disaster Recovery Plan to address the hazards of concern. | Franklin Township |
| Mitigate Minor Flooding Throughout Township. Identify alternative strategies | Township Trustee's Office | In Progress | Yes | Minor flooding occurs throughout the Township. | Township Trustee's Office |
| Increase coverage of tornado sirens in the township | Township Trustee's Office | No Progress | No | - | - |
| Seek funding for acquisition of properties along Whims Ditch. | Township Trustee's Office | No Progress | Yes | After heavy rains, the Whims Ditch area experiences significant flooding issues. The flooding has been so extensive that residents have relocated, and their homes purchased by government agencies. Remaining residents still experience flood damage, roads are closed, and the townships departments are tasked with evacuations. Low laying land, with a ditch through Green Lawn Cemetery | Franklin Township, Franklin County, and Federal Emergency Management Agency |

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---------|-------------------|--|---|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| | | | | near the area of Hart and Richter Roads. | |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Township of Franklin identified the following mitigation efforts completed since the last HMP:

- Franklin Township is trying to address the flood prone issues concerning the Whims Ditch. Improved drainage is being added in an attempt to alleviate some of the flooding during heavy rains.

Since the adoption of the County's first HMP, the Township of Franklin has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.10-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | - | - | X | - | X | - | - | - | X |
| Disease Outbreak | X | - | - | X | - | X | - | - | - | X |
| Drought | X | - | - | X | - | X | - | - | - | X |
| Earthquake | X | - | - | X | - | X | - | - | - | X |
| Extreme Temp | X | - | - | X | - | X | - | - | - | X |
| Flood | X | X | - | X | X | X | - | - | X | X |
| Geologic | X | - | - | X | - | X | - | - | - | X |
| Invasive Species | X | - | - | X | - | X | - | - | - | X |
| Severe Summer Weather | X | - | - | X | - | X | - | - | - | X |
| Severe Winter Weather | X | - | - | X | - | X | - | - | - | X |
| Tornado | X | - | - | X | - | X | - | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.10-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Franklin Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.10-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------------|----------------------------|--|---|---------------|--------------------|--|---|---|---|----------|---------------------|--------------|
| 2023-Franklin Twp-001 | Whims Ditch | <p>Problem: After heavy rains, the Whims Ditch area experiences significant flooding issues. The flooding has been so extensive that residents have relocated, and their homes purchased by government agencies. Remaining residents still experience flood damage, roads are closed, and the townships departments are tasked with evacuations. Low lying land, with a ditch through Green Lawn Cemetery near the area of Hart and Richter Roads.</p> <p>Solution: Either remove existing homes or raise them at a minimum of 6.5 feet to reduce flood damage. Install a new stormwater pump and widen an existing ditch.</p> | Flood | 1, 2, 3, 4, 5 | 3 years | Franklin Township, Franklin County, and Federal Emergency Management Agency. | FEMA HMGP, FMA, and BRIC; Township budget | Remove 65 houses, or raise the remaining houses a minimum of 6.5 feet, install a new stormwater pump and widen the existing ditch | \$14,000,000 per U.S. Army Corp of Engineers in 2010. | Medium | LPR, EAP, SIP | PR, PP, SP |
| 2023-Franklin Twp-002 | Debris Management Plan | <p>Problem: The Township does not have a Debris Management Plan developed to address the aftermath of the hazards of concern.</p> | Dam/Levee, Drought, Earthquake, Extreme Temperature, Flood, | 4, 5 | 1 Year | Franklin Township | Township Budget | The Township will be better prepared to handle | Staff Time | High | LPR | PP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------------|-----------------------------|---|---|-----------|--------------------|---------------------------|---|--|-----------------|----------|---------------------|--------------|
| | | Solution: The Township will develop a Debris Management plan that integrates the hazards of concern. | Geologic Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | | | | | debris management | | | | |
| 2023-Franklin Twp-003 | Post Disaster Recovery Plan | Problem: The Township does not have a Post Disaster Recovery Plan to address the hazards of concern. Solution: The Township will develop a Post Disaster Recovery Plan that will integrate the HMP. | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 4, 5 | 1 Year | Franklin Township | Township Budget | The Township will be better prepared to handle the hazards of concern. | Staff Time | High | LPR | PP |
| 2023-Franklin Twp-004 | Warning System* | Problem: The Township does not have a warning system to notify their residents of incoming hazards or issues relating to the hazards of concerns. Solution: The Township will develop a text/email warning | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, | 4, 5 | 1 Year | | FEMA HMGP, FMA, and BRIC; Township budget | The Township residents will be better prepared for hazards. | \$50,000 | High | EAP | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------------|---------------------------------|---|---|-----------|--------------------|---|---|--|--------------------------|----------|---------------------|--------------|
| | | system to notify residents of issues throughout the Township as well as the surrounding areas. | Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | | | | | | | | | |
| 2023-Franklin Twp-005 | Minor Township Flooding | Problem: Minor flooding occurs throughout the Township. Solution: Mitigate minor flooding throughout the Township by first performing a flood study, then identifying potential strategies to implement. | Flood | 1 | 4 years | Township Trustee's Office | FEMA HMGP, FMA, and BRIC; Township budget | Medium | Medium | Medium | LPR | PR |
| 2023-Franklin Twp-006 | Repetitive Loss Area Mitigation | Problem: Portions of the Township experienced repetitive flooding. Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | Flood | 6 | 4 years | Franklin Township, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- *Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.10-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-----------------------|-----------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Franklin Twp-001 | Whims Ditch | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 5 | Medium |
| 2023-Franklin Twp-002 | Debris Management Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-Franklin Twp-003 | Post Disaster Recovery Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-----------------------|---------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Franklin Twp-004 | Warning System | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-Franklin Twp-005 | Minor Township Flooding | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 8 | Medium |
| 2023-Franklin Twp-006 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.11 CITY OF GAHANNA

This section presents the jurisdictional annex for the City of Gahanna that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Gahanna participated in the planning process, an assessment of the City of Gahanna’s risk and vulnerability, the different capabilities used in the City of Gahanna, and an action plan that will be implemented to achieve a more resilient community.

9.11.1 Hazard Mitigation Planning Team

The City of Gahanna identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Gahanna departments, including Department of Emergency Services. The Fire Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.11-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|----------------------------|
| Name/Title: | Kevin Schultz/Senior Director of Operations | Name/Title: | Laurie Jadwin/Mayor |
| Address: | 200 S. Hamilton Rd Gahanna | Address: | 200 S. Hamilton Rd Gahanna |
| Phone Number: | 614.342.4042 | Phone Number: | 614.342.4045 |
| Email: | kevin.schultz@gahanna.gov | Email: | laurie.jadwin@gahanna.gov |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Tom Komlanc/Director of Engineering | | |
| Address: | 200 S. Hamilton Rd Gahanna | | |
| Phone Number: | 614.342.4050 | | |
| Email: | Tom.komlanc@gahanna.gov | | |
| Additional Contributors: | | | |
| Name/Title: | Larry Rinehart | | |
| Method of Participation: | Direct | | |

9.11.2 Municipal Profile

The City of Gahanna is in the center east area of Franklin County and is bordered by Jefferson Township to the east, Blendon Township to the north, Mifflin Township and Columbus City to the south and to the west. Gahanna contains parts of Big Walnut Creek within its boundaries and is extremely close to Rocky Fork Creek.

According to the American Community Survey, the 2021 population for the City of Gahanna was 35,626, a 7.15 percent increase from the 2010 Census population of 33,248. Data from the 2021 American Community Survey indicates that 5.3 percent of the population is 5 years of age or younger and 16.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.11.3 Jurisdictional Capability Assessment and Integration

The City of Gahanna performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Gahanna to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Gahanna and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.11-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Part 13 – Building Code - 2007 | Local | Building Dept. |
| <p><i>How does this reduce risk?</i></p> <p>The purpose of the Ohio Building Code is to establish uniform minimum requirements for the erection, construction, repair, alteration, and maintenance of buildings, including construction of industrialized units. Such requirements shall relate to the conservation of energy, safety, and sanitation of buildings for their intended use and occupancy with consideration for the following:</p> <p>(a) Performance. Establish such requirements, in terms of performance objectives for the use intended.</p> <p>(b) <i>Extent of Use.</i> Permit to the fullest extent feasible, the use of materials and technical methods, devices, and improvements which tend to reduce the cost of construction without affecting minimum requirements for the health, safety, and security of the occupants of buildings without preferential treatment of types or classes of materials or products or methods of construction.</p> <p>(c) <i>Standardization.</i> To encourage, so far as may be practicable, the standardization of construction practices, methods, equipment, material and techniques, including methods employed to produce industrialized units.</p> | | | | |
| Zoning/Land Use Code | Yes | Part 11.03 – Zoning | Local | Zoning Dept. |
| <p><i>How does this reduce risk?</i></p> <p>The fulfillment of this purpose is to be accomplished by seeking:</p> <p>(a) To encourage and facilitate orderly, efficient and appropriate growth and development.</p> <p>(b) To establish population densities to prevent or reduce congestion and to secure economy in the cost of providing water supply and sewerage systems, streets and highways, fire and police protection, schools, parks and recreation facilities, and other governmental services.</p> <p>(c) To zone all properties with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout the City.</p> <p>(d) To protect residential, business, commercial and industrial areas alike from harmful encroachment by incompatible uses and to ensure that land allocated to a class of uses shall not be usurped by other uses inappropriate to the class.</p> <p>(e) To avoid the inappropriate development of lands and provide for adequate drainage, curbing of erosion and reduction of flood damage.</p> <p>(f) To foster a more rational pattern of relationship between residential, business, commercial and manufacturing uses for the mutual benefit of all.</p> | | | | |
| Subdivision Ordinance | Yes | Part 11.01 – Subdivision | Local | Planning Dept. |
| <p><i>How does this reduce risk?</i></p> <p>Subdivision means the division of any parcel of land shown as a unit or as contiguous units on the last preceding tax roll, into two or more parcels, sites or lots, any one of which is less than five acres for the purposes, whether immediate or future, of the transfer of ownership, provided, however, that the partition of land into parcels of more than five acres not involving any new streets or easements of access, and the sale or exchange of parcels between adjoining lot owners, where such sale or exchange does not create additional building sites, shall be exempted; or the improvement of one or more parcels of land for residential, commercial or industrial structures or groups of structures involving the division or allocation of land for the opening, widening or extension of any street or streets, except private streets serving industrial structures, the division or allocation of land as open spaces for common use by owners, occupants or lease holders or as easements for the extension and maintenance of public sewer, water, storm drainage or other public facilities.</p> | | | | |
| Site Plan Ordinance | Yes | Part 11.50 – Site Planning | Local | Planning Dept. |
| <p><i>How does this reduce risk?</i></p> <p>This ordinance provides guidance on building setbacks, parking setbacks, landscaping, patios, storage areas, and maintenance which take into account hazard areas and spacing.</p> | | | | |
| Stormwater Management Ordinance | Yes | Part 11.93 – Stormwater Mng. | Local | Engineering |
| <p><i>How does this reduce risk?</i></p> <p>The Stormwater Runoff Policy requires that land uses and developments which increase the runoff rate or volume shall control the discharge rate of runoff prior to its release to off-site land. The purposes of this policy are to:</p> <p>(1) Permit development without increasing the flooding potential of other lands;</p> <p>(2) Reduce damage to receiving streams and impairment of their capacity which may be caused by increases in the quantity and rate of stormwater discharge; and</p> <p>(3) Establish a basis for design of stormwater drainage systems on lands below undeveloped areas which shall preserve the rights and options of both dominant and servient property owners and assure long-term adequacy of storm drainage systems.</p> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Real Estate Disclosure <i>How does this reduce risk?</i> | No | - | - | - |
| Growth Management <i>How does this reduce risk?</i> | No | - | - | - |
| Environmental Protection Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Flood Damage Prevention Ordinance <i>How does this reduce risk?</i> It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: (a) Protect human life and health; (b) Minimize expenditure of public money for costly flood control projects; (c) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; (d) Minimize prolonged business interruptions; (e) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard; and (f) Help maintain a stable tax base by providing for the proper use and development of areas of special flood hazard so as to minimize future flood blight areas. | Yes | Chapter 1191- 6/21/1994 | Local | Planning Dept. |
| Wellhead Protection <i>How does this reduce risk?</i> | No | - | - | - |
| Emergency Management Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Change Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan <i>How does this reduce risk?</i> | Yes | | | |
| Capital Improvement Plan <i>How does this reduce risk?</i> Operates as a roadmap that will prioritize and guide the investment of Issue 12 dollars for both short-term and long-term capital needs (such as streets, bridges, trails, sidewalks, playgrounds, parks and more). | Yes | August 2023 | Local | Various |
| Disaster Debris Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Floodplain Management or Watershed Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Stormwater Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Open Space Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Urban Water Management Plan <i>How does this reduce risk?</i> | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Habitat Conservation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Economic Development Plan <i>How does this reduce risk?</i> | - | - | - | - |
| Shoreline Management Plan <i>How does this reduce risk?</i> | - | - | - | - |
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | - | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | - | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | - | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | Draft | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | Yes | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> The Emergency Operations Plan was adopted by Ordinance 0254-2001 on December 17, 2001. In accordance with the recommendation of the Director of Emergency Management, this Plan shall be updated each year and kept current at all times. | Yes | December 17, 2001 | Local | Emergency Management |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|-----------------------------------|---------------------------------|---|---|--|
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the City of Gahanna to oversee and track development.

Table 9.11-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--|
| Do you issue development permits? • If yes, what department is responsible? | Yes | Planning & Engineering |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | There is a specific Flood Permit for all development within these areas. |
| Do you have a buildable land inventory? • If yes, please describe | No | Gahanna is largely built-out but does have infill opportunities. |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Gahanna and their current responsibilities that contribute to hazard mitigation.

Table 9.11-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|----------------------------------|---------------------|---|
| Administrative Capability | | |
| Planning Board | Yes | Planning Commission is comprised of seven members appointed to three-year terms by City Council or the Mayor. |
| Zoning Board of Adjustment | Yes | The Board of Zoning and Building Appeals shall have the power to hear and decide appeals as follows: <ul style="list-style-type: none"> • For exceptions to ordinances, resolutions, and regulations of the City pertaining to zoning, building, and landscaping in the City. • From the decisions, measures and orders of City officials, boards, commissions and agencies pertaining to zoning, building, and landscaping in the City. • The Board shall decide its cases to afford justice and avoid unreasonable hardship to citizens. Further, the Board's authority shall be exercised |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|------------------------|--|
| | | subject to such reasonable standards as shall be prescribed by Council. Further, the Board shall have such other powers as may be granted to it by Council |
| Planning Department | Yes | <p>The Planning Commission shall have the power and duty to:</p> <ul style="list-style-type: none"> • Advise the Council concerning the preparation of plans and maps for the future physical development and harmonious improvement of the Municipality. • Evaluate the planning and design, location, removal, relocation and alteration of new, renovated, or expanded structures; any public building or structure and public property; the location, widening, extension and vacation of streets, alleys, public ways, parks, playgrounds, recreation areas and other public places. • Approve plats for the subdivision of lands. • Regulate and restrict the location of buildings and other structures and of premises to be used for trade, industry, residence, or other specified uses. • Regulate and limit heights of buildings or other location of buildings or other structures to be erected or altered. • Regulate the bulk and location of buildings and other structures to be erected or altered, including the percentage of lot occupancy, set back building lines, and the area of yards, courts and other open spaces; and such other powers and duties as may be imposed upon it by resolution or ordinance of Council |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | Yes | The Mission of the Department of Parks & Recreation is to provide parks, trails, and recreational opportunities to all people of Gahanna so they can be healthy and well while they explore and learn in our community. |
| Economic Development Commission/Committee | Yes | - |
| Public Works/Highway Department | Yes | - |
| Construction/Building/Code Enforcement Department | Yes | - |
| Emergency Management/Public Safety Department | Yes | - |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | From Franklin Count EMA |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Stormwater Management program |
| Mutual aid agreements | Yes | - |
| Human Resources Manual | Yes | Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | - |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | - |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Planners or engineers with an understanding of natural hazards | Yes | - |
| Staff with expertise or training in benefit/cost analysis | Yes | - |
| Professionals trained in conducting damage assessments | Yes | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | Yes | - |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | Yes | Utilities Engineer |

Fiscal Capability

The table below summarizes financial resources available to the City of Gahanna.

Table 9.11-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | Yes |
| Stormwater utility fee | Yes |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | Yes |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | Yes |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Gahanna.

Table 9.11-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|--|------------------------|-------------------------------|
| Public information officer or communications office | Yes | - |
| Personnel skilled or trained in website development | Yes | - |
| Hazard mitigation information available on your website | No | Will implement in the future. |
| Social media for hazard mitigation education and outreach | No | Will implement in the future. |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Through Franklin County EMA |

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|----------|
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | No | - |

Community Classifications

The table below summarizes classifications for community programs available to the City of Gahanna.

Table 9.11-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.11-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.11.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Gahanna.

Table 9.11-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|--------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Gahanna (C) | 48 | 29 | \$88,329.77 | 2 | 0 |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Gahanna.

Table 9.11-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | Our GIS is fully integrated with the current FEMA Flood mapping for the entire City of Gahanna and beyond. Properties damaged by flooding would be inventoried as part of the permitting process. |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | - |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | Damage determinations are made in coordination with the Chief Building Official and Fire Marshal. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | - |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | Yes |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Planning & Engineering |

| NFIP Topic | Comments |
|---|---|
| Are any certified floodplain managers on staff in your jurisdiction? | Yes |
| Do you have access to resources to determine possible future flooding conditions from climate change? | Yes |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed? | Yes – We are in the process of having additional staff trained. |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | Permit Review, GIS, inspection, engineering |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | By code |
| What are the barriers to running an effective NFIP program in the community, if any? | Cost |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | N/A |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | Chapter 1191-6/21/1994 |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | Meet |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Site Plan Review supports floodplain management |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | - |

9.11.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

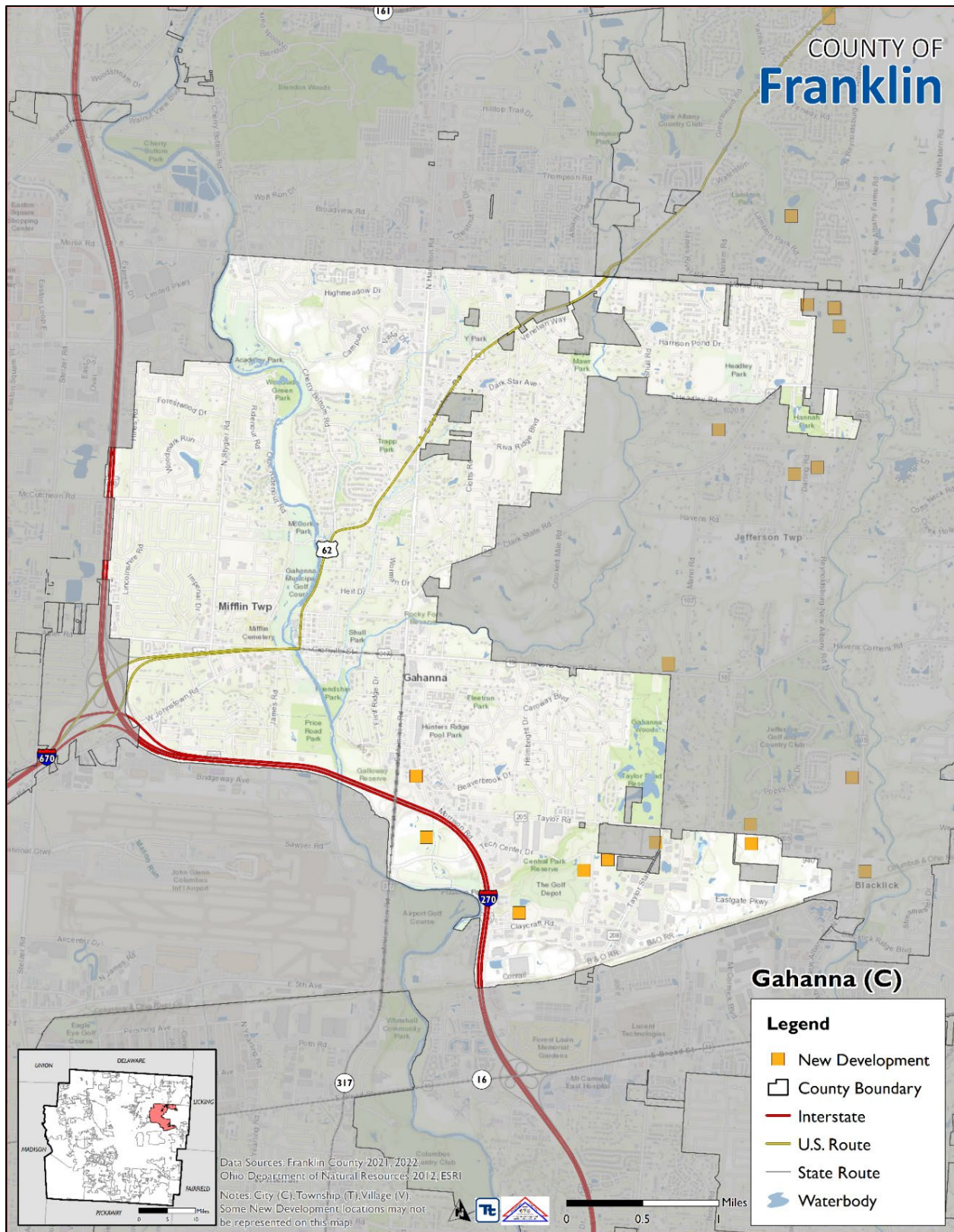
Table 9.11-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-----------|-------------|-----------|-------------|------------|-------------|-----------|-------------|-----------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 81 | 2 | 68 | 2 | 95 | 1 | 54 | 1 | 36 | 2 |
| Multi-Family | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 4 | 0 |
| Other (commercial, mixed-use, etc.) | 16 | 0 | 17 | 1 | 14 | 2 | 14 | 4 | 21 | 5 |
| Total Permits Issued | 99 | 2 | 85 | 4 | 110 | 3 | 68 | 5 | 61 | 7 |

Table 9.11-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

Figure 9.11-1. City of Gahanna Hazard Area Extent and Location Map – New Development

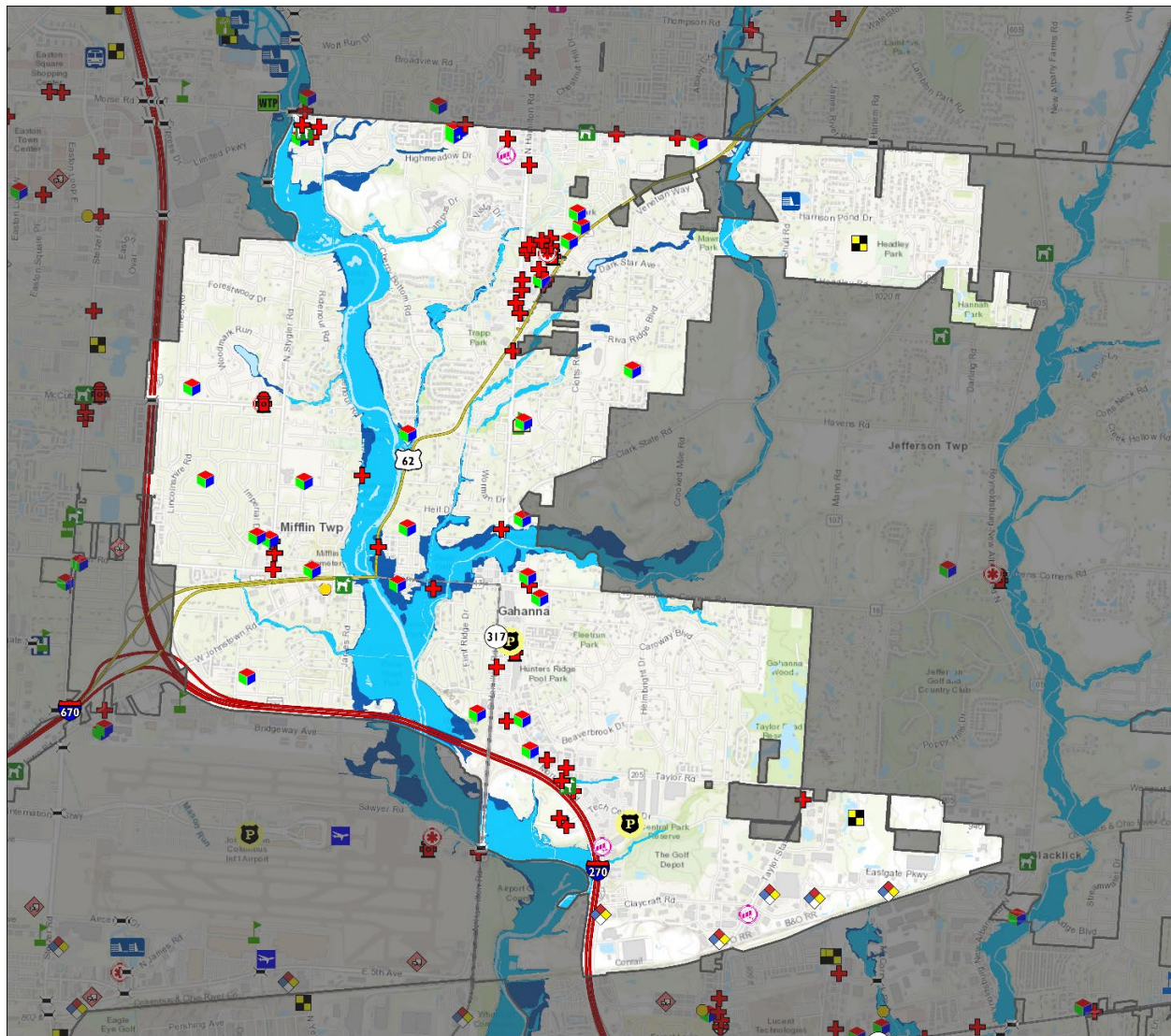


9.11.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Gahanna's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Gahanna has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.11-2. City of Gahanna Hazard Area Extent and Location Map - Flood



Gahanna (C)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service

- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems

0 0.5 1 Miles

- Municipal Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody

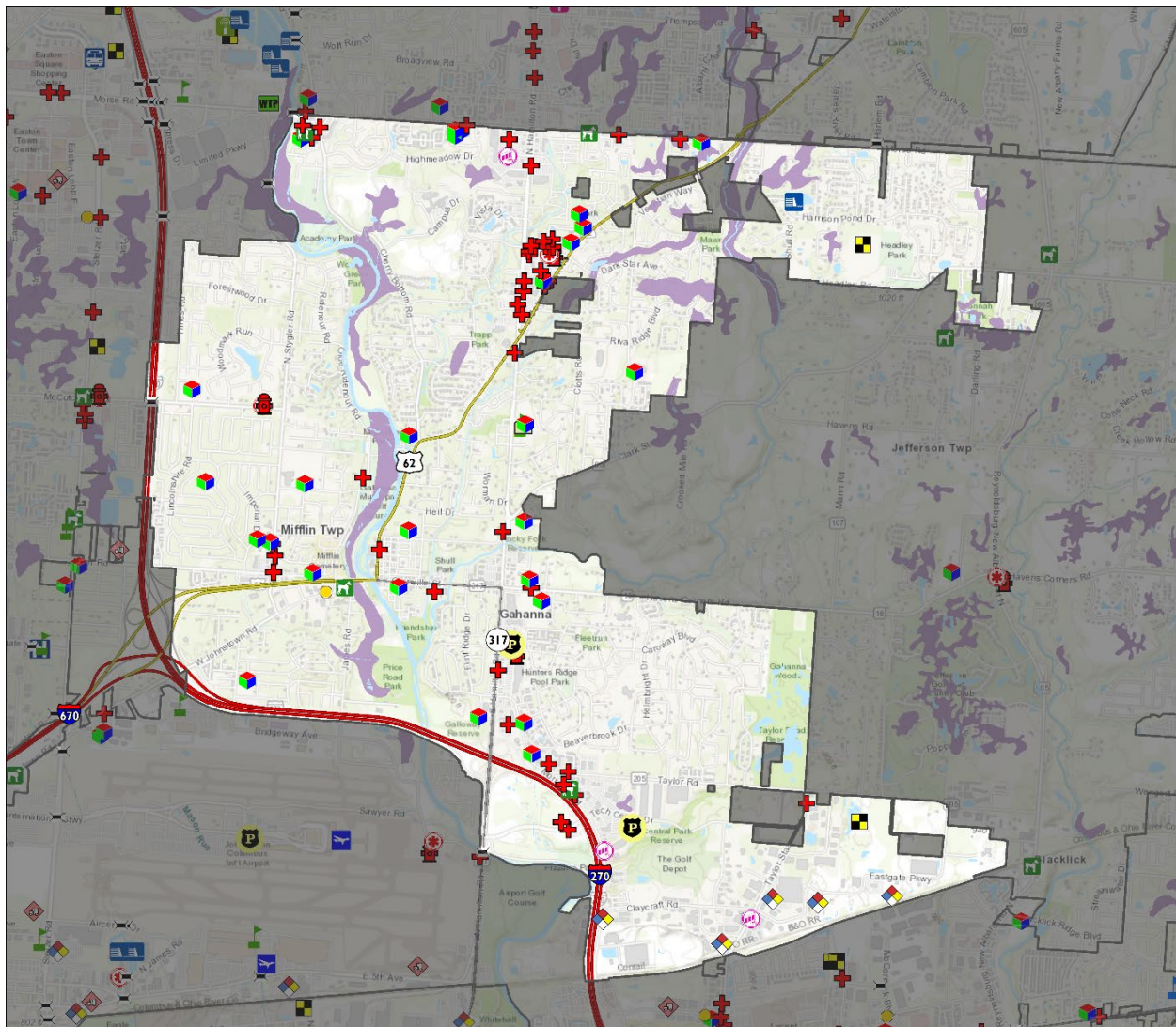
FEMA Flood Hazard Area

- 1-Percent Annual Chance
- 0.2-Percent Annual Chance

The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.

Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021
Notes: City (C), Township (T), Village (V)

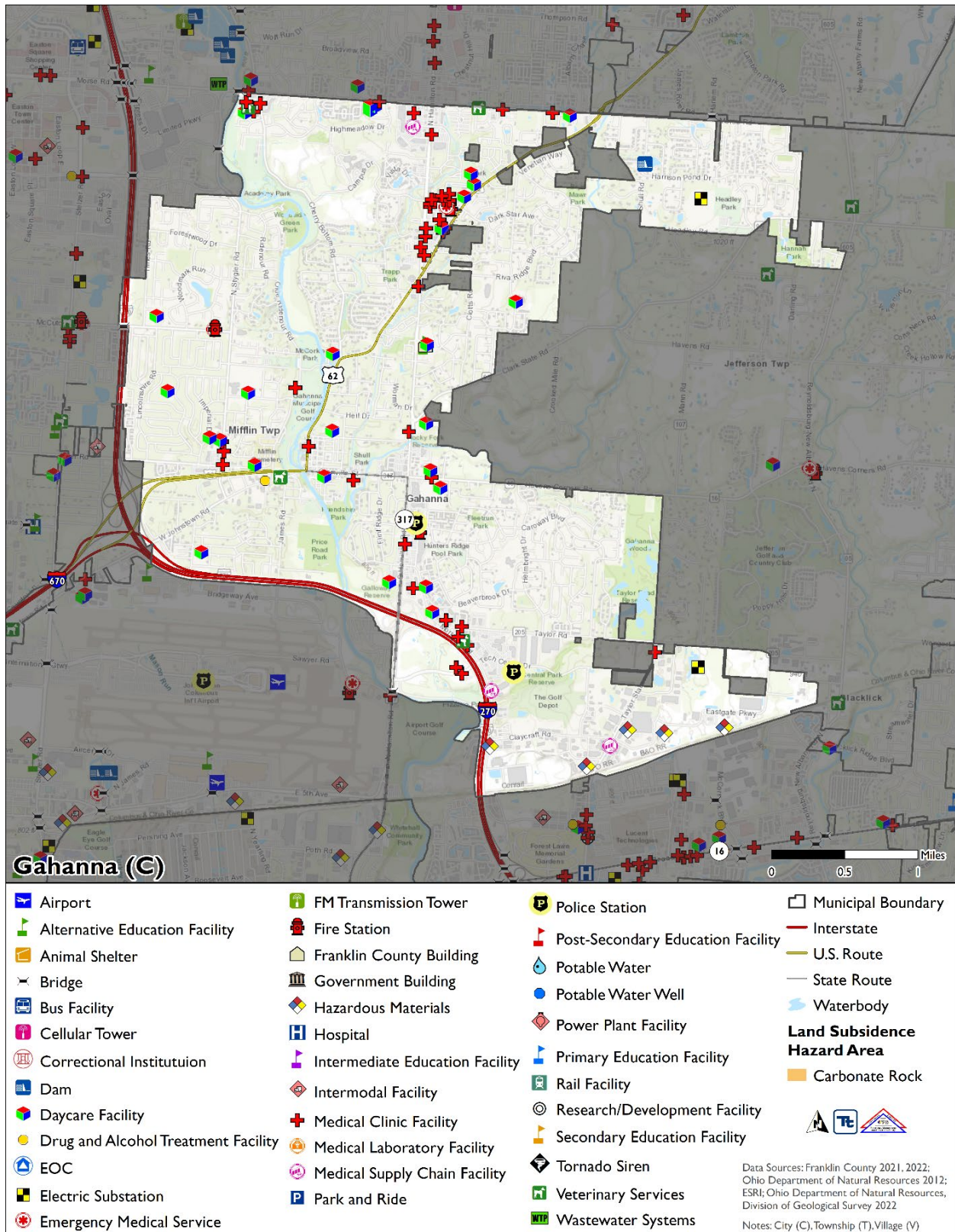
Figure 9.11-3. City of Gahanna Hazard Area Extent and Location Map – Inland Erosion



Gahanna (C)

- | | | | |
|-------------------------------------|---------------------------------|-----------------------------------|-----------------------------------|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Inland Erosion Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | K-Factor: ≥ 0.49 |
| Dam | Intermodal Facility | Research/Development Facility | |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | |
| EOC | Medical Supply Chain Facility | Veterinary Services | |
| Electric Substation | Park and Ride | Wastewater Systems | |
| Emergency Medical Service | | | |
- Notes: City (C), Township (T), Village (V)
- Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; United States Department of Agriculture, Natural Resources Conservation Service 2022.

Figure 9.11-4. City of Gahanna Hazard Area Extent and Location Map – Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Gahanna’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Gahanna experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.11-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The City did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The City did not experience any notable damages or losses. |
| March 2020-present | Covid-19 Pandemic | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The City did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Gahanna.

The City of Gahanna reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.11-14. Hazard Ranking Input

| Hazard/Vulnerability | Ranking |
|-----------------------|---------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.11-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Gahanna

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 3 | 3 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

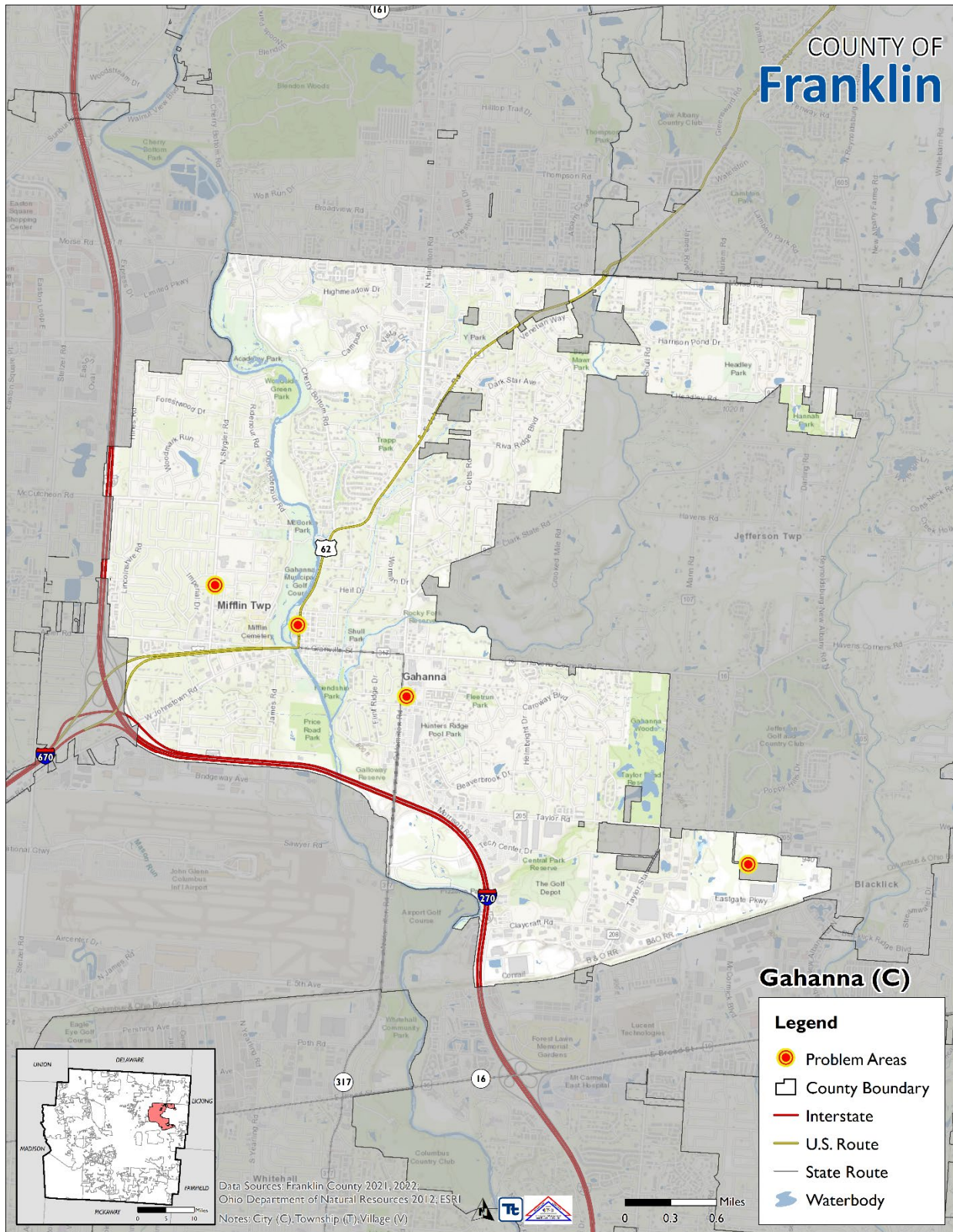
Identified Issues

In addition to the risk assessment, the City of Gahanna identified the following vulnerabilities within its community:

- Outdated zoning code and regulations
- Flooding is a problem as the City sits immediately south of the Hoover Dam and the main outfall of Big Walnut Creek bisects the City.
- Flooding due to drainage issues.

The following figure illustrates the problem areas identified by the City during the planning process.

Figure 9.11-5. City of Gahanna Hazard Area Extent and Location Map – Problem Areas



9.11.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.11-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|-------------------|--|---|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Storm water five year capital projects (3,000,000 / 3 years) | Mayor's Office | No Progress | No | - | - |
| Flood routing swale for Academy Woods. (750,000 / 2 years) | Mayor's Office | No Progress | No | - | - |
| Detention basin, flood routing swales and culverts for Industrial Zone phase 1. (450,000 / 1 year) | Mayor's Office | No Progress | No | - | - |
| Industrial Zone phase 2, pond dredging retention basins. (1,000,000 / 9 months) | Mayor's Office | No Progress | No | - | -- |
| Engineering of flood mitigation program. (150,000 / 6 months) | Mayor's Office | No Progress | No | - | - |
| Industrial Zone 36" pipe for Kahiki (450,000 / 9 months) | Mayor's Office | No Progress | No | - | - |
| Construction of flood reliever piping system. (850,000 / 2 years) | Mayor's Office | No Progress | No | - | - |
| Royal Manor BW phase 1 & 2 construction. (1,500,000 / 18 months) | Mayor's Office | No Progress | No | - | - |
| Old Gahanna storm rehab, (3,000,000 / 2 years) | Mayor's Office | No Progress | No | - | - |
| Storm component of East Johnstown Road (1,500,000 / 18 months) | Mayor's Office | No Progress | No | - | - |
| Hunters Ridge/Claman Heights Storm Improvements (200,000/2 years) | Mayor's Office | No Progress | No | - | - |
| Royal Manor/Brentwood Storm Improvements (5,500,000/3 years) | Mayor's Office | No Progress | No | - | - |
| Souder Ditch Watershed – Erosion Repair Projects (\$1,500,000/18 months) | Mayor's Office | No Progress | No | - | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Gahanna identified the following mitigation efforts completed since the last HMP:

- None identified.

Since the adoption of the County's first HMP, the City of Gahanna has made significant mitigation progress in the following areas:

- None identified.

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Gahanna participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.11-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | | X | | X | X | | | | | X |
| Disease Outbreak | | X | | X | X | | | | | X |
| Drought | | X | | X | X | | | | | X |
| Earthquake | | X | | X | X | | | | | X |
| Extreme Temp | | X | X | X | X | | | | | X |
| Flood | | X | X | X | X | | | | X | X |
| Geologic | | X | X | X | X | | | | | X |
| Invasive Species | X | | | X | X | X | | | | |
| Severe Summer Weather | | X | | X | X | | | | X | X |
| Severe Winter Weather | | X | | X | X | | | | X | X |
| Tornado | | X | | X | X | | | | | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.11-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Gahanna will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.11-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------|----------------------------|---|--|-----------|--------------------|--|---------------------------|--|-----------------|----------|---------------------|--------------|
| 2023-Gahanna-001 | Inundation Modeling | <p>Problem: The City of Gahanna has a number of areas that fall within the mapped FEMA Flood plain and floodway. The City also sits immediately south of the Hoover Dam and the main outfall of Big Walnut Creek bisects the City. In addition, drainage issues exist throughout the City. In events of above average rainfall some of these areas experience significant levels of inundation. In the event of extreme flooding, dam failure, severe storms these areas jurisdiction wide become overwhelmed.</p> <p>Solution: The City will develop an inundation model, city-wide, that will inform officials on nuisance level drainage issues to areas of significant challenges during 25-, 50-, 100-, & 500-year events. This base line information will help identify areas of immediate concern and more thoughtful solutions can be designed to mitigate the impact of these events. This will also provide a trusted resource to better plan response around releases from the Hoover Dam up to and including a dam failure.</p> | Flood; Dam and Levee Failure; Severe Summer Weather; Severe Winter Weather; and Tornado | 1,2,3,6 | 1 Year | City of Gahanna - Engineering Department | FEMA, HMGP, Local | This project will identify the most at risk areas within the City and provide the necessary information for City officials to plan mitigation strategies and projects in future years. | \$100,000 | High | LPR | PR |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------|---------------------------------|--|---------------------------|-----------|--------------------|--|---|--|--------------------------|----------|---------------------|--------------|
| 2023-Gahanna-002 | Zoning Code Update | Problem: The City's Zoning code was written approximately 50 years ago when the physical environment in the City was dramatically different. The city is mostly built-out by today's standards and is not reflective of best practices in today's world. This impacts the natural environment as well as the flood plains and floodways that run through the city. This project will address existing and future land use concerns for these areas. Solution: The entire zoning code for the City of Gahanna will be brought up to today's standards. | Flood | 1 | 1 Year | City of Gahanna - Planning Department | Local | Modern Zoning Regulations | \$75,000 | High | LPR/NSP | NR, PR |
| 2023-Gahanna-003 | Repetitive Loss Area Mitigation | Problem: Portions of the City experienced repetitive loss due to flooding. Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | Flood | 6 | 4 years | Gahanna City, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC; Township budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Mitigation Category:

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

- *Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.11-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|------------------|---------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Gahanna-001 | Inundation Modeling | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 10 | High |
| 2023-Gahanna-002 | Zoning Code Update | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 8 | High |
| 2023-Gahanna-003 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

9.12.2 Municipal Profile

The City of Grandview Heights is located in Central Ohio and is a prominent suburb of Columbus. The City is nearly completely surrounded by Columbus, with the exception of the Village of Marble Cliff bordering the City to the West. The City is just north of the Scioto River, west of the Olentangy River, and is in close proximity to Clinton Township.

According to the American Community Survey, the 2021 population for the City of Grandview Heights was 8,099, a 23.91 percent increase from the 2010 Census population of 6,536. Data from the 2021 American Community Survey indicates that 5.7 percent of the population is 5 years of age or younger and 11.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.12.3 Jurisdictional Capability Assessment and Integration

The City of Grandview Heights performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Grandview Heights to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Grandview Heights and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.12-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|------------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Ohio Building Code; City of Grandview Heights Code Part 13 | State of Ohio | Building Department |
| <i>How does this reduce risk?</i> <i>The Building Code ensures structures are built safely with integrity to prevent injury, collapse, fire, or structural damage.</i> | | | | |
| Zoning/Land Use Code | Yes | Subdivision Regulations of the City of Grandview Heights, Ohio, Part 11 | City | Building Department Director |
| <i>How does this reduce risk?</i> Each development that comes forward must address stormwater mitigation and design to minimize the impacts to the surrounding environment. The majority of Grandview Heights sits at an elevation out of the floodplain and floodway. | | | | |
| Subdivision Ordinance | Yes | Subdivision Regulations of the City of Grandview Heights, Ohio, Chapter 1113 | City | Building Department Director |
| <i>How does this reduce risk?</i> Each development that comes forward must address stormwater mitigation and design to minimize the impacts to the surrounding environment. The majority of Grandview Heights sits at an elevation out of the floodplain and floodway. | | | | |
| Site Plan Ordinance | Yes | Chapter 937 | City | Building Department/ Planning Department |
| <i>How does this reduce risk?</i> Each development that comes forward must address stormwater mitigation and design to minimize the impacts to the surrounding environment. The majority of Grandview Heights sits at an elevation out of the floodplain and floodway. | | | | |
| Stormwater Management Ordinance | Yes | Stormwater Management Code | City | Building Department Director |
| <i>The Stormwater Management Code establishes a basis for design and therefore can:</i> | | | | |
| <ul style="list-style-type: none"> (1) Minimize the damage and inconvenience of flooding; (2) Provide drainage systems which continue to benefit their tributary area over the long term; (3) Minimize the adverse effects of new drainage systems on existing systems; and (4) Minimize the expense of maintaining the drainage facilities within the City. (5) Protect the water quality of existing water bodies to the maximum extent | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | Chapter 1339 Flood Damage Prevention | City | Floodplain Administrator (Director of Building & Zoning) |
| <i>The ordinance minimizes the impact of development on adjacent properties within and near flood prone areas by:</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|------------------------------------|--|---|--|
| (1) Restricting or prohibiting uses which are dangerous to health, safety, and property due to water hazards, or which result in damaging increases in flood heights or velocities; (2) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial Construction; (3) Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters; (4) Controlling filling, grading, dredging, excavating, and other development which may increase flood damage; and (5) Preventing or regulating the construction of flood barriers that will unnaturally divert flood waters or which may increase flood hazards in other areas. | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | Yes | Historical Preservation Ordinance | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | 2019 Community Plan | - | - |
| <i>How does this reduce risk?</i> This plan restricts use of current area subject to flooding to manufacturing and other commercial uses, prohibiting residential. | | | | |
| Capital Improvement Plan | Yes | Capital Improvement Plan | City | Finance Department |
| <i>How does this reduce risk?</i> <i>Our CIP reduces risk by allowing us to make necessary infrastructure improvements such as utility upgrades to increase capacity, minimizing negative impacts and personal property damage, and to purchase equipment to mitigate any effects of a hazard.</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | Yes | Chapter 937 | City | City Engineer |
| <i>How does this reduce risk?</i> <i>The Stormwater Management Code establishes a basis for design and therefore can:</i> (1) <i>Minimize the damage and inconvenience of flooding;</i> (2) <i>Provide drainage systems which continue to benefit their tributary area over the long term;</i> (3) <i>Minimize the adverse effects of new drainage systems on existing systems; and</i> (4) <i>Minimize the expense of maintaining the drainage facilities within the City.</i> (5) <i>Protect the water quality of existing water bodies to the maximum extent</i> | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|------------------------------------|--|---|--|
| Habitat Conservation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Economic Development Plan This plan provides financial strategies for improving infrastructure including but not limited to utilities, roadway conditions, and resolve flooding potential along Goodale Boulevard. | In Progress | - | - | - |
| Shoreline Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | In progress | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | - | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>The Emergency Operations Plan allows staff to know their roles and more quickly respond to hazards as they occur, reducing the potential for life and property loss.</i> | Yes | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|------------------------------------|--|---|--|
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | - | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of the City of Grandview Heights to oversee and track development.

Table 9.12-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|------------------------|
| Do you issue development permits? • If yes, what department is responsible? | No | |
| If you do not issue development permits, what is your process for tracking new development? | N/A | Current zoning process |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | |
| Do you have a buildable land inventory? • If yes, please describe | No | |
| Describe the level of build-out in your jurisdiction. | N/A | 95% |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Grandview Heights and their current responsibilities that contribute to hazard mitigation.

Table 9.12-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|----------------------------------|------------------------|---|
| Administrative Capability | | |
| Planning Commission | Yes | Oversees commercial properties, zoning issues, and lot consolidations and splits. Members: <ul style="list-style-type: none"> • Jamie Gentry, Chair • Frances Rourke • Tim Kaskewsky • Mark Hollern, AIA, LEED AP • Sarah Bongiorno • Greta Kearns, Mayor, Ex Officio • Anthony Panzera, Council Representative, Ex Officio |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Board of Zoning Appeals | Yes | The Board of Zoning Appeals oversees residential zoning issues, and variances to the Zoning Code. Members <ul style="list-style-type: none"> • Rick Kinsinger, Chair • Anna Kalnow, Vice-Chair • Joe Donovan • Mattijs van Maasackers • Tyler La Susa |
| Planning Department | Yes | Director of Planning & Community Development |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | Yes | Council Committee |
| Public Works/Highway Department | Yes | Service Department |
| Construction/Building/Code Enforcement Department | Yes | The Building and Zoning Department: <ul style="list-style-type: none"> • Issues contractor registrations, permits, and applications • Reviews construction documents • Performs inspections • Enforces Code compliance on new and existing structures • Facilitates the Board of Zoning Appeals (residential projects) • Facilitates the Planning Commission (commercial projects) Director, Administrative Coordinator, two inspectors; Director is floodplain manager |
| Emergency Management/Public Safety Department | Yes | Police & Fire Department |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | No | Rely on FCEMHS |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Completed through a contract executed by Parks Maintenance staff |
| Mutual aid agreements | Yes | City of Columbus, Clinton Township, Upper Arlington |
| Human Resources Manual | Yes | Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? |
| Other | Yes | The Board of Health will assist, to the extent requested, Franklin County Public Health in protecting the health of the community from disease and injury by considering and recommending needed services, advising the Mayor and Chief of Fire about health concerns that are not covered by the relationship with the County, and encouraging local partnerships that promote a healthy lifestyle for persons of all ages. |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | City Engineer |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | City Engineer / Building Department staff |
| Planners or engineers with an understanding of natural hazards | Yes | City Engineer |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | Contract staff |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|--|
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | Yes | City Engineer |
| Emergency Manager | Yes | Fire Chief/Police Chief |
| Grant writer(s) | No | Consider the following: Are data and maps from the HMP used to support documentation in grant applications? |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | Yes | Contract Engineer |

Fiscal Capability

The table below summarizes financial resources available to the City of Grandview Heights.

Table 9.12-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | No |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Grandview Heights.

Table 9.12-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|--|------------------------|---|
| Public information officer or communications office | Yes | Handled by the City's Administration |
| Personnel skilled or trained in website development | No | |
| Hazard mitigation information available on your website | Yes | Floodplain information is available under the Building Department |
| Social media for hazard mitigation education and outreach | Yes | Handled through current communication channels |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|---|
| Warning systems for hazard events | Yes | We have a 311 system with push alerts and email notification capabilities |
| Natural disaster/safety programs in place for schools | Yes | Police & Fire oversee |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | Yes | We utilize social media platforms and through those, share information from Franklin County Emergency Management when appropriate and applicable. |

Community Classifications

The table below summarizes classifications for community programs available to the City of Grandview Heights.

Table 9.12-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | 3 | November 1, 2018 |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | - | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.12-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.12.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Grandview Heights.

Table 9.12-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|-----------------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Grandview Heights (C) | 9 | 3 | \$29,877.05 | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)
^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of the NFIP program in the City of Grandview Heights.

Table 9.12-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | The southernmost portion of Grandview Heights is within FEMA's floodplain. We are positioned between two rivers (Scioto and Olentangy), increasing our chance of being impacted by a serious flood. |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No. |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No. |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | We have not had a flood event in recent years during current staff's time. We do occasionally experience water in basements during heavy rain events. |

| NFIP Topic | Comments |
|---|--|
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded? | None. |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why. | Yes. |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Building & Zoning |
| Are any certified floodplain managers on staff in your jurisdiction? | Not currently. |
| Do you have access to resources to determine possible future flooding conditions from climate change? | Yes through regional partners. |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed? | Yes. We need to get a member staff certified as the Floodplain Manager. |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | Building permit review, inspections, and engineering review |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Exceeds 50% of market value |
| What are the barriers to running an effective NFIP program in the community, if any? | None |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | Unknown |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | Chapter 1339 of Codified Ordinances; 2005 |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | Meets minimum requirements |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Floodplain review comments and concerns are provided as part of the development process. |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.12.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.12-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-----------|-------------|-----------|-------------|-----------|-------------|----------|-------------|-----------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 10 | 0 | 36 | 0 | 37 | 0 | 2 | 0 | 35 | 0 |
| Multi-Family | 0 | 0 | 18 | 0 | 20 | 0 | 1 | 0 | 2 | 0 |
| Other (commercial, mixed-use, etc.) | 1 | 0 | 5 | 0 | 5 | 0 | 3 | 0 | 4 | 0 |
| Total Permits Issued | 11 | 0 | 59 | 0 | 62 | 0 | 6 | 0 | 41 | 0 |

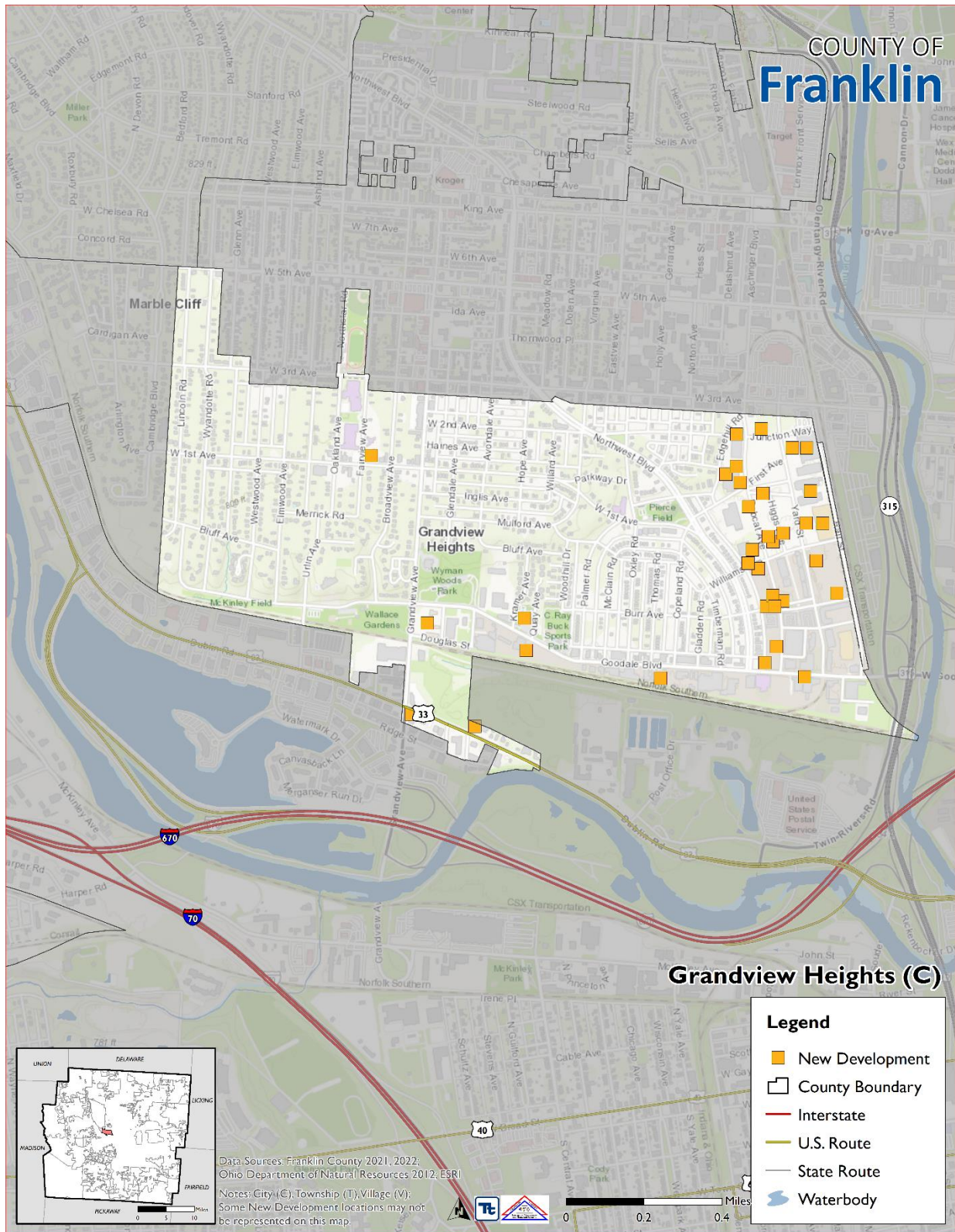
Table 9.12-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|---------------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| Grandview Yard (Morrison Bldg) | Mixed Used | 132 units / 1 structure | 822 Williams Avenue | N/A | In progress |
| Grandview Yard (Manchester Bldg) | Mixed Used | 123 units / 1 structure | 825 Junction Way | N/A | Completed |
| Grandview Yard (Homes At Pullman) | Comm - Condos | 10 units / 2 structures | 907 – 915 Williams Avenue | N/A | Completed |
| Grandview Yard | Commercial | 1 structure | 1125 Yard Street | N/A | Completed |
| Grandview Yard (Block D – Bldg. B) | Commercial | 142 units / 1 structure | 880 Yard Street | N/A | Completed |
| Grandview Yard (Parking Garage) | Commercial | 1 structure | 1125 Rail Street | N/A | Completed |
| Grandview Yard (Parking Garage) | Commercial | 1 structure | 975 Rail Street | N/A | Completed |
| Grandview Yard (Parking Garage) | Commercial | 1 structure | 960 Bobcat Avenue | N/A | Completed |
| Grandview Yard (Block D – Bldg. A) | Commercial | 78 units / 1 structure | 810 Burr Avenue | N/A | Completed |
| Grandview Yard (NRI) | Commercial | 4 structures | 1000 – 1050 Yard Street | N/A | Completed |
| Grandview Yard (Goodard School) | Commercial | 1 structure | 1175 Bobcat Avenue | N/A | Completed |
| Grandview Yard (Dorchester East) | Commercial | 86 units / 1 structure | 950 Dorchester Way | N/A | Completed |
| Grandview Yard (Dorchester West) | Commercial | 150 units / 1 structure | 955 Dorchester Way | N/A | Completed |
| Grandview Yard (Homes At Pullman) | Comm - Condos | 4 units / 1 structure | 882 – 888 Burr Avenue | N/A | Completed |
| Grandview Yard (Homes At Pullman) | Comm - Condos | 16 units / 4 structures | 844 – 876 Pullman Way | N/A | Completed |
| Grandview Yard (M/I Homes) | Residential | 19 single family homes | 841 – 877 Pullman Way | N/A | Completed |
| Grandview Yard (Homes At Pullman) | Comm - Condos | 34 units / 7 structures | 930 – 994 Pullman Place | N/A | Completed |
| Grandview Yard (M/I Homes) | Residential | 20 single family homes | 921 - 959 Pullman Place | N/A | Completed |
| Grandview Yard (M/I Homes) | Residential | 27 single family homes | 934 – 968 Hudson Crossing | N/A | Completed |
| Grandview Yard (M/I Homes) | Residential | 32 single family homes | 928 – 969 W. First Avenue | N/A | Completed |
| Grandview Yard (M/I Homes) | Residential | 15 single family homes | 1074 – 1168 Edgell Road | N/A | Completed |

| | | | | | |
|--|-------------|-------------------------|---------------------------|-----|----------------|
| Grandview Yard (M/I Homes) | Residential | 12 single family homes | 1091 – 1167 Bobcat Avenue | N/A | Completed |
| Grandview Yard (Bobcat Apt's) | Commercial | 20 units / 3 structures | 735 – 789 Bobcat Avenue | N/A | Completed |
| Grandview Yard | Commercial | 35 units / 1 structure | 828 Bobcat Avenue | N/A | Completed |
| Southern Station (Tri-W) | Commercial | 265 Units / 1 structure | 826 Bowman Way | N/A | Completed |
| Grandview Yard | Commercial | 1 structure | 950 W. Goodale Blvd | N/A | Completed |
| Grandview Crossing | Commercial | 2 structures | 1056 – 1076 Dublin Road | N/A | In progress |
| Sheetz Store | Commercial | 1 structure | 744 Grandview Avenue | N/A | Completed |
| 5 Story Mixed Use Bldg | Commercial | 1 structure | 1123 W. Goodale Blvd. | N/A | Completed |
| AEP Storage Facility | Commercial | 1 structure | 1291 W. Goodale Blvd. | N/A | Completed |
| GVH Pool Facility | Commercial | 2 Structures | 1350 W. Goodale Blvd. | N/A | Completed |
| The Edington Bldg. | Mixed Use | 18 units / 1 structure | 1580 W. First Avenue | N/A | In progress |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| City of Grandview Heights Municipal Building | Commercial | 1 | 1525 Goodale Boulevard | N/A | In design |
| Grandview Crossing | Commercial | Unknown at this time | Unknown at this time | N/A | N/A |
| Grandview Yard | Commercial | 133 units / 1 structure | 875 W. First Avenue | N/A | In plan review |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

Figure 9.12-1. City of Grandview Heights New Development Map



9.12.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Grandview Heights's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Grandview Heights has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.12-2. City of Grandview Heights Hazard Area Extent and Location Map-Flood

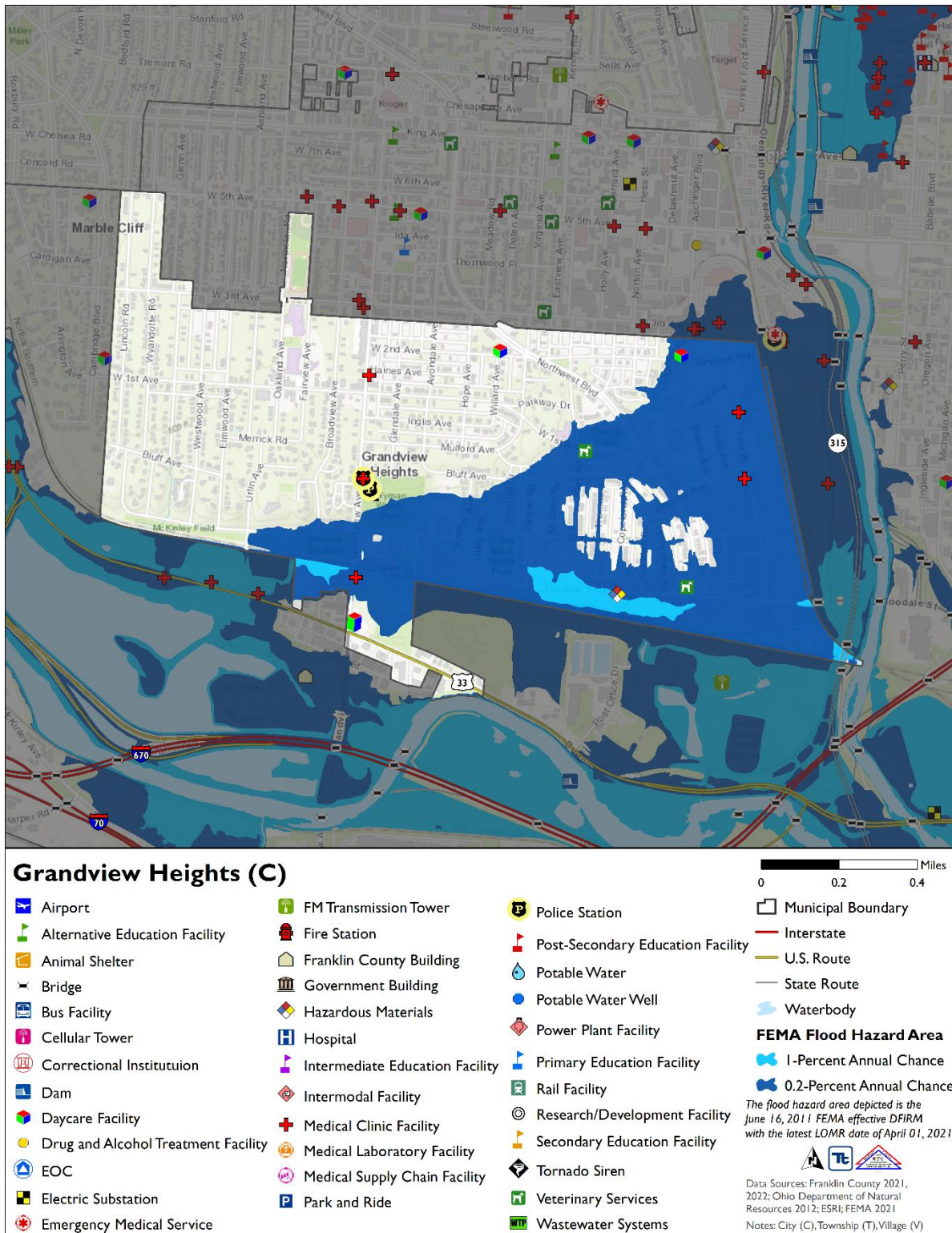


Figure 9.12-3. City of Grandview Heights Hazard Area Extent and Location Map-Inland Erosion

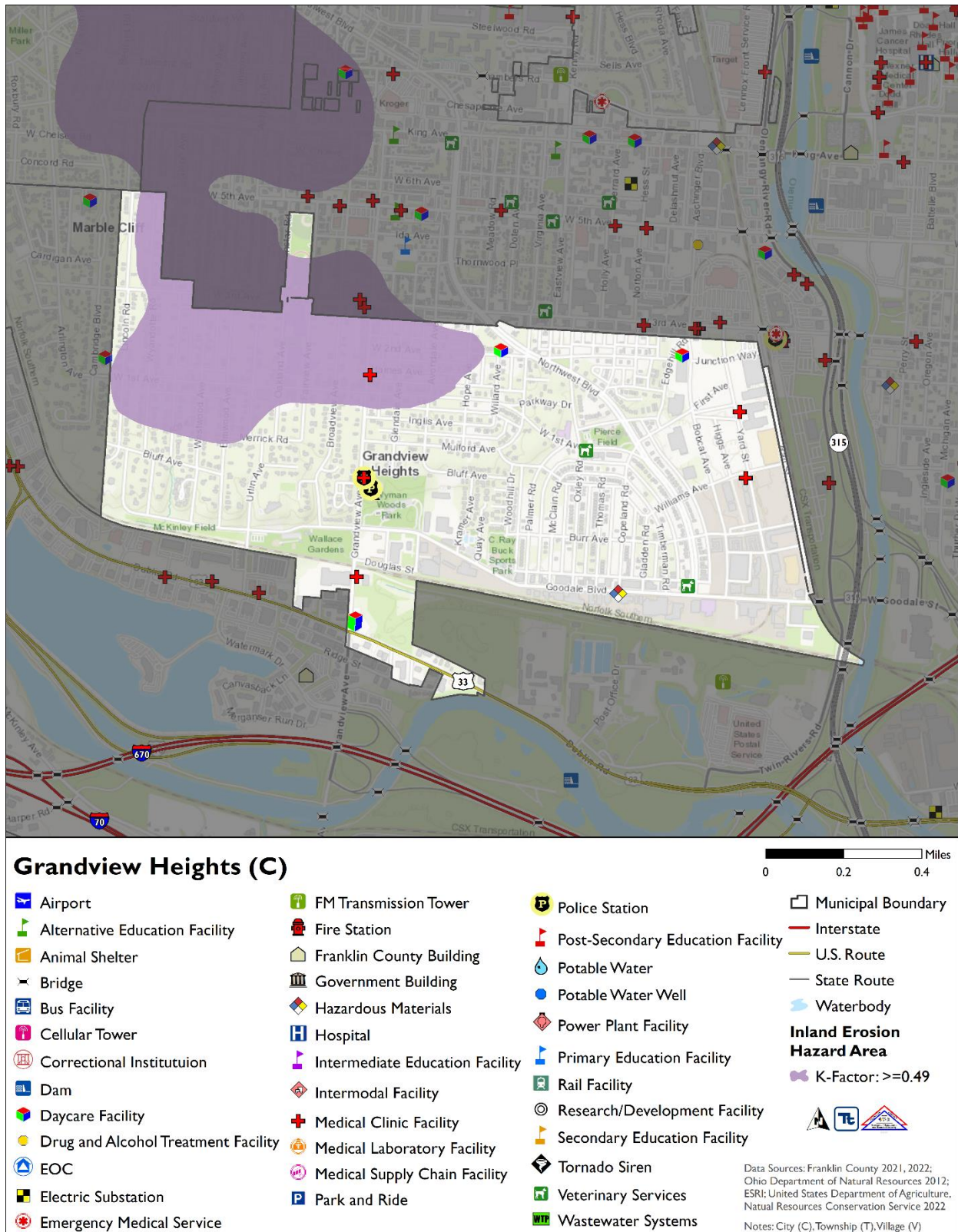
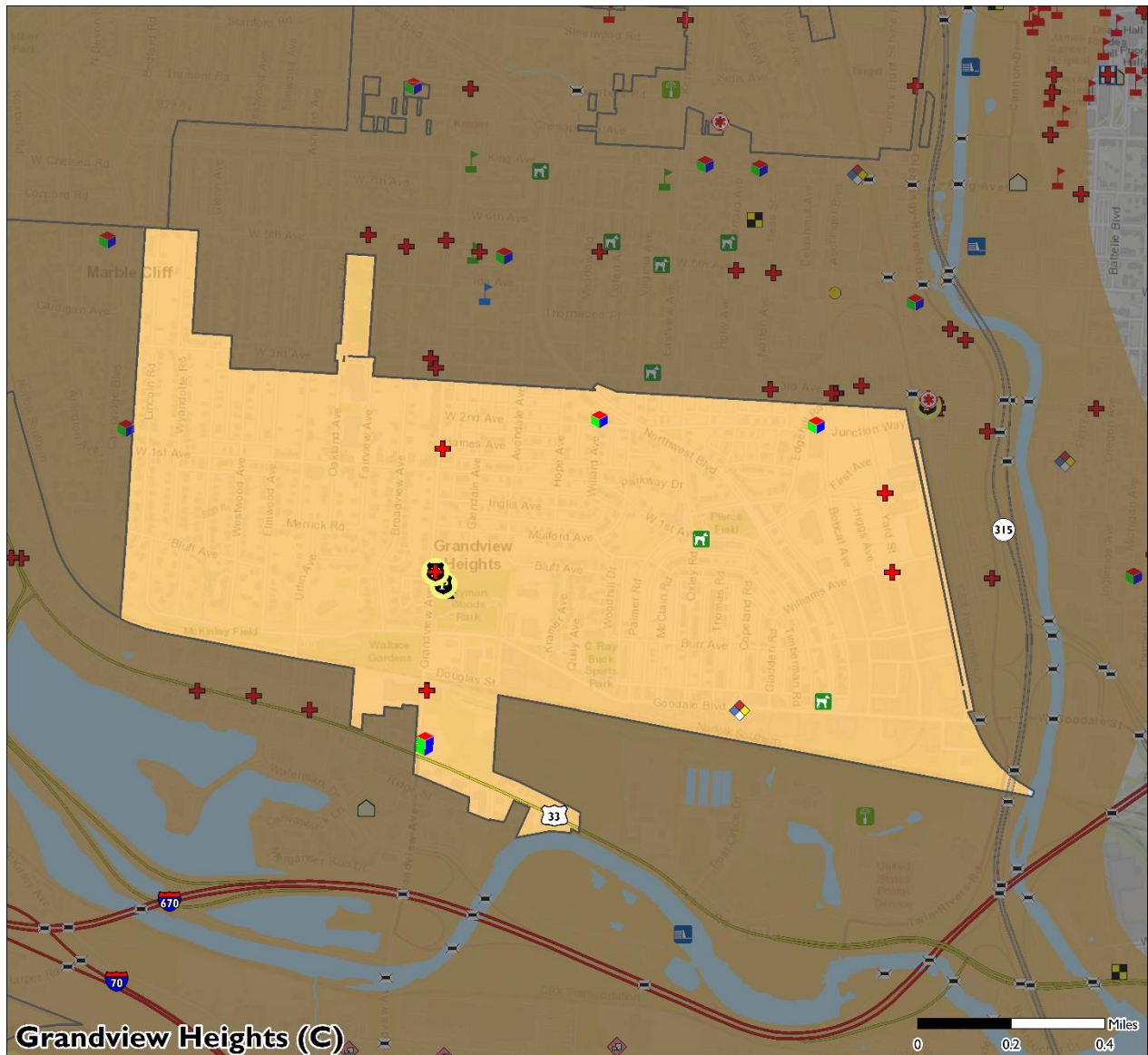


Figure 9.12-4. City of Grandview Heights Hazard Area Extent and Location Map-Land Subsidence



Grandview Heights (C)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|---|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Land Subsidence Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | Carbonate Rock |
| Dam | Intermodal Facility | Secondary Education Facility | |
| Daycare Facility | Medical Clinic Facility | Tornado Siren | <small>Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; Ohio Department of Natural Resources, Division of Geological Survey 2022.</small> |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Veterinary Services | <small>Notes: City (C), Township (T), Village (V)</small> |
| EOC | Medical Supply Chain Facility | Wastewater Systems | |
| Electric Substation | Park and Ride | | |
| Emergency Medical Service | | | |

Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Grandview Height's history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Grandview Heights experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.12-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| April 3-4, 2018 | EF-1 Tornado | N/A | Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage. | The City of Grandview Heights did not incur any damages or losses from this event. |
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The City of Grandview Heights did not incur any damages or losses from this event. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The City of Grandview Heights did not incur any damages or losses from this event. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The City suffered losses both directly and indirectly due to the COVID-19 Pandemic. Overtime due to necessary platooning and sick leave from COVID exposure was paid out as well as personal protective equipment was purchased to keep employees safe. Income tax revenue from individuals no longer working in their offices was lost, up to \$1.4 million to date. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Grandview Heights. The City of Grandview Heights reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Grandview Heights indicated the following:

- The City changed flood from medium to low since the City does not frequently encounter damage due to flooding.

Table 9.12-14. Hazard Ranking Input

| Hazard | Ranking |
|----------------------------|---------|
| Dam/Levee | Low |
| Disease Outbreak | Low |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Low |
| Flood | Low |
| Geologic (Erosion) | Low |
| Geologic (Land Subsidence) | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.12-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Grandview Heights

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 9 | 8 |

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | 1 | 1 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 17 | 13 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | 9 | 8 |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Grandview Heights identified the following vulnerabilities within its community:

- The City experiences frequent flooding from storm sewers that flood nearly 10 acres of property and structures during intense precipitation events.
- Intense storms, temperature events and other natural hazards of concern lead to power and utility interruption within the City. This makes it difficult for the City to be able to carry out continuity of operations with limited to no use of utilities.
- During heavy rain events, the City sanitary sewer system reaches capacity quickly. When it reaches capacity quickly, it backs up into many residential structures east of Grandview Avenue south of Third Avenue.
- The City has experienced numerous staffing changes and the new staff/elected officials should be onboarded regarding our all-hazards approach and response.
- The City experiences flooding relating to a storm sewer which repeatedly floods nearly ten acres of property during extreme precipitation events.

9.12.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and previously are presented in the Capability Assessment earlier in this annex.

Table 9.12-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|--------------------|--|---|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Install a gate valve at the outlet of a storm sewer to remove approximately 10 acres of property from the 100 year flood plain. | Service Department | No Progress | Yes | Install a gate valve at the outlet of a storm sewer to remove approximately 10 acres of property from the 100-year flood plain. | Service Department |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Grandview Heights identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the City of Grandview Heights has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Grandview Heights participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.12-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | | | CRS | | | | |
|-----------------------|------|-----|-----|-----|----|----|-----|----|----|----|--|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES | |
| Dam/Levee | - | X | - | X | X | - | - | - | - | X | |
| Disease Outbreak | - | X | - | X | X | - | - | - | - | X | |
| Drought | - | X | - | X | X | - | - | - | - | X | |
| Earthquake | - | X | - | X | X | - | - | - | - | X | |
| Extreme Temp | - | X | X | X | X | - | - | - | - | X | |
| Flood | - | X | X | X | X | - | - | - | X | X | |
| Geologic | - | X | X | X | X | - | - | - | - | X | |
| Invasive Species | X | - | - | X | X | X | - | - | - | - | |
| Severe Summer Weather | - | X | - | X | X | - | - | - | X | X | |
| Severe Winter Weather | - | X | - | X | X | - | - | - | X | X | |
| Tornado | - | X | - | X | X | - | - | - | - | X | |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.12-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Grandview Heights will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.12-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------|----------------------------|---|---|-----------|--------------------|-------------------------------|---------------------------|---|--------------------------------|----------|---------------------|--------------|
| 2023-Grandview Heights-001 | Gate Valve Installation | <p>Problem: The City experiences frequent flooding from storm sewers that flood nearly 10 acres of property and structures during intense precipitation events.</p> <p>Solution: The City will install a gate valve at the outlet of storm sewers to remove approximately 10 acres of property from the 100-year flood plain.</p> | Flood, Severe Summer Weather, Severe Winter Weather | 6 | 1 Year | Mayor's Office, City Engineer | BRIC, FMA, HMGP | Flooding will be significantly reduced. | High | High | SIP | SP |
| 2023-Grandview Heights-002 | Bury Utility lines* | <p>Problem: Intense storms, temperature events and other natural hazards of concern lead to power and utility interruption within the City. This makes it difficult for the City to be able to carry out continuity of operations with limited to no use of utilities.</p> <p>Solution: The City will conduct an engineering study to determine what utility lines can be safely moved underground. Once the study is complete, the City will acquire the funding to implement the solutions.</p> | Dam/Levee, Drought, Disease Outbreak, Earthquake, Extreme Temperature, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado | 6 | 5 Years | City Engineer | BRIC, HMGP | Critical facilities will be able to operate during intense hazard events. | >\$5,000 for engineering study | High | SIP | ES |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------|-------------------------------------|--|---|-----------|--------------------|--|---------------------------|---|-----------------------------|----------|---------------------|--------------|
| 2023-Grandview Heights-003 | Sewer System Study | <p>Problem: During heavy rain events, the City sanitary sewer system reaches capacity quickly. When it reaches capacity quickly, it backs up into many residential structures east of Grandview Avenue south of Third Avenue.</p> <p>Solution: The City will conduct an engineering study to figure out how to best improve the sewer system to reduce flooding issues. The City will implement the most cost-effective solution.</p> | Flood | 6 | 1 Year | City Engineer, Public Works | FMA, HMGP, BRIC | Flooding issues will be reduced in the area. | TBD after Engineering Study | High | SIP | SP |
| 2023-Grandview Heights-004 | Administration and Public Education | <p>Problem: The City has experienced numerous staffing changes and the new staff/elected officials should be onboarded regarding our all-hazards approach and response.</p> <p>Solution: The City will implement a tabletop exercise to assist City administration greatly in mitigating our response to the hazards of concern. The City plans to educate both the public and their staff on the hazards and how to be prepared. The City will conduct additional public education through existing platforms (website/social media).</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 5 | 2 Years | City Administration, City Division of Fire | HMGP, City Budget | The City staff and residents will become more educated on the hazards of concern. | \$1,000 | High | EAP | PR |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------|---|---|---|-----------|--------------------|---|---------------------------------------|--|--------------------------|----------|---------------------|--------------|
| 2023-Grandview Heights-005 | Install a gate valve at the outlet of a storm sewer | Problem: The City experiences flooding relating to a storm sewer which repeatedly floods nearly ten acres of property during extreme precipitation events. Solution: The City will install a gate valve at the outlet of the storm sewer to limit flooding issues. | Flood, Severe Summer Weather, Severe Winter Weather | 1, 6 | Less than 5 years | City Administration | City Budget, FMA, HMGP, BRIC | The City will experience reduced flooding | >\$50,000 | High | SIP | PR |
| 2023-Grandview Heights-006 | Repetitive Loss Area Mitigation | Problem: Portions of the City experienced repetitive loss due to flooding. Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | Flood | 6 | 4 years | City Administration, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC; City budget | Reduction in repetitive losses due to floods, Homeowners | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.12-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Grandview Heights-001 | Gate Valve Installation | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-Grandview Heights-002 | Bury Utility lines* | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-Grandview Heights-003 | Sewer System Study | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 12 | High |
| 2023-Grandview Heights-004 | Administration and Public Education | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 | High |
| 2023-Grandview Heights-005 | Install a gate valve at the outlet of a storm sewer | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-Grandview Heights-006 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.13 GROVE CITY

This section presents the jurisdictional annex for Grove City that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Grove City participated in the planning process, an assessment of Grove City’s risk and vulnerability, the different capabilities used in Grove City, and an action plan that will be implemented to achieve a more resilient community.

9.13.1 Hazard Mitigation Planning Team

The City of Grove City identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Grove City departments, including the Administration and Safety Department. The City Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.13-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|---|
| Name/Title: | Charles W. Boso, Jr./City Administrator | Name/Title: | William F. Vedra, Jr./Deputy City Administrator |
| Address: | 4035 Broadway, Grove City, OH 43123 | Address: | 4035 Broadway, Grove City, OH 43123 |
| Phone Number: | 614-277-3003 | Phone Number: | 614-277-3000 |
| Email: | cboso@grovecityohio.gov | Email: | wvedra@grovecityohio.gov |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Michael Boso | | |
| Address: | 4035 Broadway Grove City, OH 43123 | | |
| Phone Number: | 614-277-3076 | | |
| Email: | mboso@grovecityohio.gov | | |
| Additional Contributors: | | | |
| Name/Title: | Kota Wharton/Building Administrative Secretary | | |
| Method of Participation: | Provided key input through the planning process | | |
| Name/Title: | Michael Boso/Chief Building and Zoning Official | | |
| Method of Participation: | Provided key input through the planning process | | |

9.13.2 Municipal Profile

Grove City is in the southwest area of Franklin County and is bordered by the Village of Urban Crest to the north and surrounded by Jackson Township to the south and west. Columbus City also surrounds Grove City to the north and west.

According to the American Community Survey, the 2021 population for Grove City was 41,025, a 15.32 percent increase from the 2010 Census population of 35,575. Data from the 2021 American Community Survey indicates that 7.4 percent of the population is 5 years of age or younger and 16.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.13.3 Jurisdictional Capability Assessment and Integration

Grove City performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Grove City to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Grove City and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.13-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Part 13 and A.C. 4101:1 | Local/State | Div. of Building |
| <i>How does this reduce risk?</i> The Grove City Building Code, in conjunction with the Ohio Building Code and Residential Code and all standards and references, contained therein, provide minimum standards for life, safety and resiliency of the built environments of the City. | | | | |
| Zoning/Land Use Code | Yes | Part 11/Comp. Plan | Local | Div. of Building |
| <i>How does this reduce risk?</i> See comprehensive plan. | | | | |
| Subdivision Ordinance | Yes | Chapter 1101 | Local | Planning and Zoning |
| <i>How does this reduce risk?</i> The criteria and procedures established in this chapter pertain to providing public and/or private streets, sidewalks, parking lots, sewers, driveways, water lines, grading of land, siting of structures and all other site work outside the exterior limits of a structure or structures, including the appurtenances and associated items, all in accordance with the standard drawing requirements stated herein. | | | | |
| Site Plan Ordinance | Yes | Chapter 1141 | Local | Development |
| <i>How does this reduce risk?</i> Built environments need to be built to local laws and ordinances and need to be built to meet FEMA floodplain standards. Reviews conducted during planning and plan approval. | | | | |
| Stormwater Management Ordinance | Yes | Chapter 900 | Local | Service |
| <i>How does this reduce risk?</i> Same as above. Refer to EPA standards. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | Yes | 2050 Plan | Local/Regional | GC/MORPC |
| <i>How does this reduce risk?</i> Plan that aligns with the Regional Growth Plan | | | | |
| Environmental Protection Ordinance | Yes | Chapter 971 | Local | Service |
| <i>How does this reduce risk?</i> <ul style="list-style-type: none"> • Are environmental systems that protect development from hazards are identified and mapped. • Environmental policies maintain and restore protective ecosystems. • Ordinances prohibit development within, of filling of, wetlands, floodways, and floodplains. • Environmental policies provide incentives to development that is located outside protective ecosystems. | | | | |
| Flood Damage Prevention Ordinance | Yes | Chapter 1329 | Local | Building |
| <i>How does this reduce risk?</i> Reduces repetitive and predictable losses. | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | Yes | Chapter 509.08 | Local | City Administrator |
| <i>How does this reduce risk?</i> NFPA 1600 all hazards plan. | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | GroveCity2050 Community Plan (2018) | Local | Administration, Development Dept. |
| <p><i>How does this reduce risk?</i></p> <p>The GroveCity2050 Community Plan includes an analysis of land appropriate for future development by identifying environmentally sensitive areas such as wetlands, floodplain, and large tree stands (page 17 of Plan) that are not appropriate for development. The Community Plan contains a Development and Conservation Strategy Map showing areas targeted for development as well as areas intended to be protected as undeveloped open space (page 21 of Plan). This is further conveyed in the Future Land Use and Character Map (page 23 of Plan) that identifies areas for future parks / open space / preservations and areas that should be reserved for "low impact development" (low density residential or conservation neighborhoods, low density non-residential).</p> | | | | |
| Capital Improvement Plan | Yes | Capital Improvement Plan (annual) | Local | Administration, Service Dept. |
| <p><i>How does this reduce risk?</i></p> <ul style="list-style-type: none"> The Capital Improvement Plan ensures that public infrastructure improvements are made in-line with the Community Plan which encourages responsible development, preserving natural features and in-line with other City policies that are intended to reduce or eliminate potential hazards (stormwater policies, stream corridor protection). A recent example of a project identified on the CIP based on plans related to hazard mitigation and risk reduction is the restoration of Marsh Run in 2022. This project including shoring up the stream's eroded banks, further separating it from the adjacent roadway, and reestablishing native vegetation. | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | Yes | Chapter 1328 | Local | Floodplain MGR |
| <p><i>How does this reduce risk?</i></p> <p>Adhere to FEMA Floodplain designations and guidance to prevent building structures in a floodplain.</p> | | | | |
| Stormwater Management Plan | Yes | Stormwater Design Manual (2022) | Local | Service Dept. |
| <p><i>How does this reduce risk?</i></p> <ul style="list-style-type: none"> The City's Stormwater policies outline stormwater management requirements including peak flow rates, calculation requirements, water quality control criteria, detention system design criteria, and stream corridor protection zone requirements. These policies also regulate operation and maintenance plans for stormwater facilities, and erosion and sediment control requirements. | | | | |
| Open Space Plan | Yes | Parks, Recreation and Open Space Master Plan (2021) | Local | Parks and Recreation Dept. |
| <p><i>How does this reduce risk?</i></p> <ul style="list-style-type: none"> Chapter 3 of the Plan is dedicated to Natural Resources and Management, and identifies natural resources throughout that City that should be protected. Threats to natural resources are identified and rates the ecological condition of various waterways in the City. A number of best practices are identified to preserve and protect the area's open spaces and natural resources. | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | Yes | Transportation Chapter of Community Plan | Local | Administration, Development Dept. |
| <i>How does this reduce risk?</i> | | | | |
| <ul style="list-style-type: none"> In addition to identifying future roadway connections and the desired character for existing and future roadways, the Transportation Chapter of the Community Plan includes analyses of connectivity challenges within the City and locations with high vehicular crashes. Plans for future roadways correspond with the Land Use analyses which support development in non-environmentally sensitive areas. | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | Yes | Grove City Sustainability Plan | Local | Administration, Development Dept., Service Dept. |
| <i>How does this reduce risk?</i> | | | | |
| <ul style="list-style-type: none"> The Sustainability Plan reinforces many of the principles identified in the Community Plan regarding encouraging Low Impact Development practices and removing barriers for Green Infrastructure. | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | Yes | Town Center Conceptual Framework (2021) | Local | Administration, Development Dept., Service Dept. |
| <i>How does this reduce risk?</i> | | | | |
| <ul style="list-style-type: none"> The Town Center Conceptual Framework is limited in scope to risk reduction and focuses more on the desired character for existing and future development in the Town Center area. | | | | |
| Other | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | Yes | Emergency Management Operations Manual | Local | Deputy City Administrator |
| <i>How does this reduce risk?</i> | | | | |
| Emergency management and operations plan following NFPA 1600. | | | | |
| Continuity of Operations Plan | Yes | Emergency Management Operations Manual | Local | Deputy City Administrator |
| <i>How does this reduce risk?</i> | | | | |
| <i>Plans for continued services and leadership.</i> | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | Yes | Emergency Management Operations Manual and Ohio Homeland Security TRA | Local/State | Deputy City Administrator |
| <i>How does this reduce risk?</i> | | | | |
| <i>Gap identification</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Post-Disaster Recovery Plan | Yes | Emergency Management Operations Manual | Local | Deputy City Administrator |
| <i>How does this reduce risk?</i> <i>Provides guidance for disaster recovery and reduce injury and losses.</i> | | | | |
| Public Health Plan | No | Franklin County Public Health | County | Health Commissioner |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of Grove City to oversee and track development.

Table 9.13-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? | Yes | The Planning Commission and City Council approve development plans. Development oversees. |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | Tracked through internal software and viewable on the City website. |
| Do you have a buildable land inventory? | Yes | All City land is zoned. Parcels zoned buildable are identified |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Grove City and their current responsibilities that contribute to hazard mitigation.

Table 9.13-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|----------------------------------|---------------------|--|
| Administrative Capability | | |
| Building Division | Yes | The Building and Zoning Division is responsible for ensuring compliance with local, state and international building, housing and zoning codes, which keep the community safe and attractive. |
| Development Department | Yes | The Grove City Development Department administers economic development and planning activities for the City. Within this scope, the department works with the business community to create and retain jobs, promote business growth and ensure quality and balanced development. In addition, the department works closely with Planning |



| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|-----------------------------|--|
| | | Commission, City Council and various city agencies to maintain the standards set forth by the City for quality development. |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | Yes | The Grove City Development Department administers economic development and planning activities for the City. Within this scope, the department works with the business community to create and retain jobs, promote business growth and ensure quality and balanced development. In addition, the department works closely with Planning Commission, City Council and various city agencies to maintain the standards set forth by the City for quality development. |
| Service Department | Yes | The Service assures contractors build infrastructure according approved plans and regulations. |
| Construction/Building/Code Enforcement Department | Yes | The Building and Zoning Division is responsible for ensuring compliance with local, state and international building, housing and zoning codes, which keep the community safe and attractive. |
| Safety Department | Yes | Oversee the operations of the Police and Building Divisions |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | OWS service is contracted with the Franklin County EM&HLS, Alert FC and GC Alert |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Service Department works with OEPA to enforce stormwater management and maintenance |
| Mutual aid agreements | No | |
| Human Resources Manual | Yes | Emergency Management and Operations Manual /Positions Descriptions identify roles and responsibilities. |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | Certified Development Staff |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | Professional Engineering (P.E.) Staff (4) and Consulting Engineers oversee construction. |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | Yes | Building Division Inspectors State and ICC Certifications |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | GIS Supervisor and Specialist in the Information Services Department development and maintain all City infrastructure information in ARC GIS. |
| Environmental scientist familiar with natural hazards | Yes – 3 rd Party | Consulting Engineering |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to Grove City.

Table 9.13-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|---|
| Community development Block Grants (CDBG, CDBG-DR) | No |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | Yes |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | Yes |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Grove City.

Table 9.13-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|--|
| Public information officer or communications office | Yes | Business and Communication Officer and (3) Specialists provide day today and emergent public communication |
| Personnel skilled or trained in website development | No | - |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | No | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Alert FC and GC Alert - Everbridge |
| Natural disaster/safety programs in place for schools | Yes | South-Western City Schools |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | Yes | Grove City Text Alerts, Social Media, Website |

Community Classifications

The table below summarizes classifications for community programs available to Grove City.

Table 9.13-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|-------------------------------|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|--|
| Building Code Effectiveness Grading Schedule (BCEGS) | Yes | Residential – 4 Commercial – 3 | 2017 |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | 2 City 2X township | 2020 - Jackson Township Fire Department |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.13-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.13.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Grove City.

Table 9.13-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|----------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Grove City (C) | 33 | 43 | \$163,350.86 | 4 | 0 |

Sources: *a* BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)
b State of Ohio 2023

Notes: *Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.*

RL Repetitive Loss
 SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Grove City.

Table 9.13-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | Yes, The Floodplain MGR. identifies areas prone to flooding through GIS mapping. Most areas are at or near identified streams and tributaries. |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | Yes, None currently. |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | Site inspections by building division. None. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | None - |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | Yes - |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Safety Dept./Div. of Building |
| Are any certified floodplain managers on staff in your jurisdiction? | Yes |
| Do you have access to resources to determine possible future flooding conditions from climate change? | Yes |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | All that you mentioned |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Building Permit Review |

| NFIP Topic | Comments |
|---|--|
| What are the barriers to running an effective NFIP program in the community, if any? | None |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | N/A |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | 1329 Last updated: 2004 |
| Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? | Exceeds, no fill allowed in residential properties |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Chapter 1101.03, identifies governing regulations in floodplain areas. |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.13.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.13-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 127 | NA | 57 | NA | 163 | NA | 312 | NA | 258 | NA |
| Multi-Family | 2 | NA | 1 | NA | 32 | NA | 16 | NA | 30 | NA |
| Other (commercial, mixed-use, etc.) | 223 | NA | 59 | NA | 14 | NA | 25 | NA | 11 | NA |
| Total Permits Issued | 352 | NA | 117 | NA | 209 | NA | 353 | NA | 299 | NA |

Table 9.13-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|--|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| Stringtown Road Apartments (Bentley) | Residential | 138 | 2384 Stringtown Road 040-005652 | Flood Zone AE | Apartment, Traditional |
| Shoppes at 665 | Commercial | 1 | 2811 London-Groveport Road 040-013658 | Flood Zone A | Retail |
| Concord Fabricators | Industrial | 1 | 6511 Seeds Road 040-007498 | N/A | Industrial |



| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|---|-------------------------|-------------------------|--|----------------------|---|
| Becknell | Industrial | 1 | 3563 Southpark Place 040-008992 | N/A | Industrial |
| The Ashford of Grove City | Residential | 160 | 3197 Southwest Boulevard 040-013660 | Flood Zone AE | Assisted Living |
| Grove City Family Denistry | Office | 1 | 3031 Columbus Street 040-002174 | N/A | Medical |
| KFC | Commercial | 1 | 2815 London-Groveport Road 040-014604 | Flood Zone A | Restaurant |
| Trail View Run | Residential | 40 | 1419/1399 Borrer Road 040-015516, 040-015517, 040-015699 | Flood Zone A | Condominium, Single-Family |
| The Courtyards at Beulah Park | Residential | 104 | 3811 Southwest Boulevard 040-004273, 040-004263, 040-004271, 040-004272 | Flood Zone A | Condominium |
| Beulah Park Apartments | Residential | 376 | 3451 Kells Way 040-016119 | Flood Zone A | Apartments, Traditional |
| TOSOH | Industrial | 1 | 3600 Gantz Road 040-007623 | Flood Zone A | Industrial |
| Shoot Point Blank | Commercial | 1 | 3004 Turnberry Court 040-014279 | N/A | Retail |
| Danbury Grove Assisted Living (Subarea I) | Residential | 88 | 3522-3604 Chalford Drive 040-016054 | Flood Zone A | Assisted Living |
| Byers Pre-Owned Center | Commercial | 1 | 5887 North Meadows Drive 040-009552 | N/A | Retail |
| Homestead Senior Living | Residential | 130 | 4990 Hoover Road 040-009224 | Flood Zone A | Apartment, Age Restricted |
| Stringtown Animal Hospital | Commercial | 1 | 1320 Stringtown Road 040-009263 | N/A | Service |
| Auto Zone | Commercial | 1 | 2682 London-Groveport Road 040-008048 | N/A | Retail |
| Schoedinger Funeral Home | Commercial | 1 | 4242 Hoover Road 040-005551 | N/A | Service |
| Arrowleaf Apartments | Residential | 28 | 2060 Shirlene Drive 040-006839 | N/A | Apartments, Income Restricted |
| Farmstead | Residential | 120 | 62 Jackson Pike 160-003087, 160-000205, 180-000204, 160-0000960, 180-000201 | Flood Zone AE | Single-Family, Multi-Family (Not Specified) |



| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--------------------------------|-------------------------|-------------------------|---|----------------------|---------------------------------------|
| Browns Farm | Residential | 320 | 5154 Browns Farm Lane 040-017252, 040-016050 | N/A | Condominium, Apartment (Age Targeted) |
| Speedway | Commercial | 1 | 1895 Stringtown Road 004-04537 | N/A | Retail |
| Bank of America | Commercial | 1 | 2336 Stringtown Road 040-004295 | N/A | Service |
| Silco Fire and Security | Industrial | 1 | 2345 Southwest Boulevard 040-009220 | N/A | Office, warehouse, training facility |
| Grove City Villas | Residential | 30 | Northwest corner of Southwest Blvd. and Street E in the Beulah Park subdivision 040-016054 | N/A | Condominium |
| Novocaine Lounge | Commercial | 1 | 3425 Grant Avenue, Suite B 040-000237 | N/A | Service |
| Grove City Veterinary Hospital | Commercial | 1 | 4350 Grove City Road 040-008769 | N/A | Service |
| Taco Bell | Commercial | 1 | 3340 Broadway 040-001240 | N/A | Restaurant |
| Tigerpoly | Industrial | 1 | 6231 Enterprise Parkway 040-010335 | Flood Zone A | Manufacturing |
| TriLink Storage | Commercial | N/A | 5965 Haugn Road 040-010230 | N/A | Service |
| Becknell Seeds Road | Industrial | N/A | 6335 Seeds Road 040-004959 | Flood Zone A | Industrial |
| All R Friends | Office | 1 | 1640 Buckeye Place 040-015106 | N/A | Disability Services |
| Beulah Park Subarea E | Residential | 52 | East side of Demorest Road, South of Southwest Boulevard 040- 000413 | N/A | Single Family |
| Sugar Maple Commons | Residential | 105 | South of Holton Road and West of State Route 104 040-013869 | N/A | Apartment, Age Restricted |
| Car Source | Commercial | 1 | 1200 Stringtown Road 160-001099 | N/A | Used Car Sales |
| Hidden Chase | Residential | 80 | East of Broadway and North of Orders Road 040-017394, 040-017395, 040-017397 | N/A | Condominium |
| Broadway Professional Park | Industrial | 1 | 3491 Farm Bank Way | N/A | Flex Building |



| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|-----------------------------------|-------------------------|-------------------------|--|----------------------|-----------------------------------|
| | | | 040-009908 | | |
| Kirk Williams | Industrial | 1 | 2734 Home Road 040-002426 | N/A | Freezer Addition |
| Parkway Centre South (Five Below) | Commercial | 1 | 1715 Stringtown Road 040-012076 | N/A | Retail |
| Smokey Bones | Commercial | 1 | 1615 Stringtown Road 040-013270 | N/A | Restaurant |
| Farmstead Subarea H | Residential | 87 | 62 Jackson Pike 040-016097, 040-016100 | Flood Zone AE | Single Family |
| Brookpark Middle School | Institutional | 1 | 3160 Demorest Road 040-016445 | N/A | School |
| Kmart | Commercial | 1 | 2400 Stringtown Road 040-005710 | Flood Zone AE | Retail Redevelopment |
| Silco | Industrial | 1 | 2346 Southwest Boulevard 040-008159 | Flood Zone A | Development Plan Amendment |
| Pinnacle Quarry | Residential | 208 | White Road and SR 104 160-001492, 160-002631, 160-000056, 160-002507, 160-002459 | Flood Zone AE | Single Family, Condominium |
| Kiddie Academy | Commercial | 1 | 4248 Buckeye Parkway 040-016276 | N/A | Service |
| Beulah Park Subarea G | Residential | 82 | South of Southwest Blvd., east of Demorest Road, west of the Baltimore and Ohio R.R. Company 040-017264 | N/A | Apartment, Traditional |
| Wright-Patt Credit Union | Commercial | 1 | 2400 Stringtown Road 040-005710 | N/A | Service |
| 1804 Properties | Office | 1 | West of Hoover Road and North of Quail Creek Boulevard 040- 016671 | N/A | Medical |
| Moo Moo Express Car Wash | Commercial | 1 | 2607 London-Groveport Road 040-014760 | N/A | Service |
| Western Grove MOB | Office | 1 | Subarea 'A' of Beulah Park 040-016214-00 | Flood Zone A | Medical |
| Burger King | Commercial | 1 | 2811 London-Groveport Road 040-013658 | N/A | Restaurant |



| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|---|-------------------------|-------------------------|---|----------------------|-----------------------------------|
| Beulah Park Subarea D | Residential | 86 | East side of Demorest Road, approximately 1,200 feet north of Grove City Road 040- 016219 | Flood Zone AE | Single Family |
| Tosoh | Industrial | 1 | 3600 Gantz Road 040-007623-00 | Flood Zone A | Addition |
| Kram-It Self Storage | Commercial | 11 | 3170 Urbancrest Industrial Drive 040-009249 | N/A | Development Plan Amendment |
| Forge Biologics | Industrial | 1 | 3900 Gantz Road 040-007564 | N/A | Building Addition |
| Columbus Powersports | Commercial | 1 | 2713 Home Road 040-002431 | Flood Zone AE | Development Plan/Special |
| Tosoh | Industrial | 1 | 3600 Gantz Road 040-007623-00 | Flood Zone A | Building Addition |
| Beautiful Savior Lutheran Church | Educational | 1 | 2213 White Road 040-010581 | N/A | Building Addition |
| Chick-fil-A | Commercial | 1 | 1696 Stringtown Road 040-007340 | N/A | Restaurant |
| Autumn Grove Addition | Residential | 69 | 4550 Rensch Road 040-012465 | N/A | Single Family |
| Sheridan Dental | Office | 1 | East of Broadway and South of Parlin 040-015109 | N/A | Medical |
| Hayes Intermediate School | Educational | 1 | 4436 Haughn Road 040-004138 | Flood Zone AE | Building Addition |
| Shoppes at Beulah | Commercial | N/A | Southwest corner of Southwest Blvd. and Columbus St. 040-017255 | N/A | Retail |
| Sherwin Williams | Commercial | 1 | 3019 Turnberry Court 040-014278 | N/A | Retail |
| Petsuites | Commercial | 1 | 1260, 1270, & 1280 Stringtown Road 040-014325 | N/A | Dog/cat kennel |
| Southwestern Career Academy | Educational | 1 | 4750 Big Run Road 040-011536 | Flood Zone AE | Building Addition |
| Beulah Park Subarea C Lennar Homes | Residential | 19 | South of Southwest Blvd., East of Demorest Rd., West of Indiana/Ohio Railroad Tracks 040-016132 | N/A | Single Family |
| Beulah Park Subarea C Epcoc Communities | Residential | 11 | South of Southwest Blvd., East of Demorest Rd., West of Indiana/Ohio Railroad Tracks 040-016146 | N/A | Condominium |
| Mid-Ohio Food Collective | Industrial | 1 | 3960 Brookham Drive | N/A | Freezer Addition |



| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|--|----------------------|---|
| | | | 040-001228, 040-001093 | | |
| Sharp Home | Residential | 1 | 3530 Sunshine Park Place 040-000890 | N/A | Single Family |
| 4238 Broadway | Residential | 1 | 4238 Broadway 040-000696 | N/A | Single Family |
| Builtrite Properties | Industrial | 1 | 5873 Haughn Road 040-010580 | N/A | Industrial |
| 4238 Broadway - Residential In PSO | Residential | 1 | 4238 Broadway 040-000696 | N/A | Single Family |
| Hickory Creek Subdivision | Residential | 81 | North of Orders and West of Haughn Roads 040-009246 | N/A | Condominium |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| Broadway Live | Residential, Commercial | > 144 units | Broadway and Columbus Street 040-000097, 040-000603, 040-000207040-000866, 040-000222,040-000046,040-000492, 040-000120, 040-000090, 040-000024 | Flood Zone AE | Residential, retail, offices, restaurants |
| Plum Run | Residential | 94 | Northeast corner of LondonGroveport Road and Jackson Pike 040-012710 | Flood Zone AE | Condominiums |
| Plum Run | Residential | 266 | Northeast corner of LondonGroveport Road and Jackson Pike 040-012710 | Flood Zone AE | Single-Family |
| Courtyards at Mulberry Run | Residential | 74 | North and south side of White Road east of McDowell Road and west of I-71 160-002476, 040-002898 | Flood Zone AE | Single-Family |
| Season's Grove | Residential | 1 | 1050 Lamplighter Drive 040-012669 | N/A | Residential, Age-Targeted |
| Harris Property | Residential | 323 | Northwest corner of London Groveport Road and Borrar Road 040-017497, 040-017498, 040-017499 | Flood Zone A | Single-Family |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.13.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Grove City's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which Grove City has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.13-1. Grove City Hazard Area Extent and Location Map-Flood

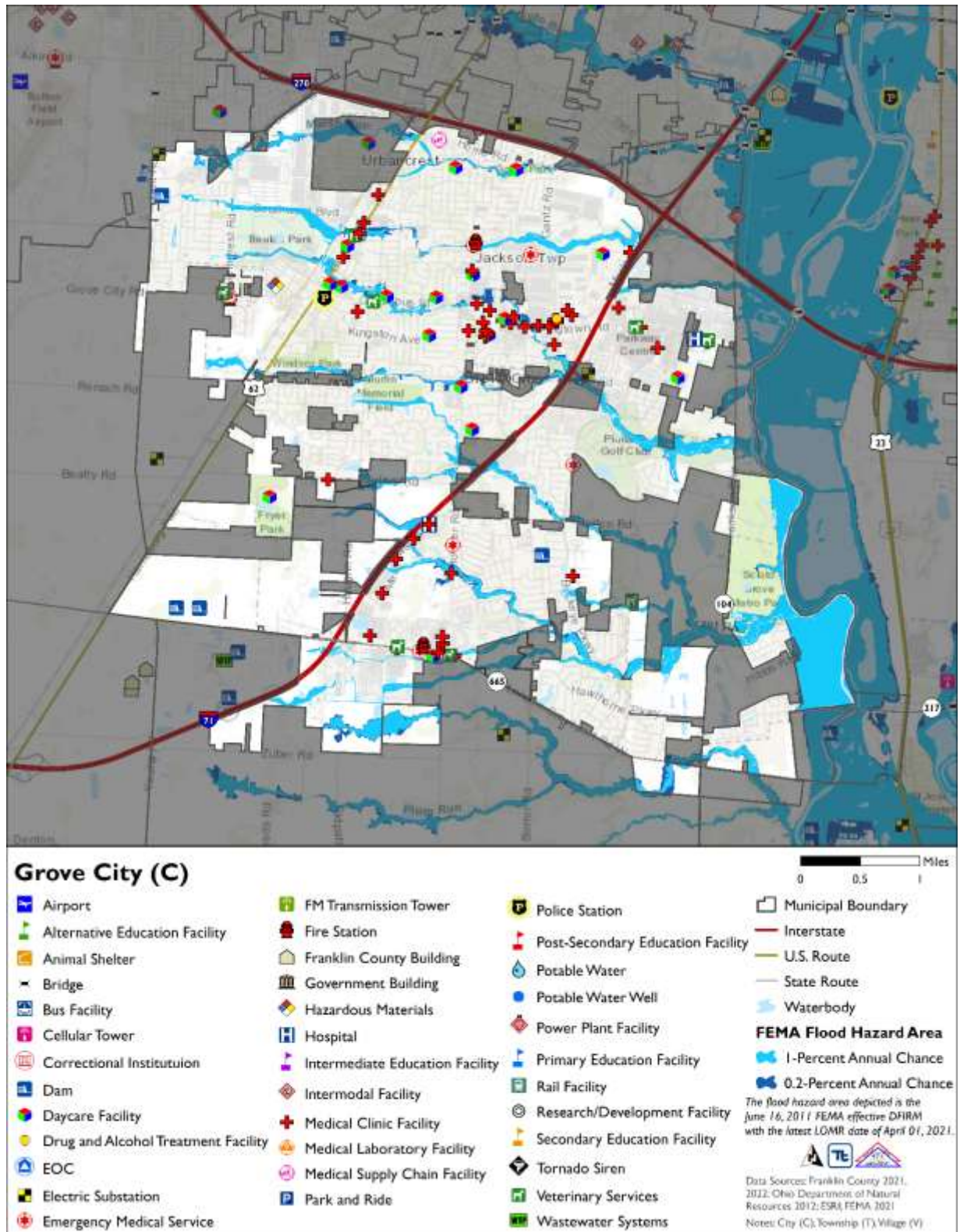


Figure 9.13-2. Grove City Hazard Area Extent and Location Map-Inland Erosion

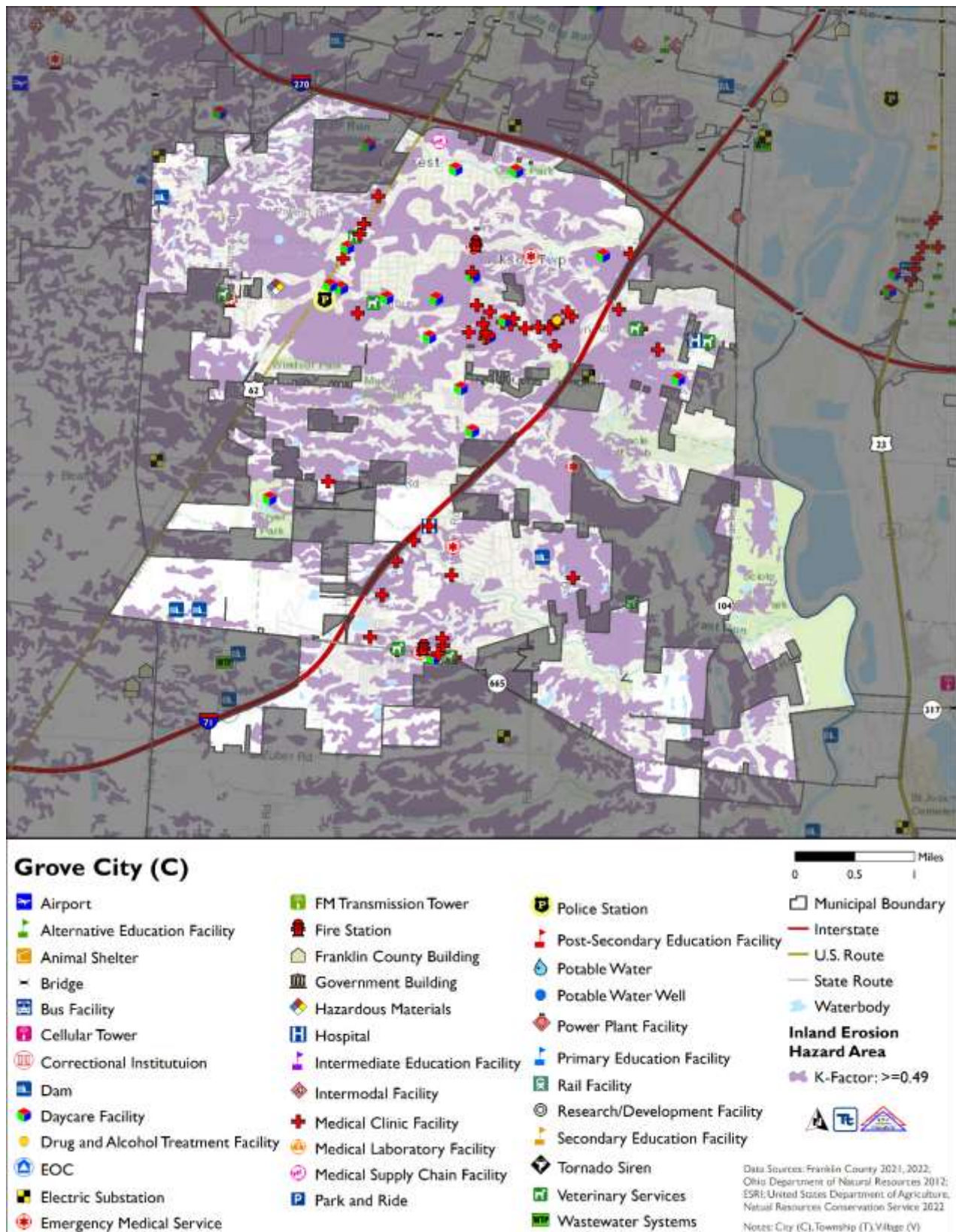
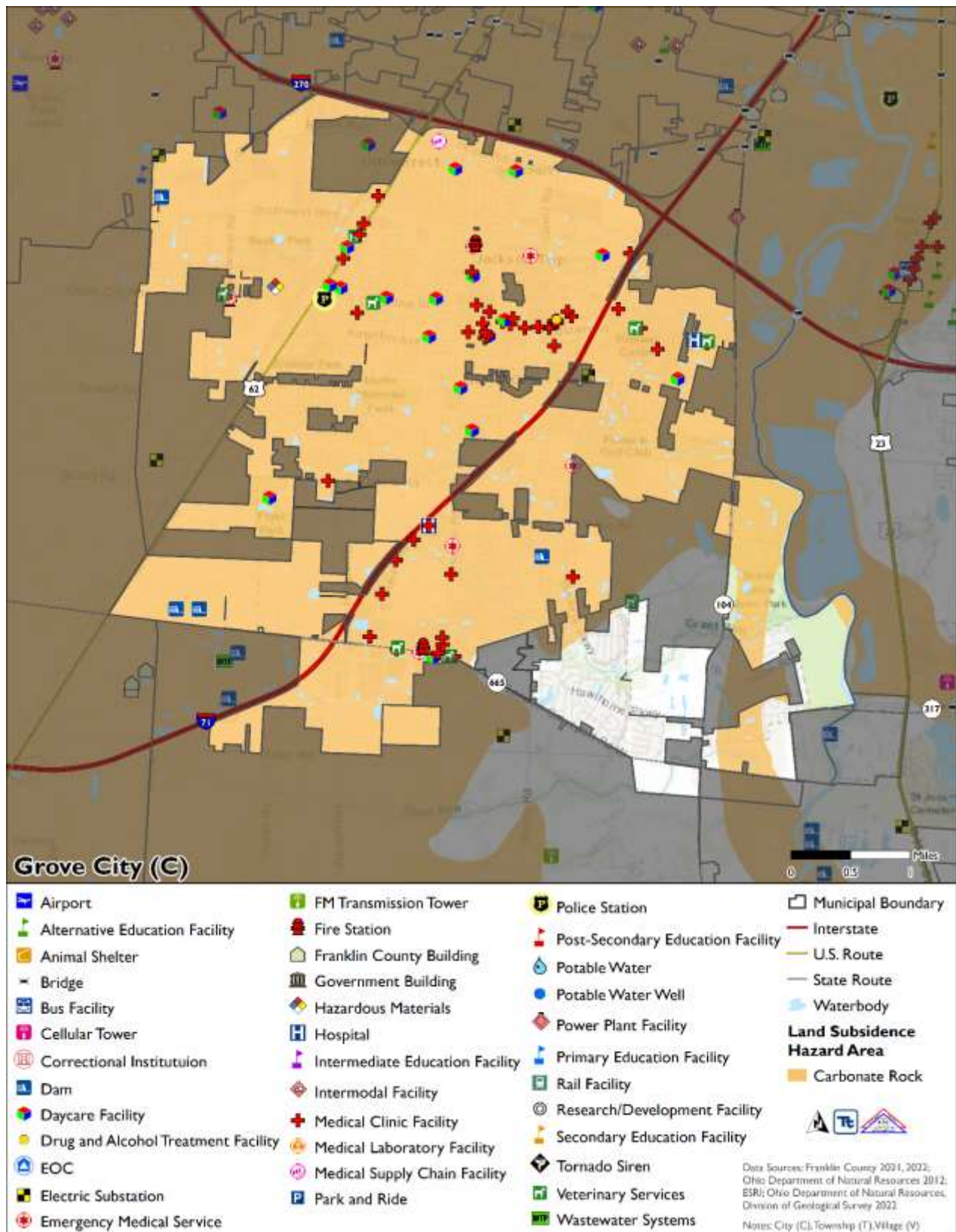


Figure 9.13-3. Grove City Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Grove City’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage Grove City experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.13-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The City did not experience additional damages and losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The City did not experience additional damages and losses. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The City did not experience additional damages and losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for Grove City. Grove City reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Grove City indicated the following:

Table 9.13-14. Hazard Ranking Input

| Hazard | Ranking |
|-----------------------|---------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.13-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Grove City

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 4 | 3 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 5 | 4 |
| Inland Erosion (K-Factor: >= 0.49) Hazard Area | 75 | 67 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 116 | 99 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Grove City identified the following vulnerabilities within its community:

- Grove City has four repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.
- The following critical facilities are municipally owned and located in the special flood hazard area:
 - Ohio ENT
 - CONCORD CHAPEL ANIMAL HOSPITAL
 - THE BUCKEYE RANCH, INC.
 - Grove City Christian Child Care Center
- The City has three critical facilities that do not have backup power installed. This means that they cannot operate during a power outage.
- The City does not have backup power available for traffic signals and during power outages the signals will not operate. There are three critical intersections that affect the flow of traffic.

- The City actively works to mitigate damages caused by natural hazards through communication and community outreach. The outreach list is limited, and the City is working to update and maintain a list of all business owners in the City.
- The City is unable to be self-sufficient for a water supply in the case of a drought event.
- The City's native species are at risk from invasive species which may harm local ecosystems.
- The City has limited information on location and capabilities of critical infrastructure in the City.
- There are numerous reports of flooding issues throughout the City including numerous roads, parks, and housing developments. *
- The City experiences power outages and phone connection issues due to utility wires being knocked down due to hazard events. This presents an issue to first responders attempting to communicate with people in need during hazard events. *

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.13.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.13-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|-------------------|--|--|--|--|
| | | If in progress or completed, please describe the funding source, cost and who is implementing. | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding for repetitive loss structures to permanently reduce damage to these structures (2 known properties est. at 400,000 /4 years) | Mayor's Office | No Progress | No | - | - |
| Seek funding for back-up generators for critical public buildings (5 facilities @ 500,000 / 6 months) | Mayor's Office | In Progress | Yes | No Backup Power, 10-15K each. 3 facilities completed 2022 | Service Department |
| Seek funding for lightning detection/warning for city parks (45,000 / 6 months) | Mayor's Office | No Progress | No | - | - |
| Seek funding for backup power generators for evacuation route intersections. (120,000 / 3 months) | Mayor's Office | In Progress | Yes | Battery backup and generator connections for critical intersections \$10K each : Still lacking 3 | Service Department |
| Seek funding for backup power for 5 existing pump stations. (500,000 / 6 months) | Mayor's Office | Complete | No | - | - |
| Seek funding for backup power for existing water booster stations/water tanks. (50,000 / 6 months) | Mayor's Office | No Progress | No | - | - |
| Work with Franklin County Emergency Management and Homeland Security to develop public educational outreach regarding all natural hazards and Franklin County's susceptibility to those hazards then make available on city's website. (5,000 / ongoing) | Mayor's Office | No Progress | No | - | - |



| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|-------------------|--|--|--|--|
| | | If in progress or completed, please describe the funding source, cost and who is implementing. | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Potential changes in the operation of the Columbus sanitary sewer system could result in the flooding of 10 homes in the southeastern section of Grove City, Scioto Meadows/Hibbs Rd. (10 homes, 300,000) | Mayor's Office | No Progress | No | - | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, Grove City identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, Grove City has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

Grove City participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.13-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | X | - | X | X | - | X | - | X | X |
| Disease Outbreak | X | X | - | X | - | - | X | - | - | X |
| Drought | X | X | - | X | - | - | X | - | - | X |
| Earthquake | X | X | - | X | X | - | X | - | X | X |
| Extreme Temp | X | X | - | X | X | - | X | - | X | X |
| Flood | X | X | - | X | - | - | X | - | X | X |
| Geologic | X | X | - | X | - | - | X | - | - | X |
| Invasive Species | X | X | X | X | - | - | X | X | - | X |
| Severe Weather | X | X | - | X | X | - | X | - | X | X |
| Severe Winter Weather | X | X | - | X | X | - | X | - | X | X |
| Tornado | X | X | - | X | X | - | X | - | X | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.13-17)
 Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Grove City will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.13-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------|--------------------------------|---|---|-----------|--------------------|--|--------------------------------|--|----------------------------------|----------|---------------------|--------------|
| 2023-Grove City-001 | Repetitive Loss Mitigation | <p>Problem: Grove City has four repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.</p> <p>Solution: The City will conduct outreach to the RL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information, and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).</p> | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Less than 5 Years | NFIP Floodplain Administrator, Property Owners | HMGP, FMA, BRIC, CDBG | The Repetitive loss structures will no longer flood as frequently. | >\$100,000 per property | High | SIP | SP |
| 2023-Grove City-002 | Flood Vulnerability Evaluation | <p>Problem: The following critical facilities are municipally owned and located in the special flood hazard area:</p> <ul style="list-style-type: none"> Ohio ENT CONCORD CHAPEL ANIMAL HOSPITAL THE BUCKEYE RANCH, INC. | Flood | 6 | Less than 5 Years | NFIP Floodplain Administrator, Property Owners | HMGP, FMA, BRIC, CDBG | Critical facilities will be able to continue to operate and will not flood as often. | TBD after feasibility assessment | High | SIP | SP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------|----------------------------|--|--|-----------|--------------------|---------------------------------------|---------------------------|--|--------------------------|----------|---------------------|--------------|
| | | <ul style="list-style-type: none"> Grove City Christian Child Care Center <p>Solution: The City will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the facilities to protect each to the 500-year flood level. Options include:</p> <ul style="list-style-type: none"> Elevation of facility Floodproofing of facility Mobile flood barriers <p>Once the most cost-effective option is identified, the City will carry out the option.</p> | | | | | | | | | | |
| 2023-Grove City-003 | Backup Generators | <p>Problem: The City has two critical facilities that do not have backup power installed. This means that they cannot operate during a power outage.</p> <p>Solution: The City will implement a generator sizing study and will seek funding for back-up generators for two critical public buildings. The City will install generators and implement a routine maintenance plan for each.</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 2 | Less than 5 years | Engineer, Department of Public Works, | HMGP, BRIC, City Budget | Critical facilities will be able to operate during a hazard event. | > \$100,00 per generator | High | SIP | ES |
| 2023-Grove | Traffic Generators | <p>Problem: The City does not have backup power available for traffic signals and during power outages the</p> | Dam/Levee, Disease Outbreak, | 2 | Less than 5 Years | Service Department | HMGP, BRIC | Traffic signals will be able to | \$10,000 per generator | High | SIP | ES |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------|--|---|--|-----------|--------------------|-------------------------------------|---------------------------|--|-----------------|----------|---------------------|--------------|
| City-004 | | signals will not operate. There are three critical intersections that affect the flow of traffic. Solution: The City will implement a generator study to determine the size and capacity of the generator needed at 3 critical intersections. | Drought, Earthquake, Extreme Temp, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado | | | | | operate during power outages | | | | |
| 2023-Grove City-005 | Critical Incident and Communication Plan | Problem: The City actively works to mitigate damages caused by natural hazards through communication and community outreach. The outreach list is limited, and the City is working to update and maintain a list of all business owners in the City. Solution: The City will continue to update and maintain the City business owner contact list. | Dam and Levee Failure, Disease Outbreak, Earthquake, Drought, Extreme Temperature, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Invasive Species, Tornado; | 1 | 6 months | Department of Economic Development | HMGP, City Budget | The City will have an updated contact list of residents in the City. | \$500 | High | LPR, EAP | ES |
| 2023-Grove City-006 | Drought Contingency and | Problem: The City is unable to be self-sufficient for a water supply in the case of a drought event. | Drought | 1, 6 | 6 months | Administration Department of Public | City Budget | The City will have a plan during a drought event. | \$1,000 | High | LPR | ES |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------|----------------------------------|---|--|-----------|--------------------|---|---------------------------|--|-----------------|----------|---------------------|--------------|
| | Communication Plan | Solution: The City will produce, when needed, a drought contingency and communication plan with the City of Columbus, who provides water to the City, for additional resources. | | | | Works/Service Department City of Columbus | | | | | | |
| 2023-Grove City-007 | Invasive Species Prevention | Problem: The City's native species are at risk from invasive species which may harm local ecosystems. Solution: The City, through the Department of Community Relations and the Department of Service, Division of Urban Forestry, will create and distribute guides to the community through social media and physical print, warning residents of certain species of plants that are considered urban forestry. Additionally, The City, through the Department of Community Relations and the Department of Service, Division of Urban Forestry, will, annually, engage in a social media campaign to educate the City not to bring in pests and vegetation that may pose a threat to the City. The campaign shall mirror messaging of the Oregon "Don't Pack a Pest method. | Invasive Species | 5 | 6 months | Department of Community Relations Department of Service, Division of Urban Forestry | City Budget | The City will ensure residents are more knowledgeable. | \$1,000 | High | NSP | NR |
| 2023-Grove City-008 | Critical Infrastructure Database | Problem: The City has limited information on location and capabilities of critical infrastructure in the City. Solution: The City, via the Department of Information Services, GIS Division, shall create and maintain a GIS | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, | 6 | 1 Year | Department of Information Systems, GIS Department of Public Safety, Division of Building, | City Budget, HMGP | The City will be more aware of critical infrastructure and their capabilities. | \$1,000 | High | EAP | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------|---|---|---|-----------|--------------------|--|---------------------------|---|-----------------|----------|---------------------|--------------|
| | | <p>database of all critical infrastructure in the City. The strategy is as follows:</p> <ul style="list-style-type: none"> Identify all critical infrastructure in the city. This includes things like hospitals, power plants, water treatment facilities, and transportation hubs. Collect data on each piece of infrastructure, such as its location, size, function and ability to provide backup power. Enter the data into a GIS database. Make the database accessible to emergency management personnel. <p>This strategy would be valuable for emergency management because it would provide a centralized location for all critical infrastructure of the City.</p> | Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | | | Department of Economic Development | | | | | | |
| 2023-Grove City-009 | City Wide Flood Study and Infrastructure Fix* | <p>Problem: There are numerous reports of flooding issues throughout the City including numerous roads, parks and housing developments.</p> <p>Solution: The City will implement a City-wide flood study to determine what is creating the flooding issues throughout the entire City. Once causes of flooding are determined, cost effective solutions will be implemented to reduce issues.</p> | Flood | 2,6 | Less than 5 Years | Floodplain Administrator, Department of Public Safety, | FMA, BRIC, CDBG, HMGP | The City will have reduced flooding issues. | TBD after Study | High | SIP | SP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------|----------------------------|--|--|-----------|--------------------|----------------------------|-------------------------------|--|-----------------|----------|---------------------|--------------|
| 2023-Grove City-010 | Utility Wires* | <p>Problem: The City experiences power outages and phone connection issues due to utility wires being knocked down due to hazard events. This presents an issue to first responders attempting to communicate with people in need during hazard events.</p> <p>Solution: The City will conduct a study to determine if it is feasible to move utility wires underground to prevent hazard events from knocking them down. Once feasibility is determined, the City will implement a process to start moving wires underground.</p> | Dam/Levee, Earthquake, Extreme Temp, Severe Summer Weather, Severe Winter Weather, Tornado | 2,6 | Less than 5 Years | Department of Public Works | CDBG, HMGP, BRIC, City Budget | The City will experience less connection and power issues. | TBD after Study | High | SIP | SP, PR |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.13-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|---------------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Grove City-001 | Repetitive Loss Mitigation | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 11 | High |
| 2023-Grove City-002 | Flood Vulnerability Evaluation | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 11 | High |
| 2023-Grove City-003 | Backup Generators | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-Grove City-004 | Traffic Generators | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 11 | High |
| 2023-Grove City-005 | Critical Incident and Communication Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-Grove City-006 | Drought Contingency and Communication Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 11 | High |



| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|---------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Grove City-007 | Invasive Species Prevention | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 11 | High |
| 2023-Grove City-008 | Critical Infrastructure Database | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-Grove City-009 | City Wide Flood Study and Infrastructure Fix* | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 13 | High |
| 2023-Grove City-010 | Utility Wires* | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.14 CITY OF GROVEPORT

This section presents the jurisdictional annex for the City of Groveport that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Groveport participated in the planning process, an assessment of the City of Groveport’s risk and vulnerability, the different capabilities used in the City of Groveport, and an action plan that will be implemented to achieve a more resilient community.

9.14.1 Hazard Mitigation Planning Team

The City of Groveport identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Groveport departments, including the City Administrator, Finance Director, Engineer Department, Public Service Director and Building/Zoning Department. The Building Official and City Engineer represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.14-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|--------------------------------------|
| Name/Title: | Stephen Moore, Building Official | Name/Title: | Stephen Farst, City Engineer |
| Address: | 655 Blacklick Street Groveport, Ohio | Address: | 655 Blacklick Street Groveport, Ohio |
| Phone Number: | 614-830-2045 | Phone Number: | 614-830-2067 |
| Email: | smoore@groveport.org | Email: | sfarst@groveport.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Benjamin King, City Administrator/Floodplain Administrator | | |
| Address: | 655 Blacklick Street Groveport, Ohio 43125 | | |
| Phone Number: | 614-830-2041 | | |
| Email: | bking@groveport.org | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.14.2 Municipal Profile

The City of Groveport is in the southeast corner of Franklin County almost entirely encompassed by Madison Township. The City of Obetz borders parts of Groveport to the west Located 12.1 miles southeast of Columbus, the City of Groveport is known for its scenic golf course, parks, and recreation.

According to the American Community Survey, the 2021 population for the City of Groveport was 5,942, a 11.11 percent increase from the 2010 Census population of 5,348. Data from the 2021 American Community Survey indicates that 5 percent of the population is 5 years of age or younger and 14.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.14.3 Jurisdictional Capability Assessment and Integration

The City of Groveport performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Groveport to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Groveport and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.14-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | 2017 Ohio Building Code/2019 Residential Code of Ohio | Local | Building/Zoning |
| <i>How does this reduce risk?</i> The building codes establish minimum regulations for buildings and their systems using prescriptive and performance related provisions. These provisions include fire, sanitation, construction, floodplain etc. | | | | |
| Zoning/Land Use Code | Yes | 2019 Zoning Code | Local | Building/Zoning |
| <i>How does this reduce risk?</i> The City zoning code has both general and specific requirements within zoning districts that require determination of land suitability and environmental standards for development in the City. Staff review is required for all development proposed in the City. | | | | |
| Subdivision Ordinance | Yes | 2019 Zoning Code | Local | Building/Zoning & Engineering |
| <i>How does this reduce risk?</i> The subdivision regulations require developers to show locations of existing features such as woods, wetlands, water courses, floodplains, natural features, contours, drainage easements and FEMA floodway fringe/floodway boundaries. By showing this information on the development plans staff, planning commission and City council can make educated decisions on how best to protect these features. | | | | |
| Site Plan Ordinance | Yes | 2019 Zoning Code | local | Building and Zoning Dept. |
| <i>How does this reduce risk?</i> By requiring submittal of site plans for review and approval, staff can monitor development to check for development in the floodplain and other hazard areas and require compliance with those regulations prior to approval of the site plan. | | | | |
| Stormwater Management Ordinance | Yes | Chapter 935 | Local | Engineering |
| <i>How does this reduce risk?</i> Our stormwater management ordinance (Chapter 935 in the Codified Ordinances, City of Groveport) establishes design standards for stormwater drainage systems and stormwater management facilities ensuring that new development and redevelopment on lands within Groveport are properly and consistently designed and constructed to capture and convey runoff and to attenuate peak flows so that there is a reduction in risk of flooding on downstream properties. Moreover, the ordinance establishes during site planning and design on developing lands, a stream corridor protection zone that will prevent establishment of new structures in these zones that on most sites, include lands subject to inundation during a storm event. Preventing buildings in these areas reduces risk of losses due to flood damage. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | Chapter 1341 | Local | Building/Zoning |
| <i>How does this reduce risk?</i> The Flood Damage Code provides minimum safety standards for development and construction within the regulatory floodplain. The code requires applications and plans to be submitted for review and permit issuance prior to any development beginning in the SFHA of the City. | | | | |
| Wellhead Protection | Yes | Source Water Assessment and Protection Plan (12/19/03 & 9/23/05). | Local | Public Service Dept/Engineering Dept |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|---|
| <p>Groveport has its own water treatment plant and well field that were designed and are operated and maintained according to requirements of the Ohio EPA. The wellfield was designed and constructed in 2003, with wellhead protection per requirements of the Ohio EPA, including to establish a 300-ft isolation zone surrounding each well and elevating the wellhead to above the one-percent chance flood. Wellhead protection reduces risk of contamination of the City's source water, thus providing a reliable and safe source of drinking water supply to residents. The City has and maintains a Source Water Assessment and Protection Plan.</p> | | | | |
| Emergency Management Ordinance | Yes | Ord. #1-92 | Local | Mayor |
| <p><i>How does this reduce risk?</i> The ordinance requires an emergency operation plan be created and sets out the requirements to address the mitigation, preparedness, response and recovery from man-made, technological, and natural disasters and emergencies.</p> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Other | - | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Groveport Ohio 2004 Comprehensive Plan | Local | Building/Zoning, Engineering, Planning Commission & Council |
| <p><i>How does this reduce risk?</i> The City's Comprehensive Plan encourages the retention and protection of scenic and natural areas including streams, creeks, woodlands, and wetlands. The plan requires all new development need to make every effort to maintain the natural functions of the environment. The plan has an environmental overview that illustrates the environmentally sensitive areas of the City. The plan also allows for conservation development design, that allows for cluster type lots built around natural features and hazard areas.</p> | | | | |
| Capital Improvement Plan | Yes | Capital Improvement Plan | Local | Engineering/ Administration |
| <p><i>How does this reduce risk?</i> The City's Capital Improvement Plan provides for a vision of capital projects for upgrades and rehabilitation of the City's physical infrastructure including principally City streets, street lighting, and utility systems including water production, water distribution system (conduits), sanitary sewer collection system, and stormwater collection system. The plan - updated every year - provides a 5-year planning horizon and for water capital projects, a 10-year planning horizon. Planning in this manner ensures the infra-structure, notably the storm collection system, is well maintained and improved as needed, thus reducing risk of flooding.</p> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Stormwater Management Plan | Yes | Section 935 | Local | Engineering |
| <p><i>How does this reduce risk?</i> The City is obligated through a requirement of the Ohio EPA, to operate its stormwater utility system under an NPDES permit for the City's Municipal separate stormwater system (MS4), which is renewed every five years by the Ohio EPA. Under this permit, the City developed and follows a Stormwater Management Plan that includes six minimum control measures (MCMs), including Public education (MCM1), Public Involvement (MCM2), Illicit Discharge, Detection, Elimination (MCM3), Construction Site Stormwater Runoff Control (MCM4), Post-Construction Stormwater Management (MCM5), and Pollution Prevention/Good Housekeeping for Municipal Operations (MCM6). By implementing actions under the plan and within these MCM's, the City ensures storm runoff leaving the City's MS4 complies with state and federal water quality standards that will reduce risk of contamination to the environment by containing, and pretreating pollutants that can come along with stormwater runoff. Moreover, planning and operating measures in the plan will reduce erosion, and flooding caused by stormwater runoff volume and peak flows during intense storm events. Such measures include but are not limited to site controls during and after site construction on developing lands, that will attenuate peak runoff flows and capture sediment runoff.</p> | | | | |
| Open Space Plan | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Habitat Conservation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Economic Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Shoreline Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> The plan provides the basis for a systematic approach to the solution of problems created by the threat or occurrence of disasters. It defines the responsibilities, functions, operational procedures and working relationships between the within the governmental entities and with private support groups and individual citizens. The planning process involved identification of hazards, assessment of resources and the development of response procedures. The goals to be achieved are to save lives and protect property by developing programs and operational capabilities that address mitigation, preparedness, response, and recovery for natural, technological, and civil or attack related emergencies. | Yes | Groveport-Madison Emergency Management District – Emergency Operations Plan | Local | Mayor/EOC Manager |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of the City of Groveport to oversee and track development.

Table 9.14-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? • If yes, what department is responsible? | Yes | Building/Zoning & Engineering |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | Floodplain & Stream Corridor Protection Zone |
| Do you have a buildable land inventory? • If yes, please describe | No | - |
| Describe the level of build-out in your jurisdiction. | N/A | The City is a mix of agricultural, commercial, industrial, and residential development. The commercial area of the City is mainly located in the downtown district and along Groveport Road west of the downtown. The industrial district is located to the north along St Rt 33 and west of St Rt 317 and south along Rohr, Pontius and Hayes Roads. The residential areas are located around the downtown and also to the north and west. Agricultural areas are located along the Blacklick, Big Walnut and Walnut Creeks, with other areas located throughout the community and surrounding township. |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Groveport and their current responsibilities that contribute to hazard mitigation.

Table 9.14-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|----------------------------------|---------------------|---|
| Administrative Capability | | |
| Planning Board | Yes | The commission is made up for 5 appointed citizens, they review new development and make recommendations to City Council for approval, conditional approval or disapproval for new development in the City. |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|--|
| Zoning Board of Adjustment | Yes | The board is made up of 5 appointed citizens who hear appeals to zoning and building code determinations in the City. |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | Yes | Community Improvement Corporation |
| Public Works/Highway Department | Yes | The Public Service Dept consists of 24 full time employees, responsible for street maintenance, water treatment & distribution, parks & facility maintenance, sewer & stormwater conveyance, along with other typical public works tasks. The department is responsible for maintaining City owned properties & floodways along with emergency response for road closures. |
| Construction/Building/Code Enforcement Department | Yes | The department is made up of 4 full time employees that are responsible for reviewing and issuing permits for zoning, residential and commercial buildings, floodplain development and property maintenance. |
| Emergency Management/Public Safety Department | No | - |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Provided by Franklin County EMA |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | This is completed by our Public Service Dept. to maintain the stormwater systems, trim trees, pick-up brush and leaves. They also barricade roads if flooded. |
| Mutual aid agreements | Yes | Between Groveport and Madison Township for emergency management. Ord#44-92 and Township Resolution passed Sept. 2, 1992. Ord.#13-003 for Police Dept. personnel and equipment. |
| Human Resources Manual | No | Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | City Engineer and Building Official |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | City Engineer and Building Official |
| Planners or engineers with an understanding of natural hazards | Yes | City Engineer and Building Official |
| Staff with expertise or training in benefit/cost analysis | Yes | City Engineer and Director of Public Service |
| Professionals trained in conducting damage assessments | Yes | Building Official and City Engineer |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | City Engineer |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | Consider the following: Are data and maps from the HMP used to support documentation in grant applications? |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to the City of Groveport.

Table 9.14-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|---|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas, or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | Yes |
| Stormwater utility fee | Yes |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | Yes |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | Yes |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Groveport.

Table 9.14-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|---|
| Public information officer or communications office | Yes | City Administrator or as appointed by Mayor |
| Personnel skilled or trained in website development | Yes | Each department has a staff member trained to place information on the City website |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | Yes | Flood hazard info on website |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Franklin County EMA sirens |
| Natural disaster/safety programs in place for schools | Unknown | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | Yes | Flood hazard info on website, handouts in Building Department office. |

Community Classifications

The table below summarizes classifications for community programs available to the City of Groveport.

Table 9.14-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|-------------------------------|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Building Code Effectiveness Grading Schedule (BCEGS) | Yes | 3 Residential 4 Commercial | May 26, 2020 |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | Madison Twp. Fire 03/3Y | June 29, 2020 |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.14-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.14.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Groveport.

Table 9.14-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|---------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Groveport (C) | 11 | 7 | \$5,166.57 | 1 | 0 |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Groveport.

Table 9.14-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | We have a list of properties with the SFHA, no properties damaged by flooding have been reported or found. |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No property owners have requested information on mitigation. |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | Per NFIP standards and guidance in FEMA publications. No recent flood events. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | None |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | Yes |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Building/Zoning |
| Are any certified floodplain managers on staff in your jurisdiction? | Yes |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability) | Review permit applications, provide inspections, issue permits, provide FEMA publications at office and on website, floodplain layer on GIS |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Per NFIP standards and guidance in FEMA publications. |
| What are the barriers to running an effective NFIP program in the community, if any? | None |

| NFIP Topic | Comments |
|--|--------------------------------------|
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | June 30, 2020 |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | Chapter 1341 July 24, 1995 |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | Meets |
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Zoning/Engineering site plan reviews |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | Not at this time |

9.14.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.14-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|----------|-------------|----------|-------------|----------|-------------|-----------|-------------|-----------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 5 | 0 | 0 | 0 | 3 | 0 | 21 | 0 | 11 | 0 |
| Multi-Family | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 |
| Other (commercial, mixed-use, etc.) | 4 | 0 | 3 | 0 | 3 | 0 | 10 | 2 | 8 | 1 |
| Total Permits Issued | 9 | 0 | 3 | 0 | 6 | 0 | 55 | 2 | 19 | 1 |

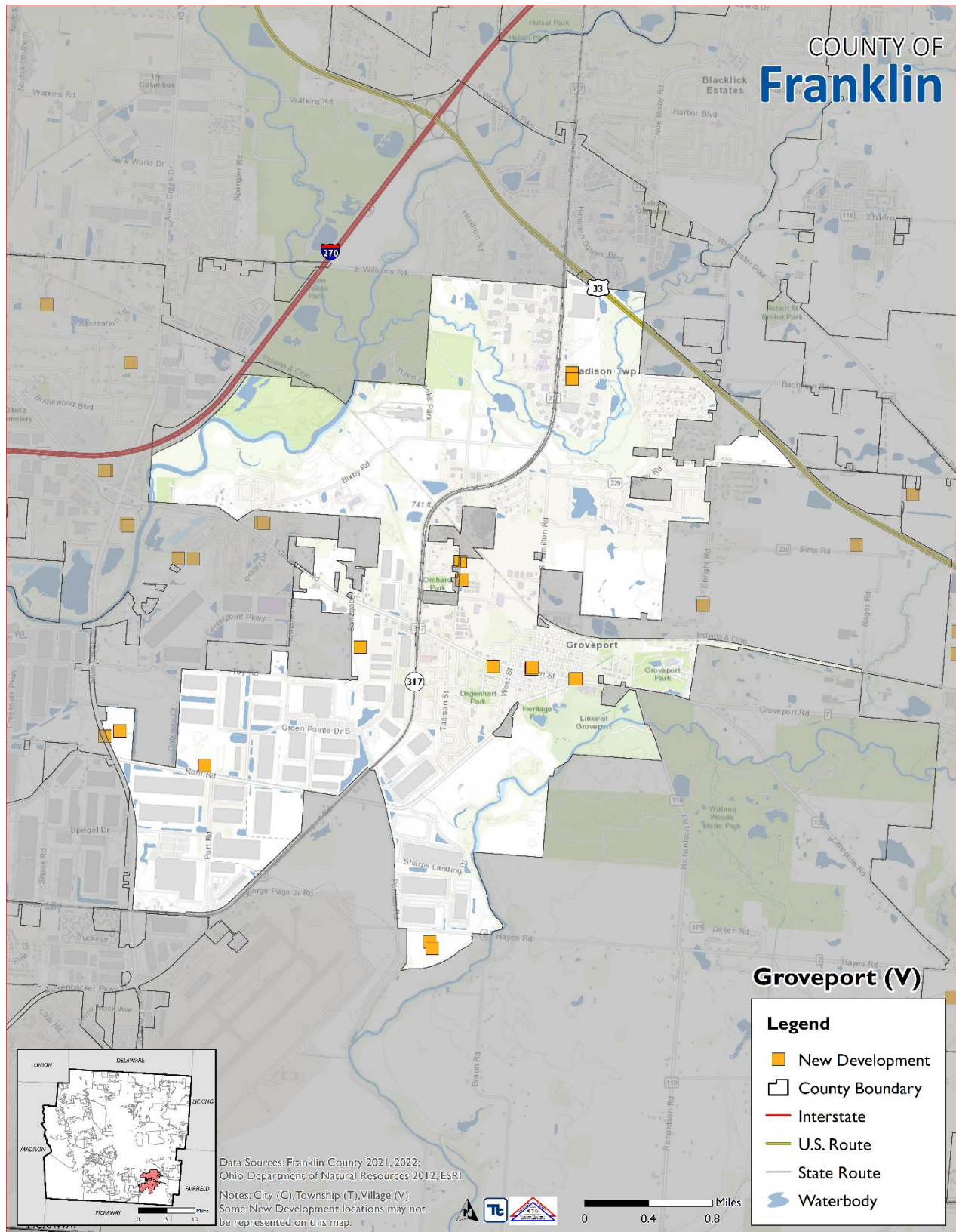
Table 9.14-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|----------------------------------|----------------------|--|
| Recent Major Development from 2018 to Present | | | | | |
| Hickory Grove Sections 3A & 3B | Residential | 51 lots | N/A | None | Last phase of subdivision – 3A completed, 3B houses still under construction |
| Blue Stone | Commercial | 3 lots | 2400 Rohr Rd PID – 154-000002 | None | Approximately 32-acre site developed into 3 lots. Lot 2 development complete with 2 warehouse buildings, lots 1 & 3 still to be developed. |

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|---------------------------|---|----------------------|---|
| Hemmer | Commercial | 3 lots | 5770 Saltzgaber Rd PID #185-002966 | None | Approximately 37-acre site developed into 3 lots. Lots 2 & 3 complete with 1 warehouse per lot, Lot 1 still to be developed |
| Pizutti - Hamilton Rd | Commercial | 2 lots | 4500 S. Hamilton Rd PID #185-001293 & 185-001294 | Zone AE | Approximately 44-acre site developed into 2 lots. Both lots are completed with 1 warehouse on each lot. |
| Redwood Apartments | Residential | 140 units in 24 buildings | 5090 Hendron Rd PID #185-002762 & 185-002763 | None | Approximately 23 acres developed with ranch-style apartments. Buildings are currently under construction. |
| Rarey's Port | Commercial | 1 – 2 story building | 674 Main Street 185-002946 | None | Approximately .33-acre site developed with mixed use commercial building. Development completed. |
| Wert's Grove | Commercial | 1- 2 story building | 480 Main Street 185-000224 & 185-000200 | None | Approximately .69-acre site developed with mixed use commercial building. Development completed. |
| Project Sunshine | Commercial | 1 lot | 3755 Hayes Rd 185-003034 | Zone AE | Approximately 47-acre site developed into single lot with 1 warehouse. Development completed. |
| Professional Office | Commercial | 2 lots | 325 Main St | None | Approximately 1.2-acre site developed into 2 lots. Lot 1 is under construction. Lot 2 is still to be developed |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| No Potential Development known at this time | | | | | |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

Figure 9.14-1. City of Groveport New Development Map

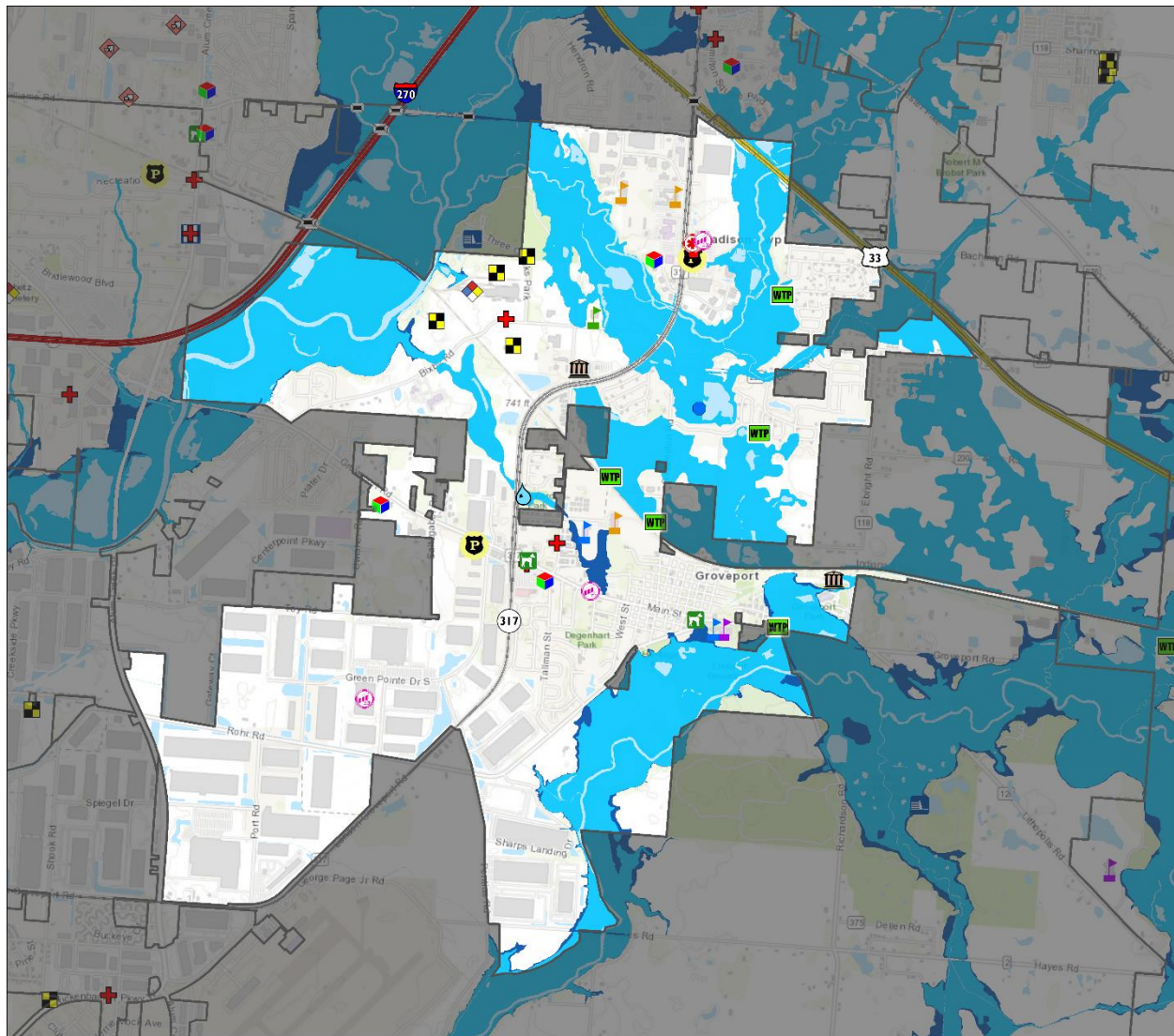


9.14.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Groveport's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Groveport has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.14-2. City of Groveport Hazard Area Extent and Location Map-Flood



Groveport (V)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | 0 0.5 1 Miles |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Municipal Boundary |
| Animal Shelter | Franklin County Building | Potable Water | Interstate |
| Bridge | Government Building | Potable Water Well | U.S. Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | State Route |
| Cellular Tower | Hospital | Primary Education Facility | Waterbody |
| Correctional Institution | Intermediate Education Facility | Rail Facility | FEMA Flood Hazard Area |
| Dam | Intermodal Facility | Research/Development Facility | 1-Percent Annual Chance |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | 0.2-Percent Annual Chance |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | <i>The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.</i> |
| EOC | Medical Supply Chain Facility | Veterinary Services | Tetra Tech, Franklin County, Ohio |
| Electric Substation | Park and Ride | Wastewater Systems | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021 |
| Emergency Medical Service | | | Notes: City (C), Township (T), Village (V) |

Figure 9.14-3. City of Groveport Hazard Area Extent and Location Map-Inland Erosion

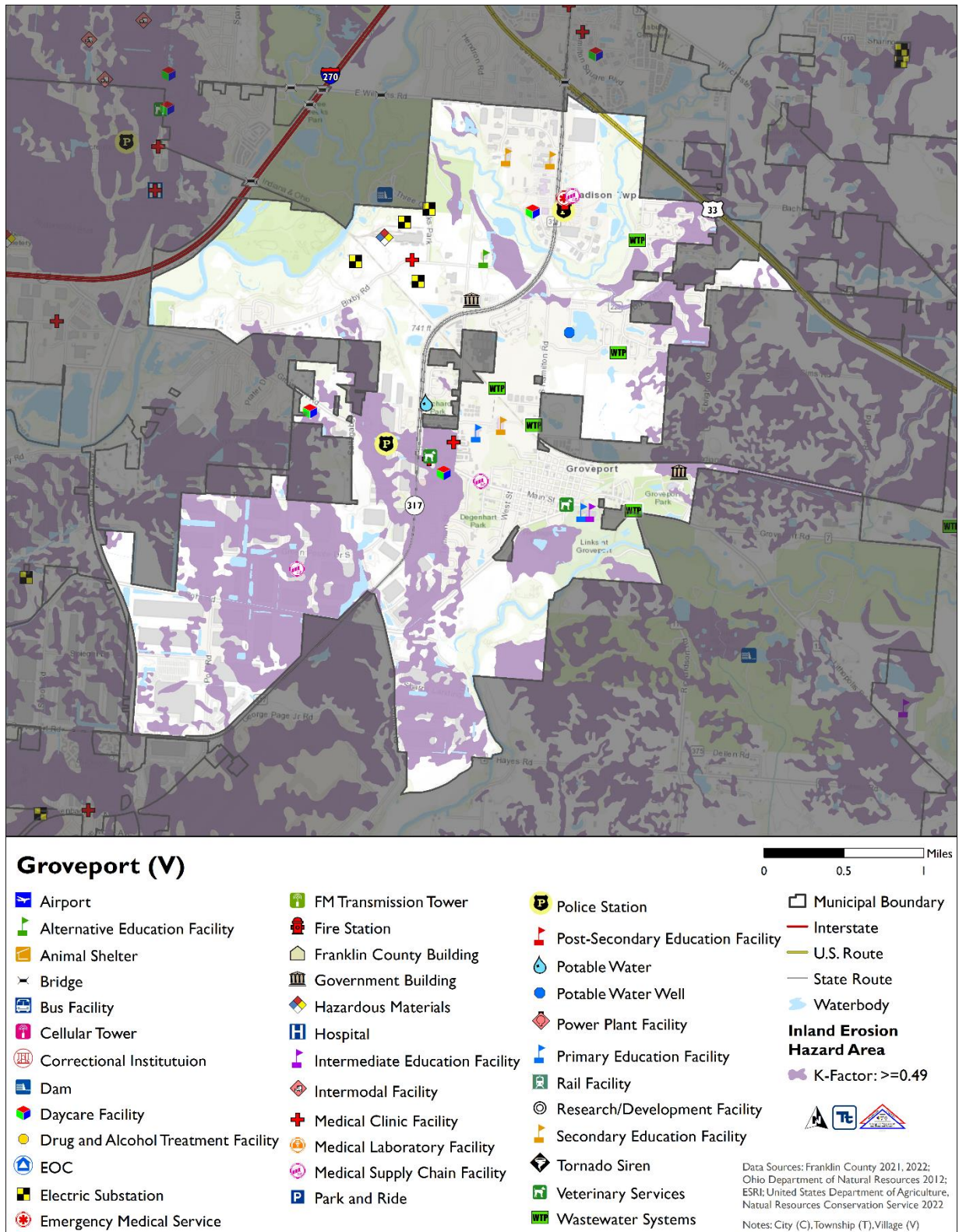
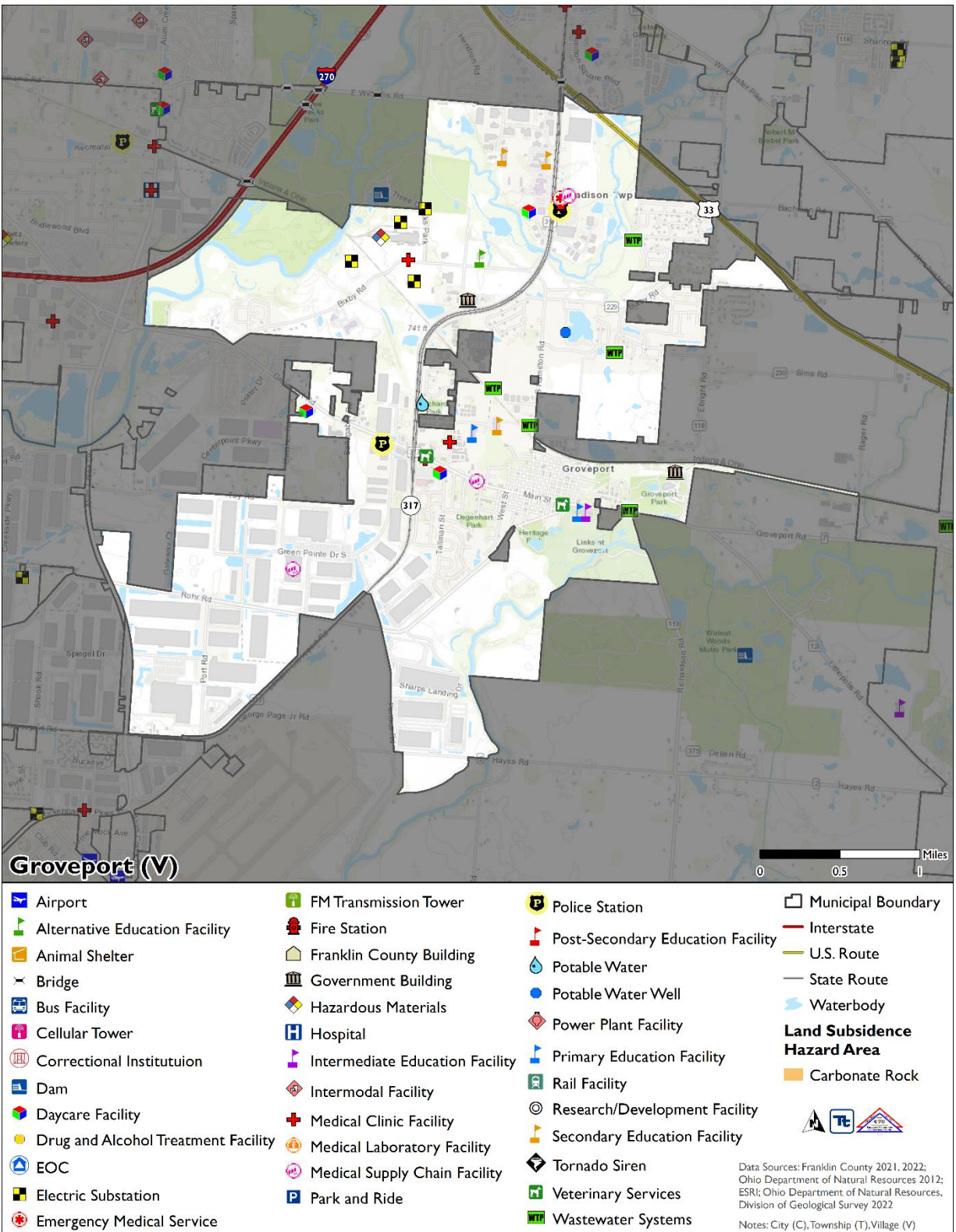


Figure 9.14-4. City of Groveport Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Groveport’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Groveport experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.14-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The City of Groveport did not incur any damages or losses from this event. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The City of Groveport did not incur any damages or losses from this event. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The City of Groveport reported a cost of \$424,344.70 related to the COVID-19 Pandemic. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Groveport.

The City of Groveport reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Groveport agreed with the following hazard rankings:

Table 9.14-14. Hazard Ranking Input

| Hazard | Ranking |
|-----------------------|---------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.14-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Groveport

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 5 | 5 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 5 | 5 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | 6 | 5 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | 19 | 18 |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Groveport identified the following vulnerabilities within its community:

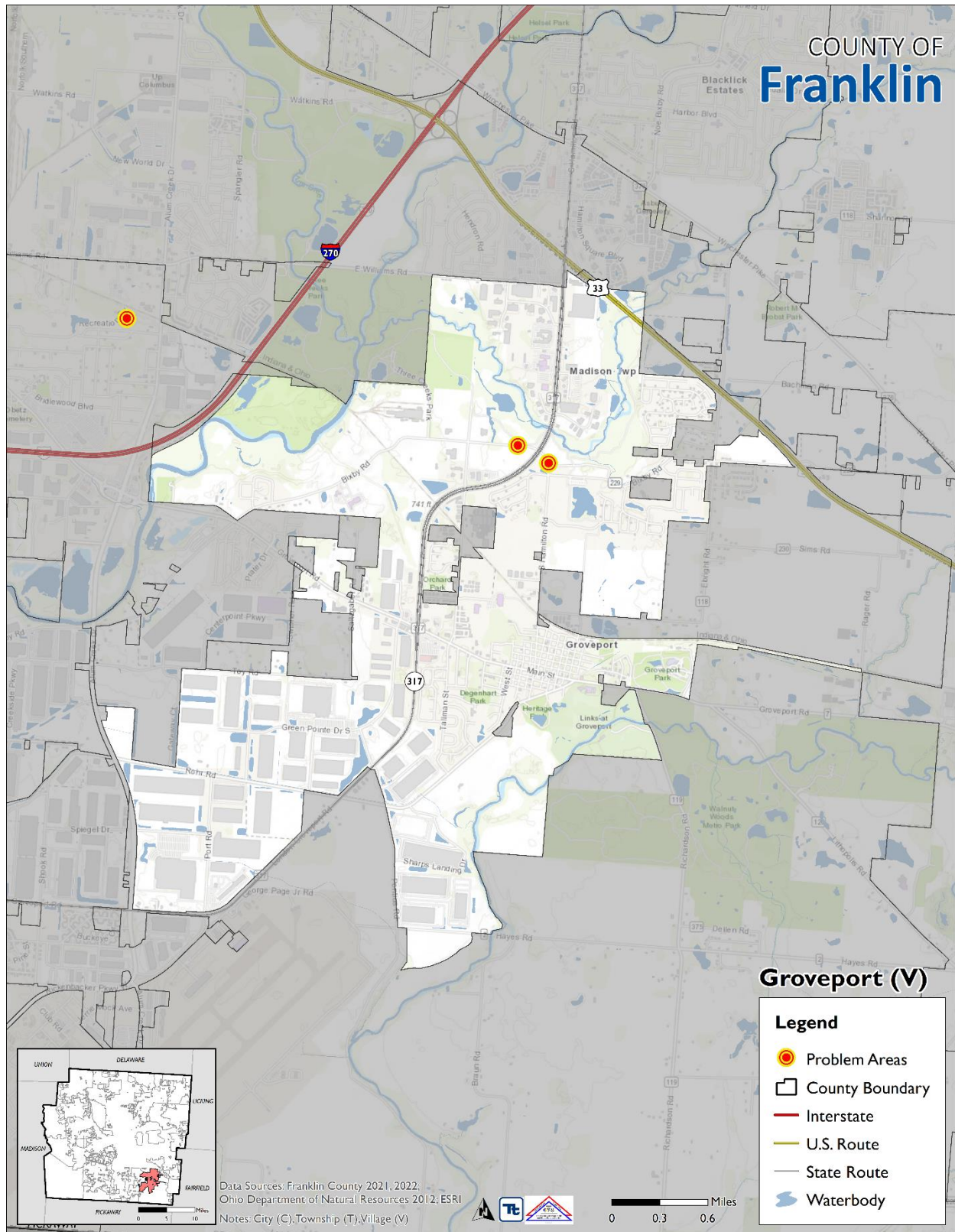
- Bixby Road and the intersection of Groveport Road and Rager Road are inundated during large magnitude flood events that come out of bank on streams adjacent to these roads. Flooding then requires road closure and thus, emergency vehicle access is interrupted, limiting emergency response to the public in these areas.
- When there are local and regional outages in the electric “grid”, particularly during hazardous weather events, the City experiences a loss of power, which will shut down critical facilities

including sanitary pump stations that can lead to health hazard to connected properties' sewer systems and that will prevent continuity of operations.

- The City's Community Recreation Center may potentially be designated as an emergency command center/shelter, due to its location, size, and amenities, however, at this time the City does not have the Community Recreation Center designated as an emergency command center/shelter. The facility does not have back-up power to operate as an emergency facility in the event of hazards.
- The residents of the City need better resources brought to them to be made more aware of how to properly protect themselves and mitigate their property from hazards that affect the region and County.
- The Current emergency disaster plan does not address all the vulnerabilities that the hazards of concern present to the public. The information is not updated to integrate the current HMP.
- The City is reliant on a single water storage facility (i.e., elevated 200,000-gallon tank) for treated/processed potable water that supplies the City's water distribution system for water customers. The single existing elevated water storage tank is vulnerable and can have high-water demand during extreme drought conditions, which may severely reduce water storage quantity in the existing tank that could reduce water distribution pressure.
- Groveport has one repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.
- The following critical facilities are municipally owned and located in the special flood hazard area or are vulnerable as access to them is subject to inundation from the 1-percent chance flood event.:
 - City of Groveport Well Field
 - City of Groveport Water (production) Plant
 - Founders Bend Sanitary Pump Station
 - Bixford Green Sanitary Pump Station
 - Groveport Park Sanitary Pump Station
 - Hendron Ditch Storm Pump Station

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

Figure 9.14-5. City of Groveport Problem Area Map



9.14.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and that presented in the 'Capability Assessment' earlier in this annex.

Table 9.14-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|--------------------------|--|---|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Evaluate Groveport Road at Rager Road to avoid flooding of Groveport Road | Franklin County Engineer | No Progress | Yes | Localized flooding in this area blocks emergency vehicles from providing service in this area | Franklin County Engineer This is not in Groveport it is in Madison Township |
| Fixed permanent emergency generators for critical facilities and sanitary sewer pump stations | Groveport City | In Progress | Yes | Loss of electric in local and regional power outages shuts down sanitary pump stations | City Engineer & Service Director |
| Research and secure funding for tree trimming program. | Mayor's Office | Ongoing | No | - | - |
| Purchase and raise frequently flooded properties on Hanstein Ditch and add property to existing City owned parkland to the east | Mayor's Office | No Progress | No | - | - |
| Replace bridge on Little Walnut Creek to prevent current bridge from breaking free, flowing down stream and causing flooding upstream | Mayor's Office | No Progress | Yes | This bridge is a small cable suspension bridge on the City's municipal golf course that carries golf carts and maintenance equipment across the stream. It is low and can be damaged during frequent bank-full flooding. It requires frequent repair. Replacement to elevate is critical | City Engineer |
| Research and secure funding to provide storm sewers on properties along Old Hamilton Road that have old collapsed tile that causes flooding. | Mayor's Office | No Progress | Yes | Flood Hazard & undersized and antiquated storm water collection | City Engineer |

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|-------------------|--|---|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding for back-up generator to the community recreation center that would be used as an emergency command center, emergency communication center and temporary housing facility for natural disasters. | Mayor's Office | No Progress | Yes | Loss of electric supply in local and regional outages would not allow use as emergency command center or temporary housing during a disaster event | City Engineer & Service Director |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Groveport identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, the City of Groveport has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Groveport participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.14-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | X | - | X | X | X | X | - | - | X |
| Disease Outbreak | X | - | - | X | X | X | X | - | - | X |
| Drought | X | X | - | X | X | X | X | - | - | X |
| Earthquake | X | X | - | X | X | X | X | - | - | X |
| Extreme Temp | X | X | - | X | X | X | X | - | - | X |
| Flood | X | X | - | X | X | X | X | - | X | X |
| Geologic | X | X | - | X | X | X | X | - | - | X |
| Invasive Species | X | - | - | X | X | X | X | - | - | - |
| Severe Weather | X | X | - | X | X | X | X | - | X | X |
| Severe Winter Weather | X | X | - | X | X | X | X | - | X | X |
| Tornado | X | X | - | X | X | X | X | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.14-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Groveport will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.14-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|------------------------------------|--|---|-----------|--------------------|---------------------------|-------------------------------------|--|---------------------------|----------|---------------------|--------------|
| 2023-Groveport City-001 | Flood Study* | <p>Problem: Bixby Road and the intersection of Groveport Road and Rager Road are subject to inundation by out-of-bank flood waters from adjacent streams that will block emergency vehicles from providing service in this area.</p> <p>Solution: Conduct an engineering study to evaluate improvement to Bixby Road and Groveport Road at Rager Road to mitigate the hazard that would result in reduced thoroughfare flooding and that will ensure emergency vehicles can access the area.</p> | Flood, Severe Summer Weather, Severe Winter Weather | 6 | 1 Year | Franklin County Engineer | City, County, FEMA, BRIC, FMA, HMGP | Emergency Vehicles will have better access to areas blocked off by flooding at Groveport and Rager Road. | >\$50,000 for engineering | High | SIP | SP, ES |
| 2023-Groveport City-002 | Generators for Critical Facilities | <p>Problem: The City experiences a loss of electric power during local and regional power outages which shut down critical facilities including sanitary pump stations and prevent continuity of operations.</p> | Dam/Levee, Drought, Earthquake, Extreme Temperature, Flood, Geologic, | 6 | Less than 5 Years | Groveport City Engineer | City, County, FEMA, BRIC, FMA, HMGP | The City will have continuity of operations at critical facilities during | \$100,000 | High | SIP | ES |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|----------------------------|---|---|-----------|--------------------|---------------------------|-----------------------------|--|--------------------------|----------|---------------------|--------------|
| | | Solutions: The City will conduct an engineering study to determine correct generator sizes and will install fixed permanent emergency generators for critical facilities and sanitary sewer pump stations. | Severe Summer Weather, Severe Winter Weather, Tornado | | | | | power outages. | | | | |
| 2023-Groveport City-003 | Bridge Replacement | Problem: The Little Walnut Creek bridge is a small cable suspension bridge on the City's municipal golf course that carries golf carts and maintenance equipment across the stream. It is low and can be damaged during frequent bank-full flooding. It requires frequent repair. Solution: The City will replace bridge over Little Walnut Creek after conducting an engineering study to prevent current bridge from breaking free, flowing down stream and causing flooding upstream. | Flood | 6 | 5 Years | City Engineer | City, FEMA, BRIC, FMA, HMGP | The Bridge will be able to provide continuity of operations. | TBD after engineer study | High | SIP | SP |
| 2023-Groveport City-004 | Storm Sewer Installations | Problem: Properties in the City along Old Hamilton Road are consistently flooding due to collapsed infrastructure. | Flood, Severe Summer Weather, Severe Winter Weather | 6 | 2 Years | City Engineer | City, FEMA, BRIC, FMA, HMGP | Properties along Old Hamilton Road will experience reduced flooding. | TBD after Study | High | SIP | SP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|--|--|---|-----------|--------------------|----------------------------------|-----------------------------|---|-----------------|----------|---------------------|--------------|
| | | Solution: The City will research and conduct a storm sewer study, then will secure funding to provide correctly sized storm sewers on properties along Old Hamilton Road that have collapsed infrastructure that causes flooding. | | | | | | | | | | |
| 2023-Groveport City-005 | Designate and install Generator at the Community Recreation Center | <p>Problem: The City's Community Recreation Center has potential for being designated an emergency command center/shelter. However, the facility does not have backup power to operate as a emergency facility in the event of hazards.</p> <p>Solution: The City will conduct an engineering study to determine what size generator is needed to power the Community Recreation Center. The City will seek funding for installation of a back-up generator to the community recreation center and would designate it as an emergency command center and temporary housing facility for natural disasters.</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado | 6 | 4 Years | City Engineer & Service Director | City, FEMA, BRIC, FMA, HMGP | The City will have a command center and shelter that will be able to perform continuity of operations during hazard events. | >\$100,000 | High | LPR | ES |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|-----------------------------|--|---|-----------|--------------------|--|-----------------------------|--|-----------------|----------|---------------------|--------------|
| 2023-Groveport City-006 | Public Outreach | <p>Problem: The residents of the City are unaware of how to properly protect themselves and mitigate their property from hazards that affect the County.</p> <p>Solution: The City will work with the County to create informative documents and website updates to include how to prepare for and mitigate the hazards that threaten the City. The City will also work with the Ohio Sam Safety Organization to obtain up to date dam information and will work to promote and educate residents on the "StormReady" program. Additionally, the City will ensure that residents know of available shelters for hazard events.</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 5 | 6 months | City Administrator, City Engineer, County Emergency Management | FEMA, HMGP, City and County | The public will be better equipped to prepare for and mitigate against the hazards of concern. | \$2,000 | High | EAP | PR, PP, PI |
| 2023-Groveport City-007 | Plan Integration and Update | <p>Problem: The Current emergency disaster plan does not address all of the vulnerabilities that the hazards of concern present to the public. The information is not updated to integrate the current HMP.</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, | 1 | 1 Year | City Administrator, Chief of Police, City Engineer | FEMA, HMGP, City | The public will be better equipped to prepare for and mitigate against the hazards of concern. | \$3,000 | High | LPR | PR, PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|--|---|---|-----------|--------------------|--|--|---|-----------------|----------|---------------------|--------------|
| | | Solution: The City will update the Plan to reflect current and projected vulnerabilities for all hazards of concern and ensure that the current HMP is integrated into the Emergency Disaster Plan. | Severe Summer Weather, Severe Winter Weather, Tornado | | | | | | | | | |
| 2023-Groveport City-008 | Supplemental Elevated Water Storage Facility | Problem: The City is reliant on a single water storage facility for treated/processed water that supplies the City's water distribution system for water customers. A single tank is vulnerable and has a high-water demand during extreme drought conditions which may severely reduce water storage quantity in the existing tank that could reduce water distribution pressures. Solution: The City will develop/construct a supplemental elevated water storage facility that would maintain water distribution system pressures for domestic and firefighting supplies in the event that water demand is excessively high due to high heat and/or drought events. | Extreme Temperature, Drought | 6 | 4 Year | City Administration, Engineering and Service Departments | Departmental Budgets, Clean Water State Revolving Loan Fund, Drinking Water State Revolving Fund, HMGP | Water supply for domestic use and firefighting will be more reliable and consistent during drought and high heat conditions | \$1,200,000 | High | SIP | SP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|--------------------------------|--|---------------------------|-----------|--------------------|--|---------------------------|--|----------------------------------|----------|---------------------|--------------|
| 2023-Groveport City-009 | Flood Vulnerability Evaluation | <p>Problem: The following critical facilities are municipally owned and located in the special flood hazard area or are vulnerable as access to them is subject to inundation from the 1-percent chance flood event:</p> <ul style="list-style-type: none"> • City of Groveport Well Field • City of Groveport Water (production) Plant • Founders Bend Sanitary Lift Station • Bixford Green Sanitary Pump Station • Groveport Park Sanitary Pump Station • Hendron Ditch Storm Pump Station <p>Solution: The City will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the facilities to protect each to the 500-year flood level. Options include:</p> | Flood | 6 | Less than 5 Years | NFIP Floodplain Administrator, Property Owners | HMGP, FMA, BRIC, CDBG | Critical facilities will be able to continue to operate and will not flood as often. | TBD after feasibility assessment | High | SIP | SP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|---------------------------------|---|---------------------------|-----------|--------------------|---|---|--|--------------------------|----------|---------------------|--------------|
| | | <ul style="list-style-type: none"> Elevation of facility Floodproofing of facility Mobile flood barriers <p>Once the most cost-effective option is identified, the City will carry out the option.</p> | | | | | | | | | | |
| 2023-Groveport City-010 | Repetitive Loss Area Mitigation | <p>Problem: Portions of the City experienced repetitive loss due to flooding.</p> <p>Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity.</p> | Flood | 6 | 4 years | City Administration, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC; City budget; homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.

- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.14-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-------------------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Groveport City-001 | Flood Study* | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-Groveport City-002 | Generators for Critical Facilities | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 12 | High |
| 2023-Groveport City-003 | Bridge Replacement | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 11 | High |
| 2023-Groveport City-004 | Storm Sewer Installations | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-Groveport City-005 | Designate and install Generator at the | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-------------------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| | Community Recreation Center | | | | | | | | | | | | | | | | |
| 2023-Groveport City-006 | Public Outreach | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-Groveport City-007 | Plan Integration and Update | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-Groveport City-008 | Supplemental Elevated Water Storage Facility | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-Groveport City-009 | Flood Vulnerability Evaluation | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 11 | High |
| 2023-Groveport City-010 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.15 HAMILTON TOWNSHIP

This section presents the jurisdictional annex for the Hamilton Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Hamilton Township participated in the planning process, an assessment of the Hamilton Township’s risk and vulnerability, the different capabilities used in the Hamilton Township, and an action plan that will be implemented to achieve a more resilient community.

9.15.1 Hazard Mitigation Planning Team

The Hamilton Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Hamilton Township departments, including Hamilton Township Fire Department . The Supervisor represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.15-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|----------------------------|----------------------------|---|
| Name/Title: | Josh Marcum/Supervisor | Name/Title: | - |
| Address: | 6400 Lockbourne Road | Address: | - |
| Phone Number: | 614-491-3963 | Phone Number: | - |
| Email: | - | Email: | - |
| NFIP Floodplain Administrator | | | |
| Name/Title: | - | | |
| Address: | - | | |
| Phone Number: | - | | |
| Email: | - | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.15.2 Municipal Profile

Hamilton Township is in southern Franklin County and is bordered by Madison Township to the east, Montgomery Township to the north, Jackson Township to the west and Pickaway County to the south. Most of northern and western Hamilton Township is occupied by the city of Columbus. The villages of Lockbourne and Obetz are located in the southern and northeastern part of the township respectively.

According to the American Community Survey, the 2021 population for the Township was 8,743, a 5.85 percent increase from the 2010 Census population of 8,260. Data from the 2021 American Community Survey indicate that 4.7 percent of the population is 5 years of age or younger and 18.3 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.15.3 Jurisdictional Capability Assessment and Integration

The Hamilton Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Hamilton Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Hamilton Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.15-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|---|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | - | Franklin County | - |
| <i>How does this reduce risk?</i> | | | | |
| Zoning/Land Use Code | Yes | - | Franklin County | - |
| <i>How does this reduce risk?</i> | | | | |
| Subdivision Ordinance | Yes | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | Yes | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | Yes | Franklin County Zoning | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Wellhead Protection | Yes | City of Columbus | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | Yes | Hamilton Township Fire Department | - | |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | 2021 Comprehensive Plan Obetz & Hamilton Township Community Plan Southwest Area Plan Clinton-Miffin Land Use Plan | Local and County | Warren County Regional Planning Commission |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| The Hamilton Township Comprehensive Plan is straightforward and includes a Future Land Use Map (FLUM) that Township officials can use to determine if a request for zoning change fits with the overall vision for the Township. The previous Hamilton Township Comprehensive Plan was adopted in 2009; however, the Future Land Use Map has been updated periodically since then (Warren County Regional Planning Commission 2021). | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | Yes | Hamilton Township NPDGS | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | Yes | Hamilton Township NPDGS | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | Yes | Hamilton Township Fire Department | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Continuity of Operations Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the Hamilton Township to oversee and track development.

Table 9.15-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? • If yes, what department is responsible? | Yes | Franklin County Economic Development and Planning department issues development permits |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | N/A | Floodplain |
| Do you have a buildable land inventory? • If yes, please describe | N/A | - |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Hamilton Township and their current responsibilities that contribute to hazard mitigation.

Table 9.15-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|--|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | Yes | <p>Board of Zoning Appeals (BZA) - The BZA is responsible for reviewing variance requests, conditional uses and challenges to the zoning administrator's decisions on the interpretation of the Hamilton Township Zoning Code. The BZA is comprised of five members and one alternate member. Each member is appointed by the Trustees for a staggered term of five years.</p> <p>Zoning Commission - The Zoning Commission makes recommendations on zone change requests and site plans, as well as text amendments to the Hamilton Township Zoning Code.</p> |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | Yes | <p>The Hamilton Township Public Works Department's primary function is to maintain roads and right-of-ways for Hamilton Township. This department reports directly to the Hamilton Township Board of Trustees. Ohio Department of Transportation.</p> |
| Construction/Building/Code Enforcement Department | Yes | Franklin County Zoning |
| Emergency Management/Public Safety Department | Yes | Fire Department |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | No | - |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Road Department to a point |
| Mutual aid agreements | Yes | Fire Department/Road Department help municipal office |
| Human Resources Manual | No | <p>Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?</p> |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | - |
| Engineers or professionals trained in building or infrastructure construction practices | No | - |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | Yes | <p>Consider the following: Are data and maps from the HMP used to support documentation in grant applications?</p> |
| Resilience Officer | No | - |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to the Hamilton Township.

Table 9.15-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | No |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Hamilton Township.

Table 9.15-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|-----------------------------------|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | No | - |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | No | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | No | - |
| Natural disaster/safety programs in place for schools | Yes | Hamilton Township Fire Department |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | No | - |

Community Classifications

The table below summarizes classifications for community programs available to the Hamilton Township.

Table 9.15-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.15-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.15.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Township of Hamilton.

Table 9.15-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|----------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Hamilton (Twp) | NR | NR | NR | NR | NR |

Sources: a BureauNet 2022 (<https://nfip-services.floodsmart.gov/reports-flood-insurance-data>)
b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Hamilton Township.

Table 9.15-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. • Do you maintain a list of properties that have been damaged by flooding? | The park floods along the creek |
| • Do you maintain a list of property owners interested in flood mitigation? • How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |
| Are any RiskMAP projects currently underway in your jurisdiction? • If so, state what projects are underway. | No |
| • How do you make Substantial Damage determinations? • How many were declared for recent flood events in your jurisdiction? | Depending on cost None |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded? | None |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why. | No we don't have any |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Road Department (Not sure) |
| Are any certified floodplain managers on staff in your jurisdiction? | Road superintendent (Not sure) |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed? | Yes |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | We use Franklin County Engineers for our source |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | - |
| What are the barriers to running an effective NFIP program in the community, if any? | None |

| NFIP Topic | Comments |
|---|----------|
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | - |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | N/A |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | - |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | Meets |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | - |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | N/A |

9.15.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. Franklin County is responsible for development in the Township and issues permits for new development. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

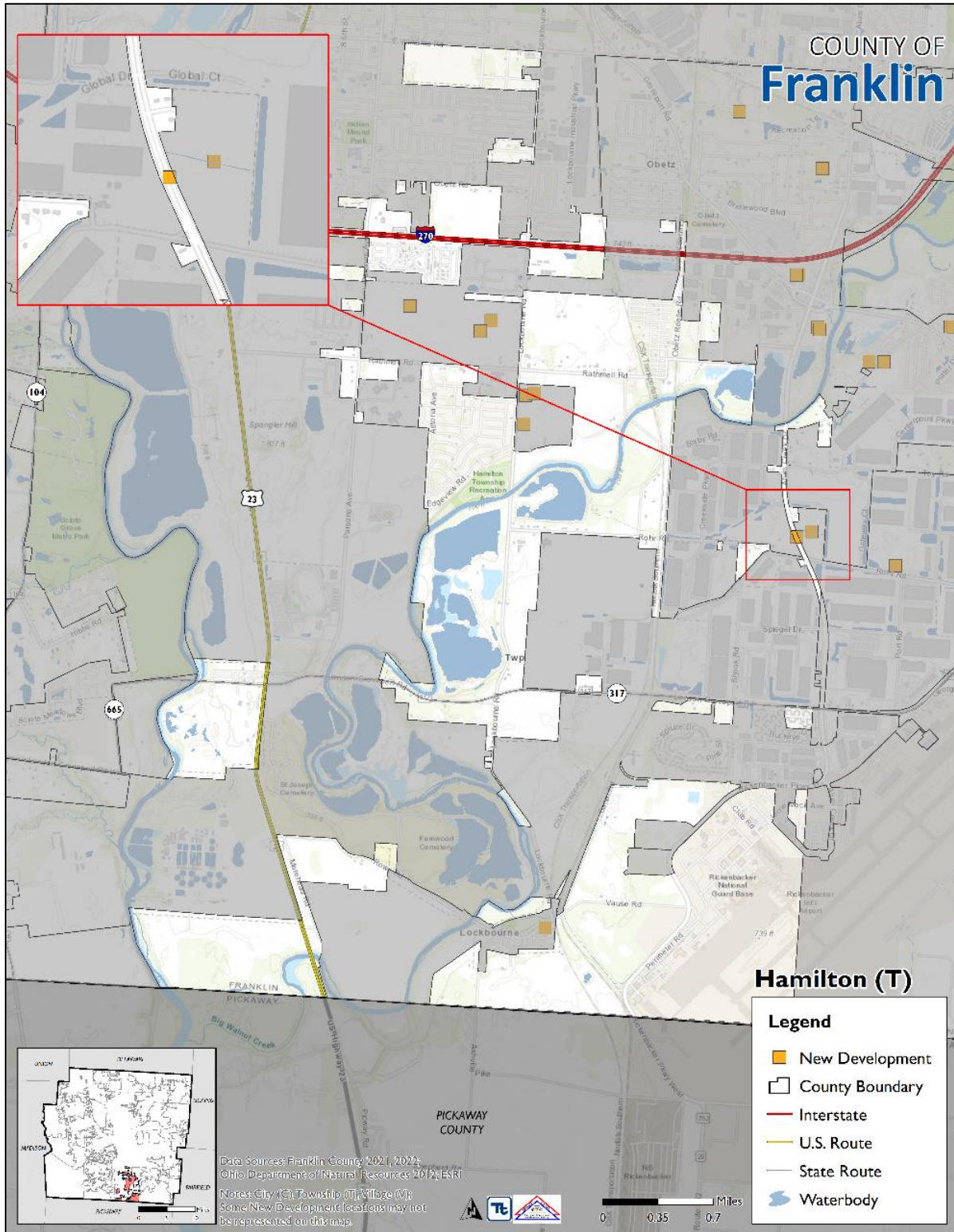
Table 9.15-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | - | - | - | - | - | - | - | - | - |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | - | - | - | - | - | - | - | - | - | - |

Table 9.15-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

Figure 9.15-1. Proposed New Development in the Jurisdiction

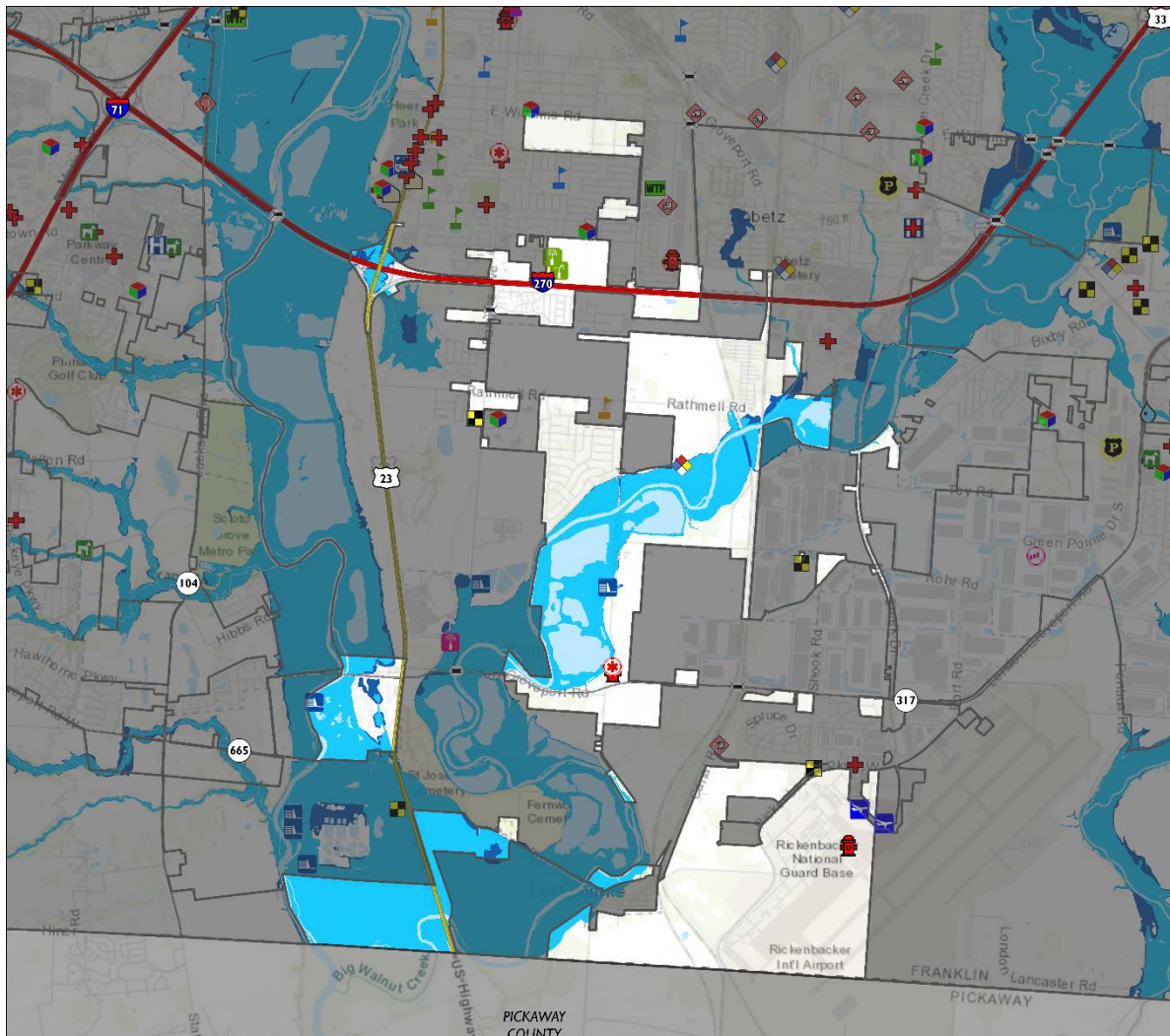


9.15.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Hamilton Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Hamilton Township has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.15-2. Hamilton Township Hazard Area Extent and Location Map



Hamilton (T)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service

- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems

- Municipal Boundary
 - Interstate
 - U.S. Route
 - State Route
 - Waterbody
 - FEMA Flood Hazard Area**
 - 1-Percent Annual Chance
 - 0.2-Percent Annual Chance
- The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.*
-
- Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021
Notes: City (C), Township (T), Village (V)

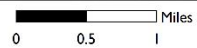


Figure 9.15-3. Hamilton Township Hazard Area Extent and Location Map

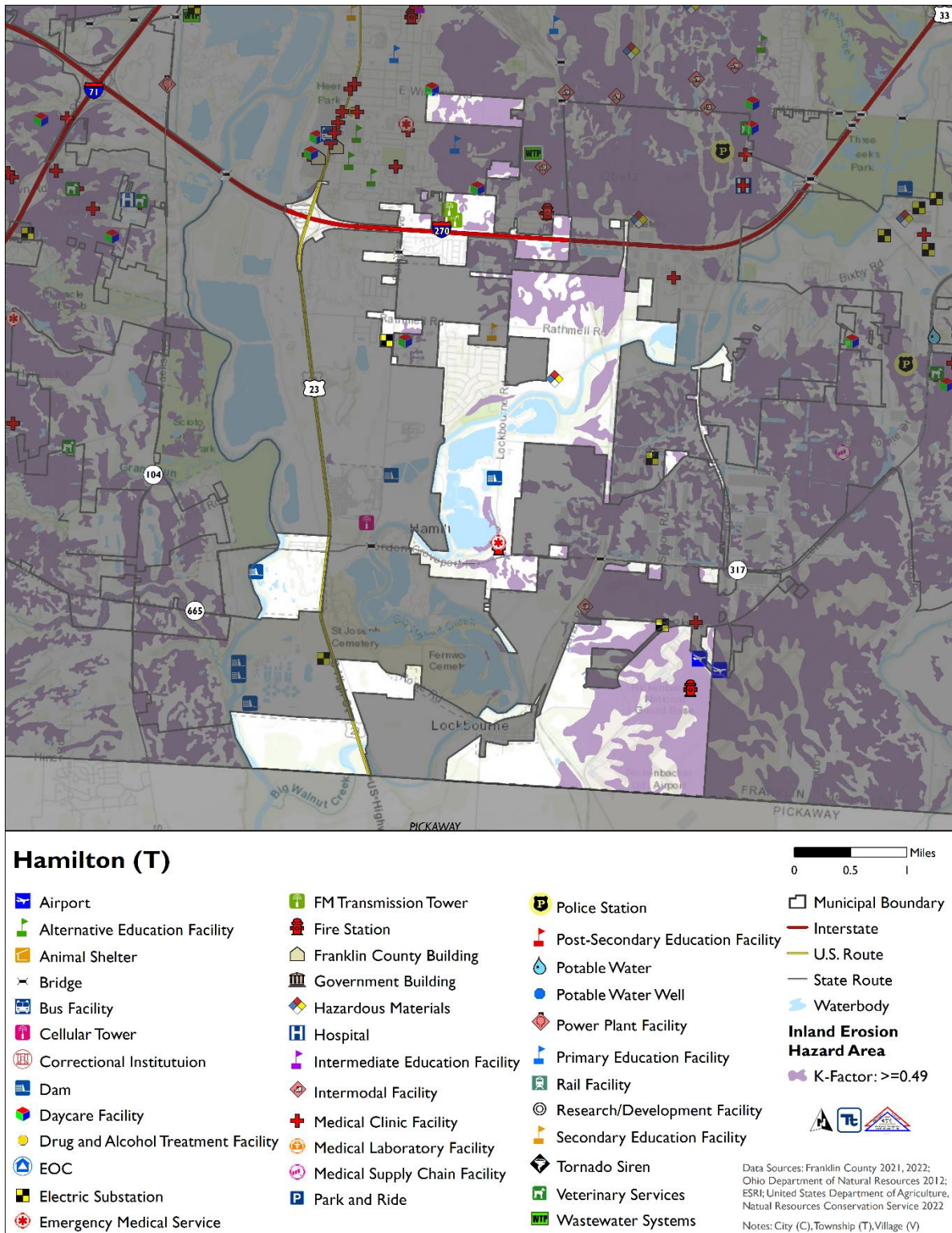
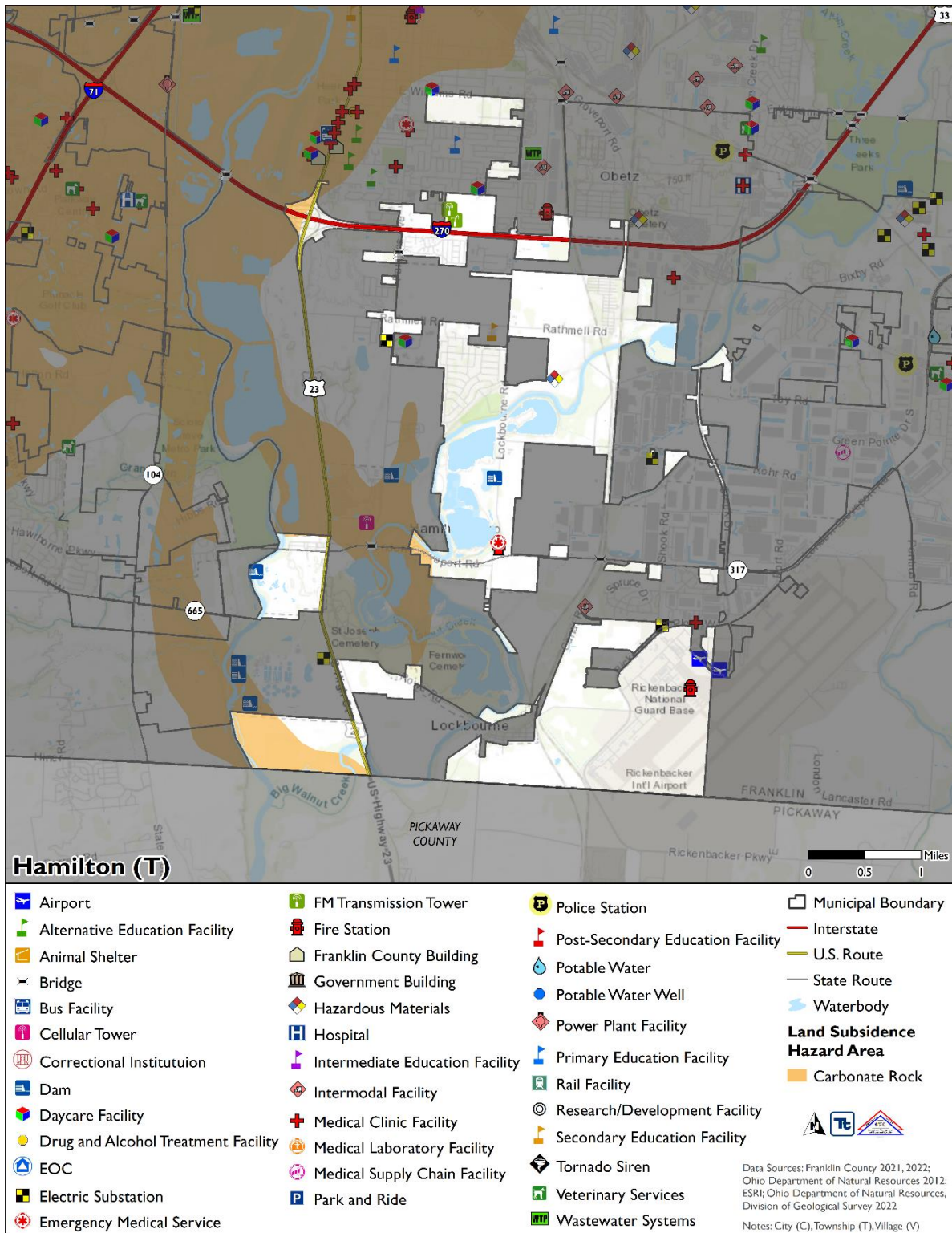


Figure 9.15-4. Hamilton Township Hazard Area Extent and Location Map



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Hamilton Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage Hamilton Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.15-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Township did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Township did not experience any notable damages or losses. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Township did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Hamilton Township.

The Hamilton Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Hamilton Township agreed with all of the following hazard risk rankings.

Table 9.15-14. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.15-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Hamilton Township

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 3 | 3 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 3 | 3 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | 4 | 4 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | 3 | 3 |
| Delaware Dam Inundation (MH Breach) Hazard Area | 1 | 1 |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the Township of Hamilton identified the following vulnerabilities within its community:

- The Township does not have a method to ensure that residents with functional needs are properly cared for in emergency situations including the hazards of concern.
- The Township does not have a Continuity of Operations Plan that is developed that addresses the hazards of concern

9.15.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.15-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|--|---|--|--|---|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Create wetlands and rain gardens where the stormwater retention ponds are not designed to reduce volume. Implement land management practices to reduce the volume of stormwater runoff from developed communities. | Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County Engineer's Office • City of Hilliard • Norwich Township • Ohio Department of Natural Resources (ODNR) | Complete – the Township implemented a rain garden in 2018 | No | - | - |
| Reconnect 150 linear feet of Dysart Run to the floodplain and stabilize 3 sections of bank with severe erosion to reduce erosion and siltation | Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County Engineer's Office • City of Hilliard • Norwich Township • Ohio Department of Natural Resources (ODNR) | Complete – the County Engineers office straightened and formed an open ditch line to the creek and grass shed at the park in 2022 | No | - | - |
| Increase stormwater retention/detention features along waterways like, Holcomb Ditch, to reduce and/or slow the flow of stormwater. | Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County Engineer's Office • City of Hilliard • Norwich Township • Ohio Department of Natural Resources (ODNR) | Complete – the County Engineers office straightened and formed an open ditch line to the creek and grass shed at the park in 2022 | No | - | - |
| Development of a plan and strategy to ensure residents with functional needs are properly cared for in an emergency. | Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County social service agencies | No Progress | Yes | There were no written action as to how functional needs individuals would be transported to shelters or evacuated from the country | The American Red cross and COTA will have available resources for all individuals |

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|--|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding for back-up generators for critical public buildings and infrastructure. | Franklin County Emergency Management & Homeland Security • All 41 jurisdictions | In Progress - This is still underway with the implementation of the Franklin County Climate change plan | Yes | Critical infrastructure in the Township does not have back-up generators | Franklin County Emergency Management & Homeland Security • All 41 jurisdictions |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Hamilton Township identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the Hamilton Township has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.15-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | - | - | X | - | - | X | - | - | X |
| Disease Outbreak | X | - | - | X | - | - | X | - | - | X |
| Drought | X | - | - | X | - | - | X | - | - | X |
| Earthquake | X | - | - | X | - | - | X | - | - | X |
| Extreme Temp | X | - | - | X | - | - | X | - | - | X |
| Flood | X | - | - | X | - | - | X | - | - | X |
| Geologic | X | - | - | X | - | - | X | - | - | X |
| Invasive Species | X | - | - | X | - | - | X | - | - | X |
| Severe Summer Weather | X | - | - | X | - | - | X | - | - | X |
| Severe Winter Weather | X | - | - | X | - | - | X | - | - | X |
| Tornado | X | - | - | X | - | - | X | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.15-17).

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Hamilton Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.15-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------|-----------------------------------|---|---|-----------|--------------------|--|---------------------------|--|-----------------|----------|---------------------|--------------|
| 2023-Hamilton Township-001 | Functional Needs during Emergency | <p>Problem: The Township does not have a method to ensure that residents with functional needs are properly cared for in emergency situations including the hazards of concern.</p> <p>Solution: The Township will develop a plan and strategy to ensure that residents with functional needs are properly cared for in an emergency.</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 5 | 3 years | Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County social service agencies | Township Budget | Residents with functional needs will be better protected. | Staff Time | High | LPR, EAP | ES |
| 2023-Hamilton Township-002 | Continuity of Operations Plan | <p>Problem: The Township does not have a Continuity of Operations Plan that is developed that addresses the hazards of concern.</p> <p>Solution: The Township will develop a Continuity of Operations Plan that will address the hazards of concern.</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 5 | 1 Year | Township Administration | Township Budget | The Township will be better prepared to perform continuity of operations after a hazard event. | Staff Time | High | LPR | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------|---|--|--|-----------|--------------------|---|---|--|--------------------------|----------|---------------------|--------------|
| 2023-Hamilton Township-003 | Back-up Generators at Critical Facilities | Problem: Critical infrastructure in the Township does not have back-up generators. Solution: Seek funding for back-up generators for critical public buildings and infrastructure. | Drought, Earthquake, Extreme Temperature, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado | 2 | 5 years | Hamilton Township Administration, Franklin County EM&HS | Township budget, FEMA BRIC | Medium | Medium | Medium | SIP | PR |
| 2023-Hamilton Township-004 | Repetitive Loss Area Mitigation | Problem: Portions of the Township experienced repetitive loss due to flooding. Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | Flood | 6 | 4 years | Hamilton Township, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC; Township budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.

- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.15-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-----------------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023- Hamilton Township-001 | Functional Needs during Emergency | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 11 | High |
| 2023- Hamilton Township-002 | Continuity of Operations Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 12 | High |
| 2023- Hamilton Township-003 | Back-up Generators at Critical Facilities | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 7 | Medium |
| 2023- Hamilton Township-004 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.16 VILLAGE OF HARRISBURG

The Village of Harrisburg did not participate in the 2023 update of the Franklin County HMP. If the Village chooses to participate in the future, this annex will be updated accordingly, and the Village will follow the linkage procedures as outlined in Appendix H (Linkage Procedures).

9.16.1 Hazard Mitigation Planning Team

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.16-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|---|
| Name/Title: | Michael Lytle/Mayor | Name/Title: | - |
| Address: | 1040 W. Franklin Street, Kenton, OH, 43326 | Address: | - |
| Phone Number: | 419-674-2222 | Phone Number: | - |
| Email: | mlytle@harrisburgoh.com | Email: | - |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Michael Lytle/Mayor | | |
| Address: | 1040 W. Franklin Street, Kenton, OH, 43326 | | |
| Phone Number: | 419-674-2222 | | |
| Email: | mlytle@harrisburgoh.com | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.16.2 Municipal Profile

The Village of Harrisburg is in northern Franklin County and is bordered by the City of Worthington to the southwest. The Village is surrounded by Sharon Township as well as the outskirts of Columbus City. The City is located to the west of Rush Run Creek.

According to the American Community Survey, the 2021 population for the Village of Harrisburg was 376, a 17.5 percent increase from the 2010 Census population of 320. Data from the 2021 American Community Survey indicates that 4.3 percent of the population is 5 years of age or younger and 26.3 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.16.3 Jurisdictional Capability Assessment and Integration

The Village of Harrisburg performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Village capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

The Village of Harrisburg is a small community with minimal capabilities. The following provides information regarding the Village’s current capabilities.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Harrisburg and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.16-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Ohio Building Code & Residential Code of Ohio | County | Authority for adopting is Franklin County Board of Commissioners. Administered by Economic Development & Planning Department (EDP) |
| <p><i>How does this reduce risk?</i> Franklin County has adopted 2019 Residential Code of Ohio, which regulates 1- 2-, and 3-family dwellings/residential homes. Section 307.37 (April 6, 2007) allows for freedom of adoption when it comes to county building codes. The 2019 Residential Code of Ohio requires the approval and inspection of all electrical, gas, mechanical and planning uses. The Residential code gives builders a pre-identified checklist prior to construction leading to safer actions to accomplish goals.</p> <p>The Franklin County Building Department is responsible for issuing building permits for 1-, 2- and 3-family residential structures and associated development. The State of Ohio issues commercial building permits. Any projects in Brown, Clinton, Franklin, Hamilton, Madison, Mifflin, Norwich, Pleasant, Sharon, and Truro townships must apply for a Certificate of Zoning Compliance through the Franklin County EDP.</p> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Homeowners and/or building contractors are required to obtain a zoning compliance from the townships of Blendon, Canal Winchester, Jackson, Jefferson, Perry, Plain, Prairie, or Washington and then apply to the County Building Department for the building permit. In the villages of Harrisburg, Lockbourne, Minerva Park, Riverlea, Urbancrest and Valleyview, homeowners and building contractors are required to obtain a zoning compliance from the village and apply to the Department for the building permit. Groveport and Obetz will issue both the zoning compliance and the building permits. | | | | |
| Zoning/Land Use Code | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Subdivision Ordinance | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Site Plan Ordinance | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Wellhead Protection | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | - | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Capital Improvement Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Floodplain Management or Watershed Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Open Space Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Shoreline Management Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Agriculture Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Tourism Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | - | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Continuity of Operations Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Strategic Recovery Planning Report | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Threat & Hazard Identification & Risk Assessment (THIRA) | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Harrisburg to oversee and track development.

Table 9.16-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--|
| Do you issue development permits? • If yes, what department is responsible? | No | This is performed at the county level. |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | This is performed at the county level. |
| Do you have a buildable land inventory? • If yes, please describe | No | This is performed at the county level. |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Harrisburg and their current responsibilities that contribute to hazard mitigation.

Table 9.16-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|----------------------------------|---------------------|--|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | No | - |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | No | - |
| Construction/Building/Code Enforcement Department | No | - |
| Emergency Management/Public Safety Department | No | - |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | No | - |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | No | - |
| Mutual aid agreements | No | - |
| Human Resources Manual | No | - |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | - |
| Engineers or professionals trained in building or infrastructure construction practices | No | - |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to the Village of Harrisburg.

Table 9.16-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | - |
| Capital improvements project funding | - |
| Authority to levy taxes for specific purposes | - |
| User fees for water, sewer, gas or electric service | - |
| Impact fees for homebuyers or developers of new development/homes | - |
| Stormwater utility fee | - |
| Incur debt through general obligation bonds | - |
| Incur debt through special tax bonds | - |
| Incur debt through private activity bonds | - |
| Withhold public expenditures in hazard-prone areas | - |
| Other federal or state Funding Programs | - |
| Open Space Acquisition funding programs | - |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | - |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Harrisburg.

Table 9.16-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|---|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | No | - |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | Yes | The Village has a social media page that they share importation information with their residents. |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | No | - |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | No | - |

Community Classifications

The table below summarizes classifications for community programs available to the Village of Harrisburg.

Table 9.16-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.

- Weak: Capacity does not exist or could use substantial improvement.

Table 9.16-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.16.4 National Flood Insurance Program Compliance

The Village of Harrisburg does not participate in the National Flood Insurance Program. Therefore, NFIP statistics and NFIP summary were not provided.

9.16.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Franklin County EDP is responsible for issuing building permits for 1-, 2-, and 3-family structures in unincorporated areas and seven villages of Franklin County. These villages include Canal Winchester, Harrisburg, Lockbourne, Minerva Park, Riverlea, Urbancrest and Valleyview. Multi-family and commercial building permits are through the applicable commercial building department. Generally, the State of Ohio, Department of Commerce, Division of Industrial Compliance is responsible for issuing commercial building permits in unincorporated areas; however, some townships have formed their own building departments or contract with other municipalities to provide this service in their township. Townships with commercial building departments include Blendon, Clinton, Franklin, Jefferson, and Prairie. The City of Groveport issues commercial building permits for Madison Township.

Table 9.16-9. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | - | - | - | - | - | - | - | - | - |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | - | - | - | - | - | - | - | - | - | - |

Table 9.16-10. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

9.16.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Village of Harrisburg’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Village of Harrisburg has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.16-1. Village of Harrisburg Hazard Area Extent and Location Map

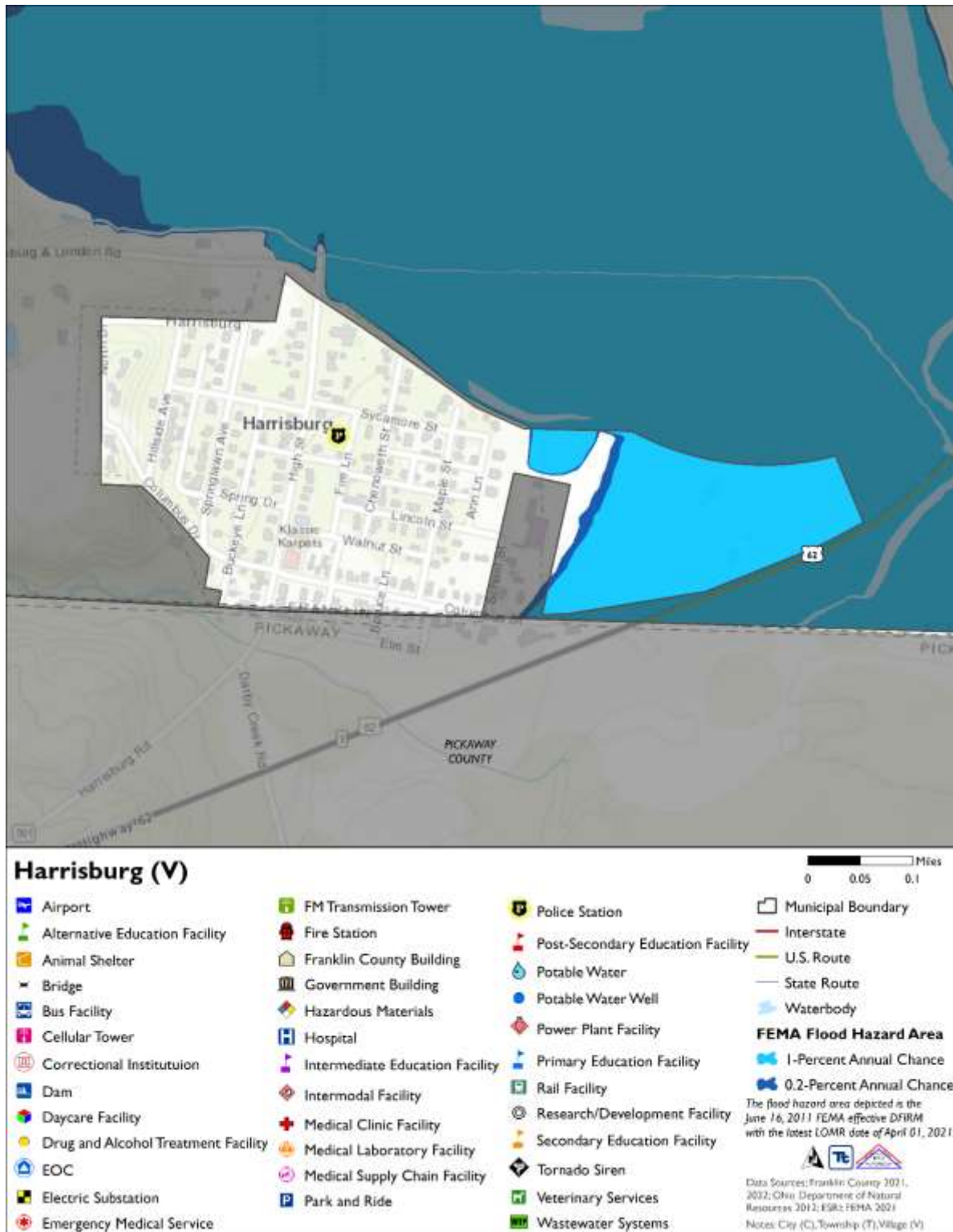


Figure 9.16-2. Village of Harrisburg Hazard Area Extent and Location Map

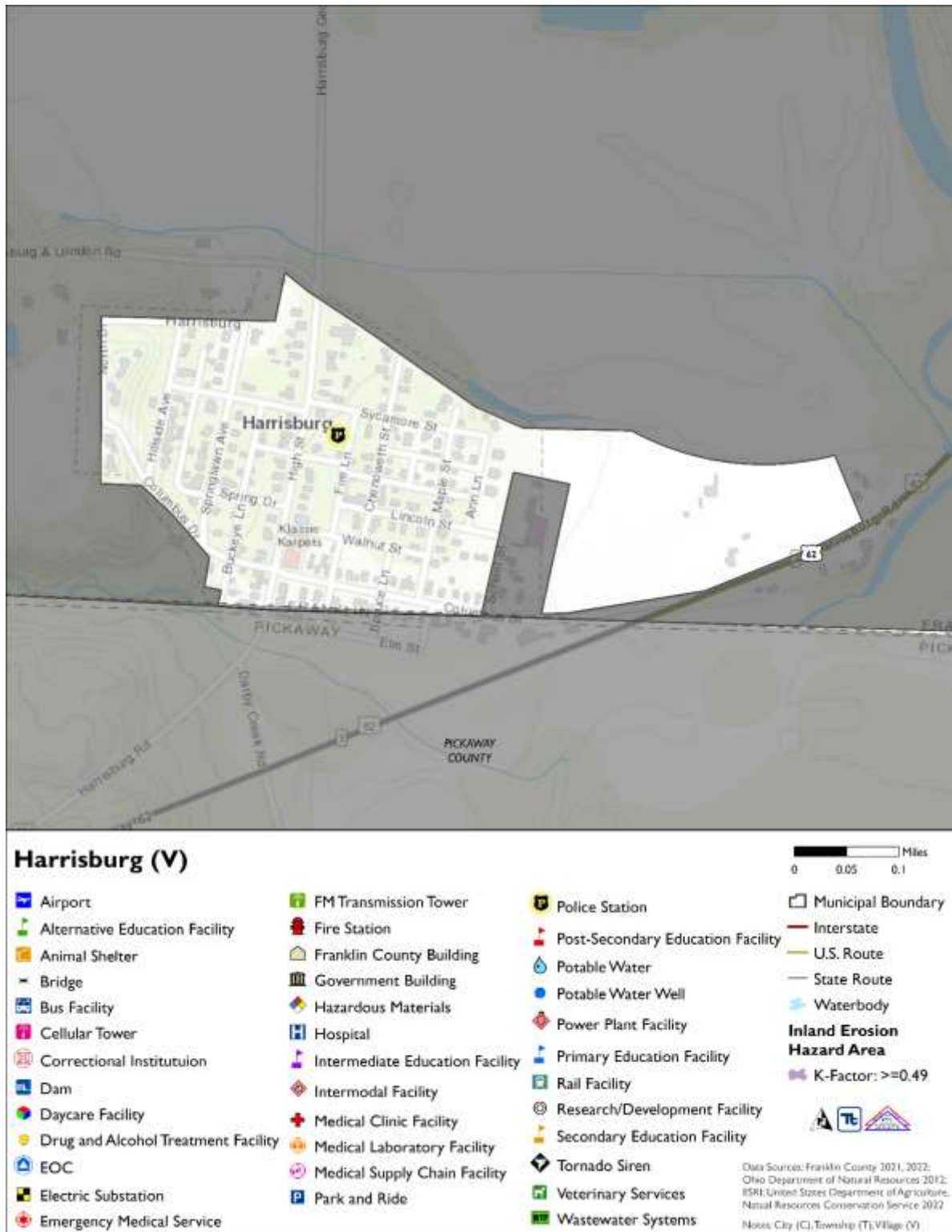
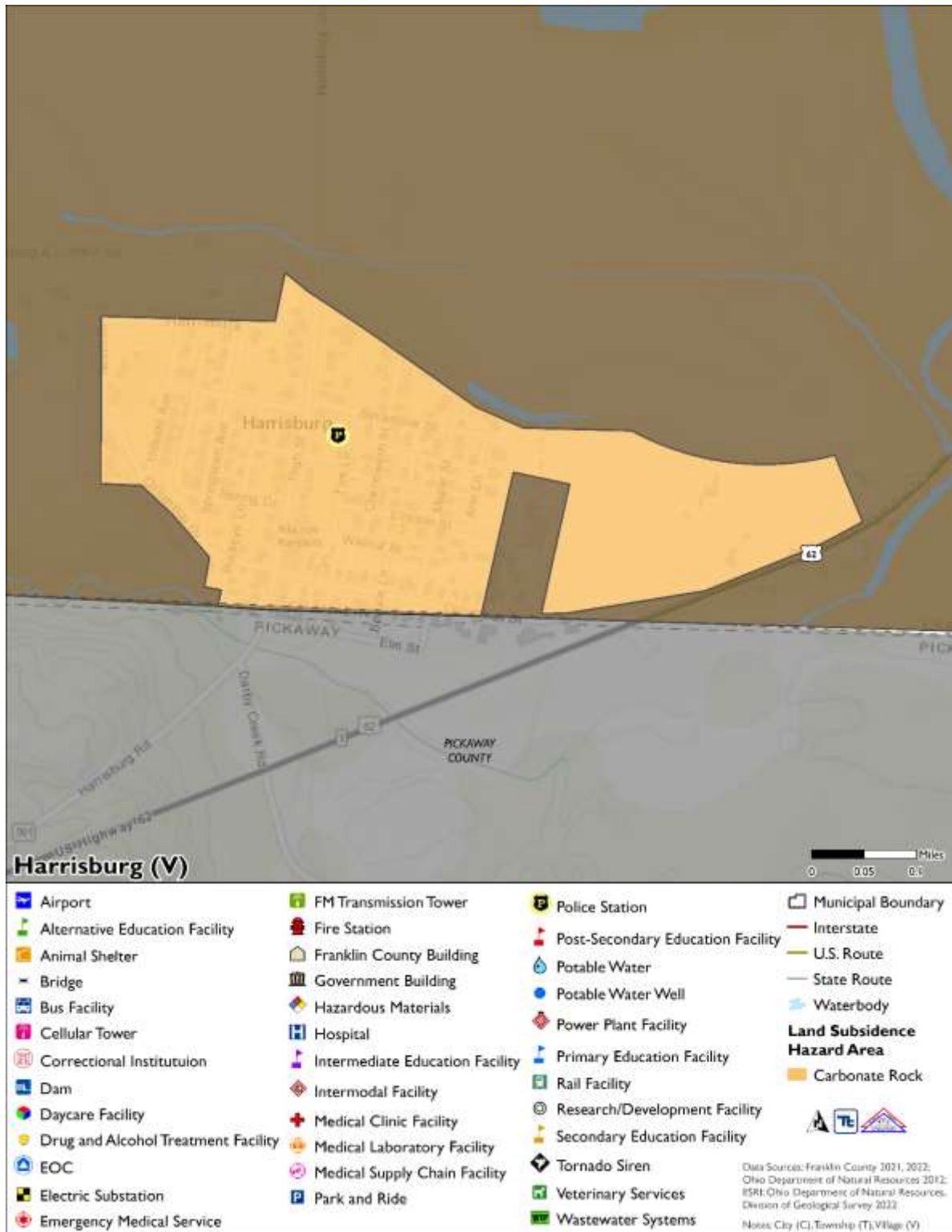


Figure 9.16-3. Village of Harrisburg Hazard Area Extent and Location Map



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Village of Harrisburg’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Village of Harrisburg experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.16-11. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Village did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Village did not experience any notable damages or losses. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Village did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Harrisburg.

Table 9.16-12. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.16-13. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Village of Harrisburg

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | - |
| Inland Erosion (K-Factor: >= 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 1 | 1 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

Springwater Run Creek will flood the park which borders the waterway.

9.16.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.16-14. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|---|--|---|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (1500 / 3 months) | Village Administration and Mayor's office | No Progress | No | - | - |
| Purchase Tornado Sirens through Franklin County Emergency Management & Homeland Security. (60,000 / 4 months) | Village Administration and Mayor's office | No Progress | No | - | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Village of Harrisburg identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, the Village of Harrisburg has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.16-15. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | | | | | | | | | | |
| Disease Outbreak | | | | | | | | | | |
| Drought | | | | | | | | | | |
| Earthquake | | | | | | | | | | |
| Extreme Temp | | | | | | | | | | |
| Flood | | | | | | | | | | |
| Geologic | | | | | | | | | | |
| Invasive Species | | | | | | | | | | |
| Severe Summer Weather | | | | | | | | | | |
| Severe Winter Weather | | | | | | | | | | |
| Tornado | | | | | | | | | | |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.16-15)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Village of Harrisburg will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.16-16. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|----------------------------|-------------------------------------|---------------------------|-----------|--------------------|---------------------------|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

*Mitigation initiative is related to a critical facility and/or community lifeline
 Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.

- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.16-17. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| | All-Hazards Education Campaign | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 10 | High |
| | Alert Franklin County Campaign | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 9 | High |
| | Locke Meadow Park Flood Mitigation Measures | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.17 CITY OF HILLIARD

This section presents the jurisdictional annex for the City of Hilliard that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Hilliard participated in the planning process, an assessment of the City of Hilliard’s risk and vulnerability, the different capabilities used in the City of Hilliard, and an action plan that will be implemented to achieve a more resilient community.

9.17.1 Hazard Mitigation Planning Team

The City of Hilliard identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Hilliard departments. The City Manager represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.17-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|---|
| Name/Title: | Michelle Crandall, City Manager | Name/Title: | Sandi Hopkins, Administrative Assistant |
| Address: | 3800 Municipal Way, Hilliard, OH 43026 | Address: | 3800 Municipal Way, Hilliard, OH 43026 |
| Phone Number: | 614-876-7361 | Phone Number: | 614-876-7361 |
| Email: | mcrandall@hilliardohio.gov | Email: | SHopkins@hilliardohio.gov |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Clark Rausch/City Engineer | | |
| Address: | 3800 Municipal Way, Hilliard, OH, 43026 | | |
| Phone Number: | 614-876-7361 | | |
| Email: | - | | |
| Additional Contributors: | | | |
| Name/Title: | Jeanne Amicon, Permit Tech, Building Standards Division, Community Development Department | | |
| Method of Participation: | Provided key input in the planning process. | | |
| Name/Title: | Dan Ralley | | |
| Method of Participation: | Provided key input in the planning process. | | |
| Name/Title: | Ron Clark | | |
| Method of Participation: | Provided key input in the planning process. | | |

9.17.2 Municipal Profile

The City of Hilliard is in the northwest corner of Franklin County. Located 14 miles northwest of downtown Columbus, the City of Hilliard is known for its extensive park system, paved scenic bike trails, one-of-a-kind museums, home-grown cultural and historical offerings, unique dining, and special events. The City of Hilliard has a total area of 13.34 square miles, 13.17 square miles of land and 0.17 square miles of water.

According to the U.S. Census, the 2020 population for the City of Hilliard was 37,132, a .6 percent decrease from the 2010 Census population. Data from the 2020 U.S. Census indicate that 5.8 percent of the population is 5 years of age or younger and 10.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.17.3 Jurisdictional Capability Assessment and Integration

The City of Hilliard performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Hilliard to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Hilliard and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.17-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Chapter 1301, November 1, 2017 | Local | Hilliard |
| <i>How does this reduce risk?</i> When specifications and drawings submitted are found to conform to the requirements of the OBC, RCO, OMC, or the Zoning Code of the City, the Building Standards Director/CBO or designee shall issue a permit. One copy of such stamped specification and plans shall be made available to the applicant and shall be kept at the site of the proposed work through its construction period. | | | | |
| Zoning/Land Use Code | Yes | 1102, February 25, 2019 | Local | Hilliard |
| <i>How does this reduce risk?</i> The purpose of this Zoning Code is to promote the public health, safety, morals, comfort and general welfare of the City and its residents; to conserve and preserve the value of property; to facilitate the provision of roads, public utilities, water, sewerage, parks, and other public requirements; and decrease or avoid congestion on public streets and highways. | | | | |
| Subdivision Ordinance | Yes | 1188, 1115.04 Big Darby Accord | Local | Community Development |
| <i>How does this reduce risk?</i> In their interpretation and application, the provisions of these Subdivision Regulations shall be held to be the minimum requirements adopted for the protection of the public health, safety and welfare. To protect the public among other purposes, such provisions are intended to provide for a permanently wholesome community environment, adequate public services and safe streets and highways. | | | | |
| Site Plan Ordinance | Yes | 1130, October 27, 2014 | Local | Community Development |
| <i>How does this reduce risk?</i> The purpose of this chapter is to establish a uniform set of requirements for the planning and design of developments within the City in order to achieve the following objectives: (a) To determine compliance with the provisions of this code; (b) To promote the orderly development of the City; (c) To prevent depreciation of land values; (d) To ensure a consistent level of quality throughout the community; (e) To ensure a harmonious relationship between new development and the existing natural and manmade surroundings; (f) To achieve the goals and principles of the City of Hilliard Comprehensive Plan; (g) To promote consultation and cooperation between applicants and the City in order that applicants may accomplish their objectives in the utilization of land, consistent with the public purposes of this code and the comprehensive plan. | | | | |
| Stormwater Management Ordinance | Yes | Chapter 951, December 21, 2009 | Local | Community Development |
| <i>How does this reduce risk?</i> The purpose of the Stormwater Management provision contained in this chapter and other related provisions contained elsewhere in the Code is to provide for effective management and financing of a stormwater system within the City of Hilliard. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | Yes | 1115.04 Big Darby Accord | Local | Community Development |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | Yes | 951, 1115.04 Big Darby Accord | Local | Community Development |
| <i>How does this reduce risk?</i> The primary mission of the Accord is to preserve, protect and improve the Big Darby Watershed's unique ecosystem, and to promote responsible growth within environmentally sensitive areas. The Hilliard Conservation District is created to promote the general public | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| welfare, encourage the efficient use of land and resources, promote greater efficiency in public utility services, and encourage innovation in the planning and building of all types of development. | | | | |
| Flood Damage Prevention Ordinance | Yes | Chapter 1305.05, October 11, 2021 | Local | Community Development |
| <i>How does this reduce risk?</i> A development permit shall be obtained from the City Engineer before construction or development begins within any area of special flood hazard. | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Southwest Area Plan Clinton-Mifflin Land Use Plan | Local | Planning Department |
| <i>How does this reduce risk?</i> In 2021, the City of Hilliard launched a process called Hilliard by Design to create a major update to the city's 2011 Comprehensive Plan. The process led to a bold vision, a series of big ideas, goals, and actions that are based on the values, needs, and aspirations of the community. This plan sets the direction for the city's growth and development and serves as a guide for decision-makers and the community for future development and many aspects of our city's quality of life. | | | | |
| Capital Improvement Plan | Yes | 2023-2027 | Local | Hilliard |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | Yes | July 21, 2022 | Local | Hilliard |
| <i>How does this reduce risk?</i> The City of Hilliard is required to prepare a stormwater management program (SWMP) in accordance with 40 CFR 123.25 and Ohio law (OAC 3745-39). This document outlines the City's program to develop, implement and enforce a stormwater management program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate requirements of the Clean Water Act (CWA) in accordance with the Ohio Environmental Protection Agency (OEPA) National Pollutant Discharge Elimination System (NPDES) Phase II program. | | | | |
| Open Space Plan | Yes | September 10, 2015 | Local | Hilliard Administration |
| <i>How does this reduce risk?</i> Examines in greater detail, the specific needs of the City's existing and future parks and public spaces to best serve City residents. | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | Yes | 1115.04 Big Darby Accord | Local | Hilliard |
| <i>How does this reduce risk?</i> Citizens receive a wide range of benefits from trees and urban forests, including recreational opportunities, energy conservation, protection from sun and heat, improved stormwater management, enhanced animal and plant biodiversity, increased property values, and more. | | | | |
| Economic Development Plan | Yes | 2022 | Local | Hilliard |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Hilliard boasts an educated workforce and developmental opportunities. The Ohio State University, Capital University, Franklin University, Otterbein University, and more are all within a short commute. The plan evaluates economic opportunities in the City. | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | Yes | September 12, 2022 | Local | Hilliard |
| <i>How does this reduce risk?</i> Each fall, the City develops and updates this plan based on fiscal constraints and City Council priorities. All new projects in the 2022-2026 CIP have components that address safety needs, such as roundabouts (mostly single lane), crosswalk improvements, medians, and installation of shared-use path and sidewalks. | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Continuity of Operations Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the City of Hilliard to oversee and track development.

Table 9.17-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--|
| Do you issue development permits? • If yes, what department is responsible? | Yes | Community Development |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | Floodplain layer in GIS tied to permitting |
| Do you have a buildable land inventory? • If yes, please describe | N/A | - |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Hilliard and their current responsibilities that contribute to hazard mitigation.

Table 9.17-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|---------------------|---|
| Administrative Capability | | |
| Planning Board | Yes | The Planning and Zoning Commission is composed of seven Hilliard citizens who serve four-year terms. P&Z advises on land use, planning issues, and proposed zoning code amendments. It also reviews zoning requests, conditional use requests, plats, development plans, and requests for sign variances. |
| Zoning Board of Adjustment | Yes | The Board of Zoning Appeals consists of seven members who serve five-year City Council appointments. The board rules on variances to the City's zoning code, such as setbacks for decks and fences. |
| Planning Department | Yes | The Planning Division prepares staff reports concerning development applications and presents to the Planning and Zoning Commission and the Board of Zoning Appeals, and occasionally attends Council meetings to discuss zoning and development proposals. Those looking for building permit applications, property inspections, sign and fence permits, or to report a zoning violation should contact the Planning Division. |
| Mitigation Planning Committee | No | |
| Environmental Board/Commission | Yes | The Environmental Sustainability Commission reviews existing environmental policies and practices. The ESC advises City Council and other City officials on programs that help Hilliard reach its sustainability goals. Other responsibilities include reviewing environmental trends affecting the community, determining community priorities, and helping other City boards and commissions determine if new proposals comply with sustainability goals. |
| Open Space Board/Committee | Yes | The committee will provide recommendations and advice on a variety of topics, including development of existing parkland; recreational facilities; trails and bikeways; health, wellness, and recreational programming; and updates to strategic plans. Major topics to be considered will include the future Community Center and the development of athletic fields and other park amenities. |
| Economic Development Commission/Committee | Yes | Hilliard's Finance Department pays the City's bills, issues debt, collects income tax through the Regional Income Tax Agency (RITA) and prepares the |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|------------------------|---|
| | | operating budget, capital improvements budget, and Comprehensive Annual Financial Report. The finance director is the City's fiscal officer, oversees the department, and serves as a financial advisor on municipal affairs for Hilliard's City Council and city manager. |
| Public Works/Highway Department | Yes | <p>The Transportation and Mobility Division is responsible for transportation planning, traffic engineering, traffic safety, administration of capital transportation projects and programs, and transportation asset management programs. The Division provides services such as:</p> <ul style="list-style-type: none"> • Development and implementation of traffic, mobility, and safety studies and plans • Management of capital transportation projects such as intersection improvements, new streets, and roundabouts from design through construction • Engineering oversight of traffic control devices, including traffic signals, traffic signs, pavement markings, pedestrian crosswalk beacons, and school zone flashing lights • Administration of annual transportation asset management programs in the public rights-of-way or easements, including the street maintenance and rehabilitation program, the sidewalk maintenance and repair program, and ADA compliance • Administration of the City's Neighborhood Traffic Calming program |
| Construction/Building/Code Enforcement Department | Yes | The Engineering Division is dedicated to assuring conformance to all engineering, development and planning standards for new developments in the City. Engineering provides services such as plan review for capital utility projects (storm sewer, sanitary sewer, and water lines) and private development engineering plans; administration and management of capital improvement programs pertaining to City owned utility infrastructure; issuance and inspection of all public right-of-way permits; administration of professional service and construction contracts for capital improvement projects pertaining to City utilities; construction inspection for all private development and public improvement projects; management of all City construction records; and all engineering and planning functions required by the City. |
| Emergency Management/Public Safety Department | No | - |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Hilliard residents are urged to sign up for a new emergency communications tool, Smart911, which gives those who answer local 911 calls vital information to share with other first responders. |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Stormwater Maintenance |
| Mutual aid agreements | No | - |
| Human Resources Manual | Yes | Hilliard's Human Resources Department provides assistance, support and direction on employee recruitment and compensation, labor relations and collective bargaining, disciplinary and grievance hearings, work rules and policies, citywide safety and training programs as well as employee appraisals and development. The department also oversees regulatory compliance under various federal and state laws. |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | - |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | 9 – engineers, construction inspectors, building inspectors |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|--|
| Planners or engineers with an understanding of natural hazards | Yes | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | 2 – GIS staff |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | Consider the following: Are data and maps from the HMP used to support documentation in grant applications? |
| Resilience Officer | No | - |
| How do your administrative/technical capabilities contribute to risk reduction in your community? Engineering Staff review plans-Engineers specialize in stormwater. | | |

Fiscal Capability

The table below summarizes financial resources available to the City of Hilliard.

Table 9.17-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | - |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | - |
| Incur debt through general obligation bonds | - |
| Incur debt through special tax bonds | - |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | Yes |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | Yes |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Hilliard.

Table 9.17-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|----------|
| Public information officer or communications office | - | - |
| Personnel skilled or trained in website development | - | - |

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|--|
| Hazard mitigation information available on your website | Yes | - |
| Social media for hazard mitigation education and outreach | Yes | Facebook |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | No | Franklin County-use for tornado and winter weather |
| Natural disaster/safety programs in place for schools | Yes | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | Yes | Website and Facebook |

Community Classifications

The table below summarizes classifications for community programs available to the City of Hilliard.

Table 9.17-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.17-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.17.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Hilliard.

Table 9.17-9. NFIP Summary

| Policies in Force | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b |
|-------------------|--------------------------------|------------------------------------|------------------------------------|---|
| 14 | 4 | \$2,387.83 | 0 | 0 |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Hilliard.

Table 9.17-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | No list. Floodplain areas shown on GIS. |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the |

| NFIP Topic | Comments |
|---|---|
| | structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value). |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded? | None |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why. | Yes |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Community Development |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | Permit review & issuance, GIS, engineering capability, coordination of NFIP requirements with Ohio DNR |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Review improvement with City's Chief Building Official. |
| What are the barriers to running an effective NFIP program in the community, if any? | None |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | 2021 |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | Ordinance 21-28 October 11, 2021 |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | Yes; Hilliard is community with a max. 0.5' floodplain increase; NFIP standard is a max. 1.0' rise in floodplain elevation |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Special Flood Hazard Area permit, NFIP Technical Bulletin 10-01 |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.17.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards

of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.17-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-----------|-------------|------------|-------------|------------|-------------|------------|-------------|-----------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 81 | - | 125 | - | 268 | - | 118 | - | 80 | - |
| Multi-Family | 0 | - | 0 | - | 0 | - | 216 | - | 4 | - |
| Other (commercial, mixed-use, etc.) | 6 | - | 10 | - | 18 | - | 19 | - | 13 | - |
| Total Permits Issued | 87 | - | 135 | - | 286 | - | 353 | - | 97 | - |

Table 9.17-12. Recent and Expected Future Development

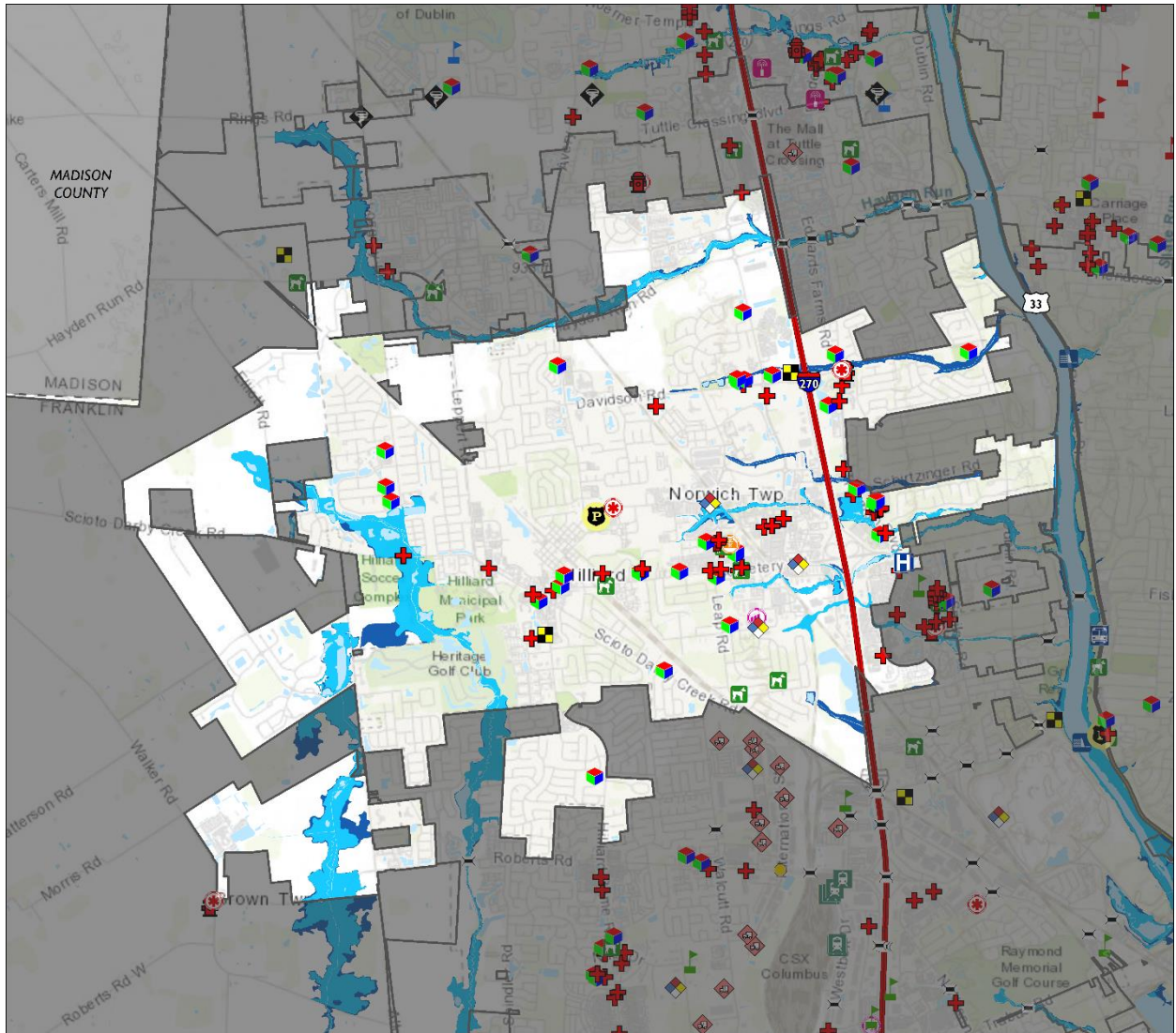
| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|---------------------------|-------------------------|-----------------------|----------------------|--|
| Recent Major Development from 2018 to Present | | | | | |
| Heritage Preserve Eagle Pointe (H.P. Apartments) | Residential | - | - | - | - |
| Tarlton Meadows AWS Davidson Road | Commercial | 5 | - | no | Data Center |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| Carr Farms | Residential | - | - | - | - |
| Alton Place AWS Cosgray Road | Residential Commercial | 5 | - | No | Residential Under Construction Data Center under initial construction |
| Hill Farms | Residential | 229 | - | No | Under Construction |

9.17.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Hilliard's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Hilliard has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.17-1. City of Hilliard Hazard Area Extent and Location Map - Flood



Hilliard (C)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service

- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems

Miles
0 0.5 1

- Municipal Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody

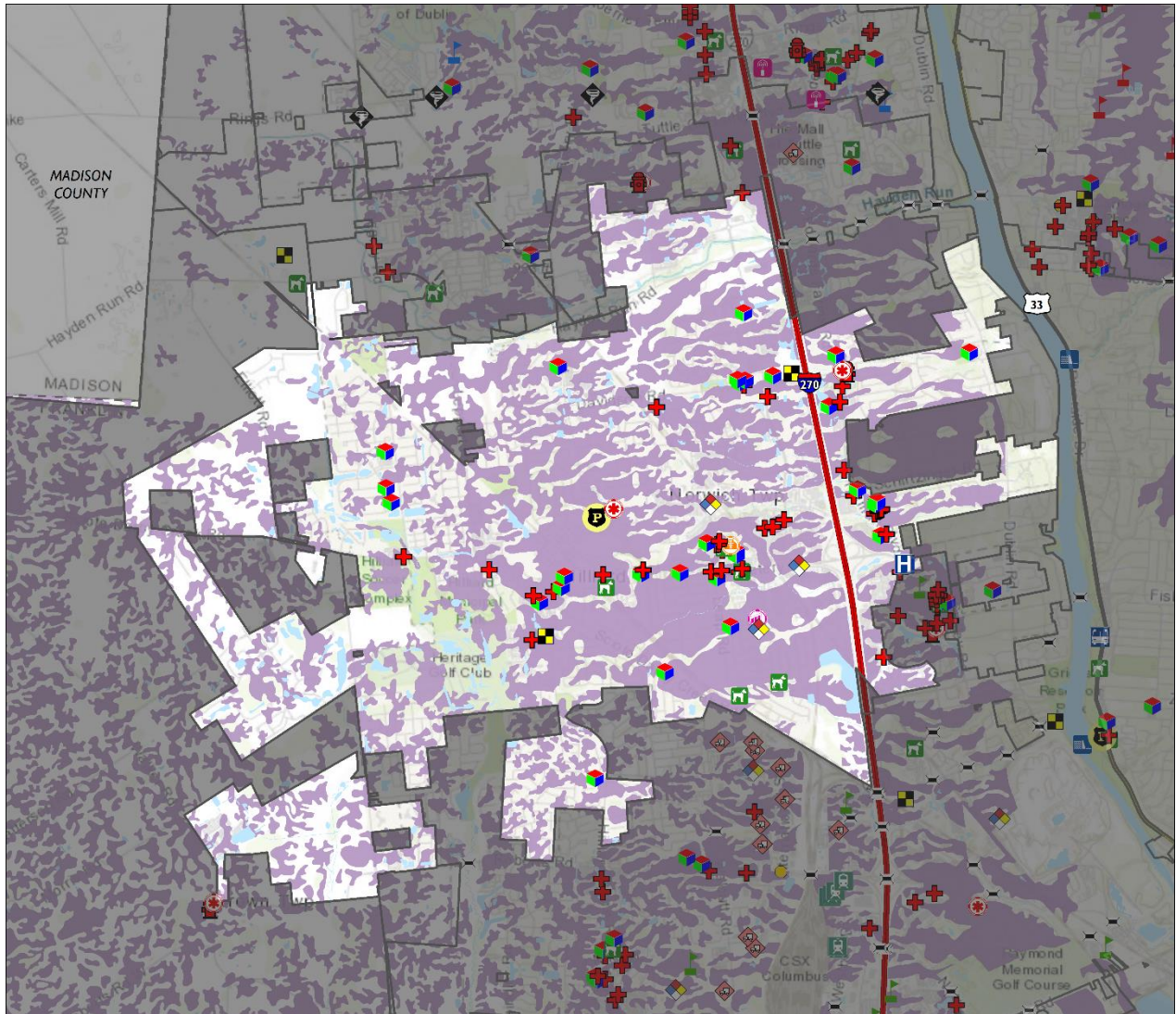
FEMA Flood Hazard Area

- 1-Percent Annual Chance
- 0.2-Percent Annual Chance

The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.

Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021
Notes: City (C), Township (T), Village (V)

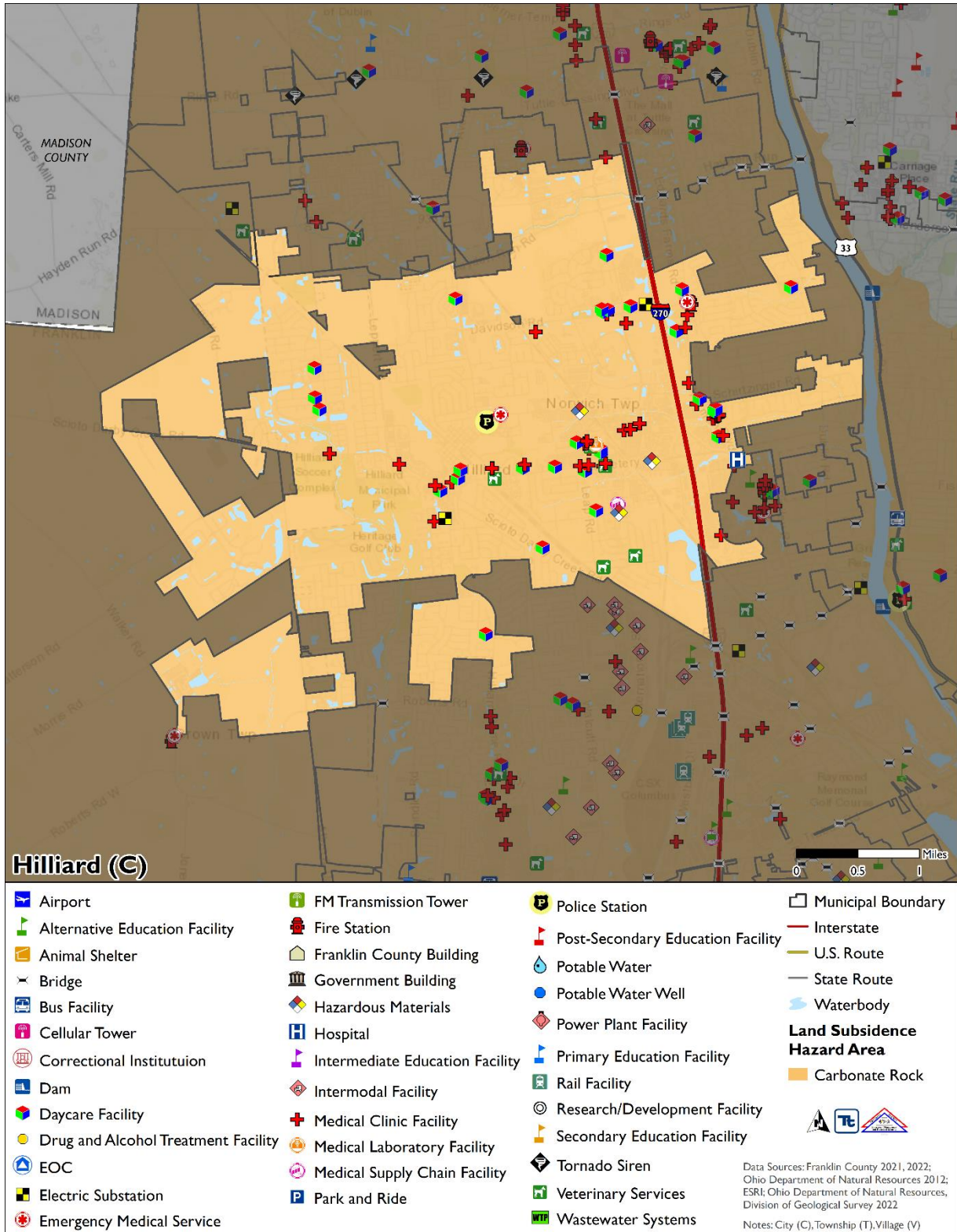
Figure 9.17-2. City of Hilliard Hazard Area Extent and Location Map – Inland Erosion



Hilliard (C)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Inland Erosion Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | K-Factor: >=0.49 |
| Dam | Intermodal Facility | Research/Development Facility | |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; United States Department of Agriculture, Natural Resources Conservation Service 2022 |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | Notes: City (C), Township (T), Village (V) |
| EOC | Medical Supply Chain Facility | Veterinary Services | |
| Electric Substation | Park and Ride | Wastewater Systems | |
| Emergency Medical Service | | | |

Figure 9.17-3. City of Hilliard Hazard Area Extent and Location Map – Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Hilliard’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Hilliard experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.17-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The City did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The City did not experience any notable damages or losses. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The City did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Hilliard. The

City of Hilliard reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.17-14. Hazard Ranking Input

| Hazard/Vulnerability | Ranking |
|-----------------------|---------|
| Dam/Levee | Low |
| Disease Outbreak | Low |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Low |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.17-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Hilliard

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 3 | 3 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 5 | 5 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | 64 | 50 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 101 | 73 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Bexley identified the following vulnerabilities within its community:

- Several areas of the City are prone to flooding from stormwater runoff.
- Many city facilities do not have back-up power to maintain critical facility services during a power outage.
- The City has limited staff and personnel resources (administrative and technical capabilities) available to contribute to hazard mitigation.

9.17.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.17-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|--|--|---|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Create wetlands and rain gardens where the stormwater retention ponds are not designed to reduce volume. Implement land management practices to reduce the volume of stormwater runoff from developed communities. | Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County Engineer's Office • City of Hilliard • Norwich Township • Ohio Department of Natural Resources (ODNR) | In Progress | Yes – refer to Table 9.17-18 below (action 2023- Hilliard-001) | Development in Big Darby Creek watershed implements practices to reduce volume of runoff. Recent Hilliard street and parking lot projects included pervious pavement to reduce volume of runoff. | - |
| Increase stormwater retention/detention features along waterways like, Holcomb Ditch, to reduce and/or slow the flow of stormwater. | Franklin County Emergency Management & Homeland Security (FCEM&HS) • Franklin County Engineer's Office • City of Hilliard • Norwich Township • Ohio Department of Natural Resources (ODNR) | Ongoing | Yes – refer to Table 9.17-18 below (action 2023- Hilliard-002) | Stream bank erosion issues along ditches leading to Scioto River. | Hilliard, Franklin County |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Hilliard identified the following mitigation efforts completed since the last HMP:

- The Franklin County Engineers have implemented a new strategy to mitigate the effects of blowing snow in rural areas of the county. The corn stalk program will reimburse farmers for leaving cornstalks standing in county roadways being purposed as a natural fence. This mitigates and results in a reduction in blowing/drifting snow.
- Franklin County Climate Resilience Plan is being implemented soon with the help of Franklin County Public Health, AEP, MORPC, the Ohio state BYRD and Sustainable Columbus. The plan is purposed to mitigate and create action items for the effects of climate change that are projected to occur in Columbus. The plan looks at the Natural hazards within the Franklin County THIRA.

Since the adoption of the County's first HMP, the City of Hilliard has made significant mitigation progress in the following areas:

- Planning to ensure residents with functional needs are properly cared for in an emergency.
- Implementing projects to increase stormwater retention/detention features along waterways to reduce and/or slow the flow of stormwater.

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Hilliard participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and the CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.17-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | X | - | X | X | - | X | - | - | X |
| Disease Outbreak | X | X | - | X | X | - | X | - | - | X |
| Drought | X | X | - | X | X | - | X | - | - | X |
| Earthquake | X | X | - | X | X | - | X | - | - | X |
| Extreme Temp | X | X | X | X | X | - | X | - | - | X |
| Flood | X | X | X | X | X | - | X | X | X | X |
| Geologic | X | X | X | X | X | - | X | - | - | X |
| Invasive Species | X | - | - | X | X | X | X | - | - | - |
| Severe Summer Weather | X | X | - | X | X | - | X | - | X | X |
| Severe Winter Weather | X | X | - | X | X | - | X | - | X | X |

| Hazard | FEMA | | | | CRS | | | | | |
|----------------|----------|----------|-----|----------|----------|----|----------|----|----|----------|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Tornado | X | X | - | X | X | - | X | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.17-17)
 Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Hilliard will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.17-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------------|--------------------------------|---|---------------------------|-----------|--------------------|--------------------------------------|---------------------------|---|-----------------|----------|---------------------|--------------|
| 2023 - Hilliard - 001 | Reduce Stormwater Runoff | Problem: Development in Big Darby Creek watershed implements practices to reduce volume of runoff. Recent Hilliard street and parking lot projects included pervious pavement to reduce volume of runoff. Solution: Create wetlands and rain gardens where the stormwater retention ponds are not designed to reduce volume. Implement land management practices to reduce the volume of stormwater runoff from developed communities. | Flood | 4 | 1 Year | City Planning/Zoning – City Engineer | BRIC, FMA, HMGP | Flooding will be significantly reduced. | >\$5,000 | H | NSP | NR |
| 2023 - Hilliard - 002 | Stormwater Retention/Detention | Problem: Stormwater runoff creates stream bank erosion issues along ditches leading to Scioto River. Solution: Increase stormwater retention/detention features along waterways like, Holcomb Ditch, to reduce and/or slow the flow of stormwater. | Flood | 4 | 1 Year | City Planning/Zoning – City Engineer | BRIC, FMA, HMGP | Flooding will be significantly reduced. | >\$5,000 | H | NSP | NR |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------------|--|---|---|-----------|--------------------|---|---------------------------|--|-----------------|----------|---------------------|--------------|
| 2023 - Hilliard - 003 | Purchase Generators for Public Buildings | Problem: Intense storms, temperature events and other natural hazards of concern lead to power and utility interruption within the City. Without backup power it makes it difficult for the City to be able to carry out continuity of operations with no power. Solution: Identify critical public building generator needs and seek funding to purchase. | Drought, Disease Outbreak, Earthquake Extreme Temp, Flood, Geologic, Severe Summer Weather Severe Winter Weather, Tornado | 4 | 5 Years | City Administration – Critical City Facility Leadership | City Budget/HMGP | City facilities will be able to operate during power outages. | >\$25,000 | H | SIP | ES |
| 2023 - Hilliard - 004 | Invasive Species Eradication Program | Problem: Invasive species are a problem in several areas, particularly those surrounding reservoirs. Solution: Start to control them by once-a-year spraying. To remove and/or chemically treat 5% of the invasive plant species each year. | Invasive Species | 4 | 5 Years | City Planning/Zoning – City Engineer | BRIC, FMA, HMGP | The City's native species will become better protected. | \$2,000 | H | NSP | PP, NR |
| 2023 - Hilliard - 005 | Continuity of Operations Plan | Problem: The City does not have a Continuity of Operations Plan that is developed that addresses the hazards of concern Solution: The City will develop a Continuity of Operations Plan that will address the hazards of concern. | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, | 5 | 1 Year | Township Administration | City Budget | The City will be better prepared to perform continuity of operations after a | Staff Time | High | LPR | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------|---------------------------------|---|---|-----------|--------------------|--|---|--|--------------------------|----------|---------------------|--------------|
| | | | Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | | | | | hazard event. | | | | |
| 2023-Hilliard-006 | Repetitive Loss Area Mitigation | <p>Problem: Portions of the City experienced repetitive flooding.</p> <p>Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity.</p> | Flood | 6 | 4 years | City of Hilliard, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, City budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.

- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.17-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-----------------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023 - Hilliard - 001 | Reduce Stormwater Runoff | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 12 | High |
| 2023 - Hilliard - 002 | Stormwater Retention/Detention | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 12 | High |
| 2023 - Hilliard - 003 | Purchase Generators for Public Buildings | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023 - Hilliard - 004 | Invasive Species Eradication Program | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 11 | High |
| 2023 - Hilliard - 005 | Continuity of Operations Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 12 | High |

| | | | | | | | | | | | | | | | | | |
|-----------------------|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------|
| 2023 - Hilliard - 006 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |
|-----------------------|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------|

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.18 TOWNSHIP OF JACKSON

This section presents the jurisdictional annex for the Township of Jackson that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Township of Jackson participated in the planning process, an assessment of Jackson Township’s risk and vulnerability, the different capabilities used in the Township of Jackson, and an action plan that will be implemented to achieve a more resilient community.

9.18.1 Hazard Mitigation Planning Team

The Township of Jackson identified the hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Jackson Township departments. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.18-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|---|
| Name/Title: | Shane Farnsworth, Township and Zoning Administrator | Name/Title: | - |
| Address: | 3756 Hoover Road, Grove City, Ohio 43123 | Address: | - |
| Phone Number: | (614) 991-6881 | Phone Number: | - |
| Email: | farnsworths@jacksontwp.org | Email: | - |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Matt Brown, Planning and Floodplain Administrator | | |
| Address: | 150 S. Front St., FSL, Suite 10, Columbus, OH 43215 | | |
| Phone Number: | (614) 525-5647 | | |
| Email: | mybrown@franklincountyohio.gov | | |
| Additional Contributors | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.18.2 Municipal Profile

The Township of Jackson is in south-central Franklin County and borders Hamilton Township, Pleasant Township, Prairie Township, and the County of Pickaway. Located 10 miles southwest of the City of Columbus, Jackson Township is known for its personal service to its community; the intimate knowledge of the community, its needs, and its people, allows for more attention to individual needs and a better understanding of local problems. Jackson Township has a total area of 35.7 square miles, 35.4 square miles of land and 0.3 square miles of water.

According to the U.S. Census, the 2020 population for Jackson Township was 46,340, a 14.11 percent increase from the 2010 Census. Data from the 2020 U.S. Census indicate that 7.1 percent of the population is 5 years of age or younger and 18.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.18.3 Jurisdictional Capability Assessment and Integration

The Township of Jackson performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Jackson Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Township of Jackson and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.18-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|------------------------------------|--|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Ohio Basic Building Code | State, County, Local | Zoning Department, Franklin County Planning Department |
| <i>How does this reduce risk?</i> Building Codes give specific regulations to ensure that buildings meet minimum health and safety standards. This code reduces casualties, costs, and damage by creating stronger buildings designed to withstand disasters. | | | | |
| Zoning/Land Use Code | Yes | Chapters 103-109, 201- 208, 301-307 | Local | Zoning Department, Zoning Board |
| <i>How does this reduce risk?</i> Specifies the allowable uses of land within each district, the regulations pertaining to the development and use of the land, and buildings are uniform for each class or kind of building. | | | | |
| Subdivision Ordinance | Yes | Chapter 101 | Local | Zoning Board |
| <i>How does this reduce risk?</i> Manage growth and development in accordance with plans, policies, and resolutions. Address public requirements and facilities, traffic circulation, stormwater management, water and sanitary services, and open space. | | | | |
| Site Plan Ordinance | Yes | Chapter 103, 107, and 108 | Local | Zoning Board |
| <i>How does this reduce risk?</i> The ordinance requires all desired changes to a property to be identified and displayed on the plan, drawn to scale. Accompanying this document, a description of the special conditions or circumstances giving rise to the changes must be described, as well as how the changes may impact the surrounding area. | | | | |
| Stormwater Management Ordinance | Yes | Stormwater Pollution Prevention Plan (NPDES) Co-Permittee with Franklin County Engineer | Franklin County | Franklin County |
| <i>How does this reduce risk?</i> To help improve/ in-sure proper drainage and to protect natural water ways. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | Yes | Jackson Township Comprehensive Plan, 2010 | Local | Board of Trustees, Franklin County Economic Development and Planning |
| <i>How does this reduce risk?</i> The inclusion of growth management within the Comprehensive Plan ensures that growth is appropriate, well-timed, and beneficial to the well-being of the Township. It is noted that the primary goal of the Comprehensive Plan is to provide guidance in absorbing expected growth while protecting the natural and built environment, minimizing land use conflict, and protecting the area's natural beauty. | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|------------------------------------|--|---|--|
| Flood Damage Prevention Ordinance | Yes | Special Resolution National Flood Insurance Program Regulation – September 26, 1978; Revised September 17, 2007 | County | Franklin County Planning Department |
| <i>How does this reduce risk?</i> Regulations designed to promote the public health, safety, and general welfare and to minimize public and private loss due to flooding. | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Jackson Township Comprehensive Plan, June 2010 | County | Zoning |
| <i>How does this reduce risk?</i> Provides a vision that achieves the goals of preparing for future growth, enhancing the quality of life for Jackson Township residents, and ensuring that the community is safe and well cared for. There are maps which depict the soil type and flood hazard areas. Also, there is a district for Agriculture Conservation and Stream Buffer. The plan discusses the hazards of development in the floodplain but does not note any ordinances or regulations discouraging it. | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | Yes | Franklin County Stormwater Management Plan – December 19, 2016 | Franklin County | Stormwater Executive Committee |
| <i>How does this reduce risk?</i> The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|------------------------------------|---|---|--|
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | Yes | Stormwater Pollution Prevention Plan, 2011 | Local | Service Department |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Continuity of Operations Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|------------------------------------|---|---|--|
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of the Township of Jackson to oversee and track development.

Table 9.18-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--|
| Do you issue development permits? • If yes, what department is responsible? | No | The Jackson Township Zoning Office collects Zoning Compliance applications and issues the appropriate certifications. The Franklin County Building Department is responsible for issuing building permits for 1-, 2- and 3-family residential structures and associated development. The State of Ohio issues commercial building permits. |
| If you do not issue development permits, what is your process for tracking new development? | N/A | Coordinate with the Franklin County Building Department. |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | The Township of Jackson does not track permits; it coordinates with the Franklin County Building Department to maintain its list. |
| Do you have a buildable land inventory? • If yes, please describe | No | The Franklin County Building Department and/or the Franklin County Economic Development and Planning Department may have an inventory, but the Township of Jackson does not. |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Jackson and their current responsibilities that contribute to hazard mitigation.

Table 9.18-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|----------------------------------|------------------------|--|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | Yes | The Township Zoning Commission consists of five regular members and can have up to two alternate members, a quorum of three members is required to convene a public meeting and rule on cases presented. |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | Yes | The Service Department is the Township's Public Works Department. The Service Department maintains all Township streets and rights-of way, maintains parks, cemeteries, buildings, and fire stations, collects electronic waste year-round. Coordinates fall leaf pick-ups, removes snow and ice from Township roads, among other tasks. |
| Construction/Building/Code Enforcement Department | No | - |
| Emergency Management/Public Safety Department | Yes | The Jackson Township Fire Department provides fire suppression, emergency medical service, hazardous material decontamination, as well as multiple disciplines of technical rescue. The department also operates a full-time fire prevention bureau and public safety education program. Jackson Township maintains a fleet of five engines (one in reserve), one aerial ladder, seven medic units (three in reserve), two rescue boats, one hazardous material unit, and one command vehicle. The Jackson Township Fire Department operates four full-time stations with firefighters and EMTs on staff. |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Participant in Alert Franklin County |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | The Service Department maintains all Township streets and rights-of way, maintains parks, cemeteries, buildings, and fire stations, collects electronic waste year-round. Coordinates fall leaf pick-ups, removes snow and ice from Township roads, among other tasks. |
| Mutual aid agreements | No | - |
| Human Resources Manual | Yes | Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? No. |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | Zoning Department and Zoning Board |
| Engineers or professionals trained in building or infrastructure construction practices | No | - |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | Yes | Financial Officer |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |
| How do your administrative/technical capabilities contribute to risk reduction in your community? | | |

Fiscal Capability

The table below summarizes financial resources available to Jackson Township.

Table 9.18-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|---|
| Community development Block Grants (CDBG, CDBG-DR) | - |
| Capital improvements project funding | - |
| Authority to levy taxes for specific purposes | - |
| User fees for water, sewer, gas, or electric service | - |
| Impact fees for homebuyers or developers of new development/homes | - |
| Stormwater utility fee | - |
| Incur debt through general obligation bonds | - |
| Incur debt through special tax bonds | - |
| Incur debt through private activity bonds | - |
| Withhold public expenditures in hazard-prone areas | - |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | - |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | - |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Jackson Township.

Table 9.18-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|--|
| Public information officer or communications office | Yes | Yes, the Township Administrator. |
| Personnel skilled or trained in website development | Yes | Contracted |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | Yes | The Township will use its Facebook and Twitter pages to share information on impending severe weather and will share information from the County's Emergency Management social media accounts. |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Participant in Alert Franklin County |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | Yes | The Township will utilize its social media accounts to inform residents how to protect themselves for an impending hazard. The Fire Department also has a public safety education program to discuss fire hazards. |

Community Classifications

The table below summarizes classifications for community programs available to Jackson Township.

Table 9.18-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---------|-------------------------|--------------------------------|---------------------------------|
|---------|-------------------------|--------------------------------|---------------------------------|

| | | | |
|---|----|---|---|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.18-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee Failure | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temperatures | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornadoes | Moderate |

9.18.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for Jackson Township.

Table 9.18-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|---------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Jackson (Twp) | NR | NR | NR | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Jackson Township.

Table 9.18-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | No |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | Evaluate the cost of repairs vs the pre-damaged value of structure. No substantial damage determinations made recently. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | Do not know many. |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | No, the most recent map update in 2007 did not include new analysis of streams. |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Franklin County Economic Development & Planning Department (EDP) |
| Are any certified floodplain managers on staff in your jurisdiction? | Yes |
| Do you have access to resources to determine possible future flooding conditions from climate change? | Unsure |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability) | Franklin County EDP provides permit review, response to resident enquiries about floodplains, enforcement |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Franklin County EDP will evaluate cost of improvements and current value of structure |
| What are the barriers to running an effective NFIP program in the community, if any? | None |

| NFIP Topic | Comments |
|--|--|
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | 2017 |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | Special Resolution National Flood Insurance Program Regulation |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | 2007 |
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Yes, freeboard requirement |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | Floodplain management is administered by Franklin County EDP which also administers county zoning and subdivision regulations. |

9.18.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

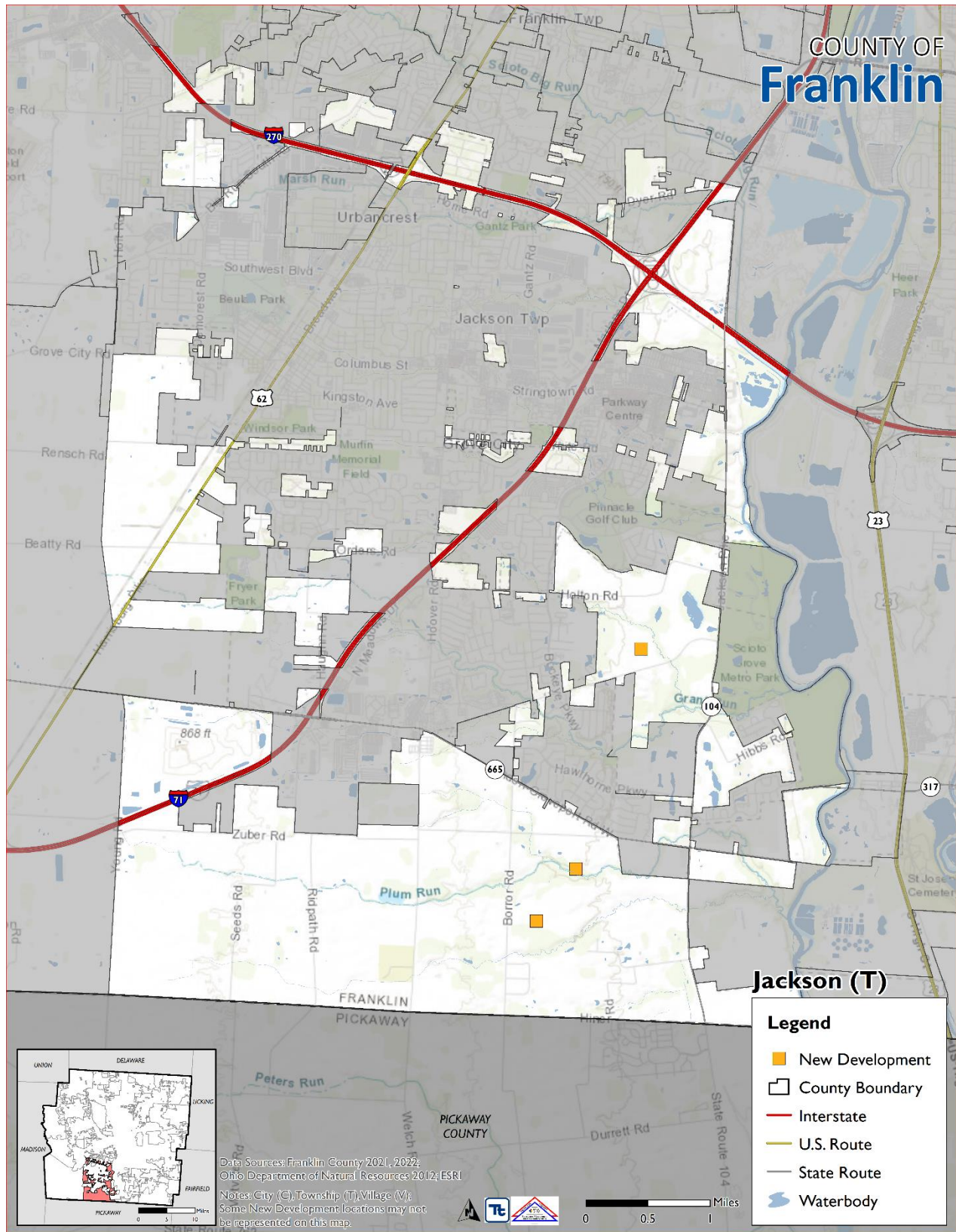
Table 9.18-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | - | - | - | - | - | - | - | - | - |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | - | - | - | - | - | - | - | - | - | - |

Table 9.18-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g., Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|--------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

Figure 9.18-1. Jackson Township New Development

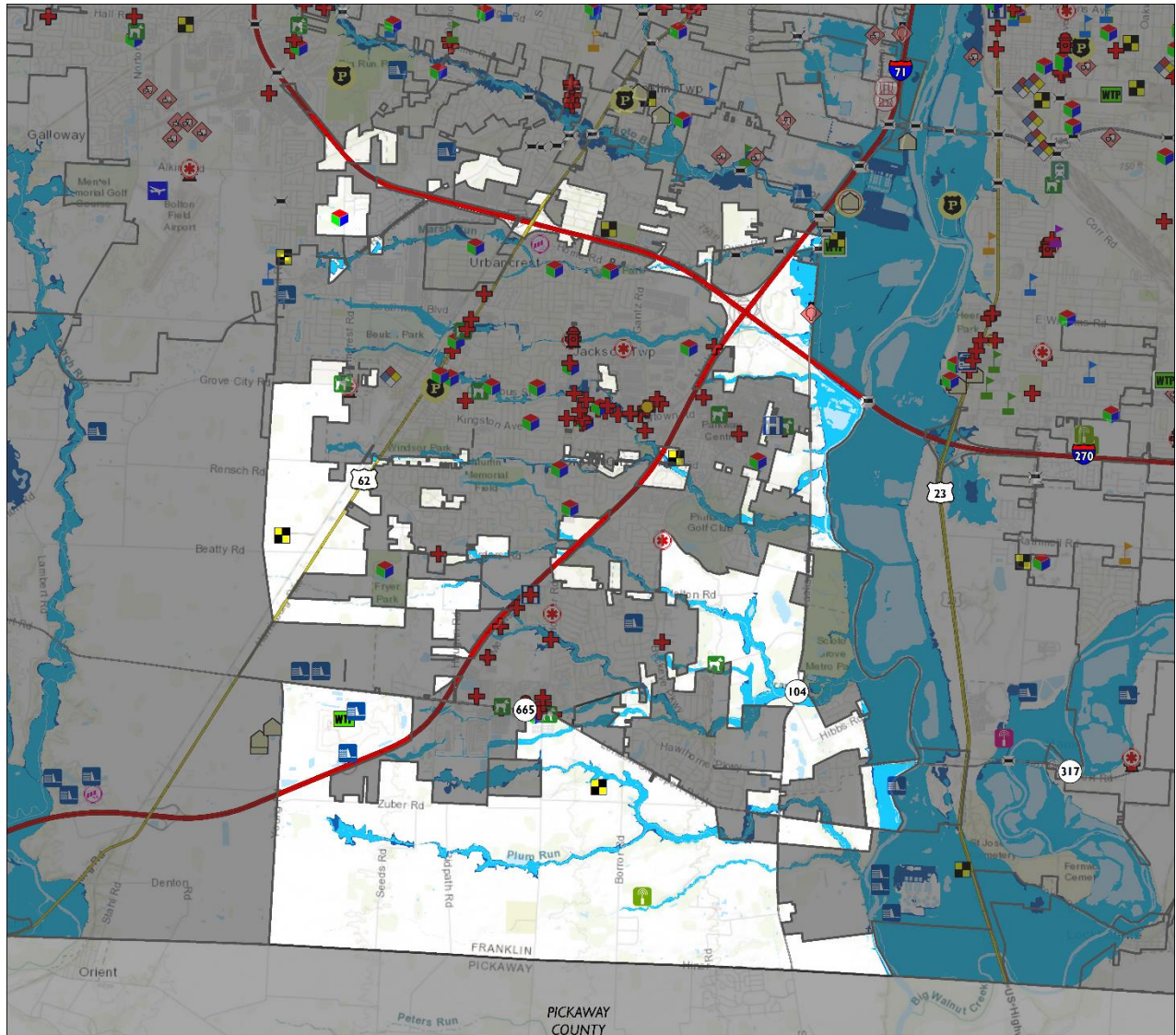


9.18.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Jackson Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Township of Jackson has significant exposure. The maps also show the location of potential new development, where available.

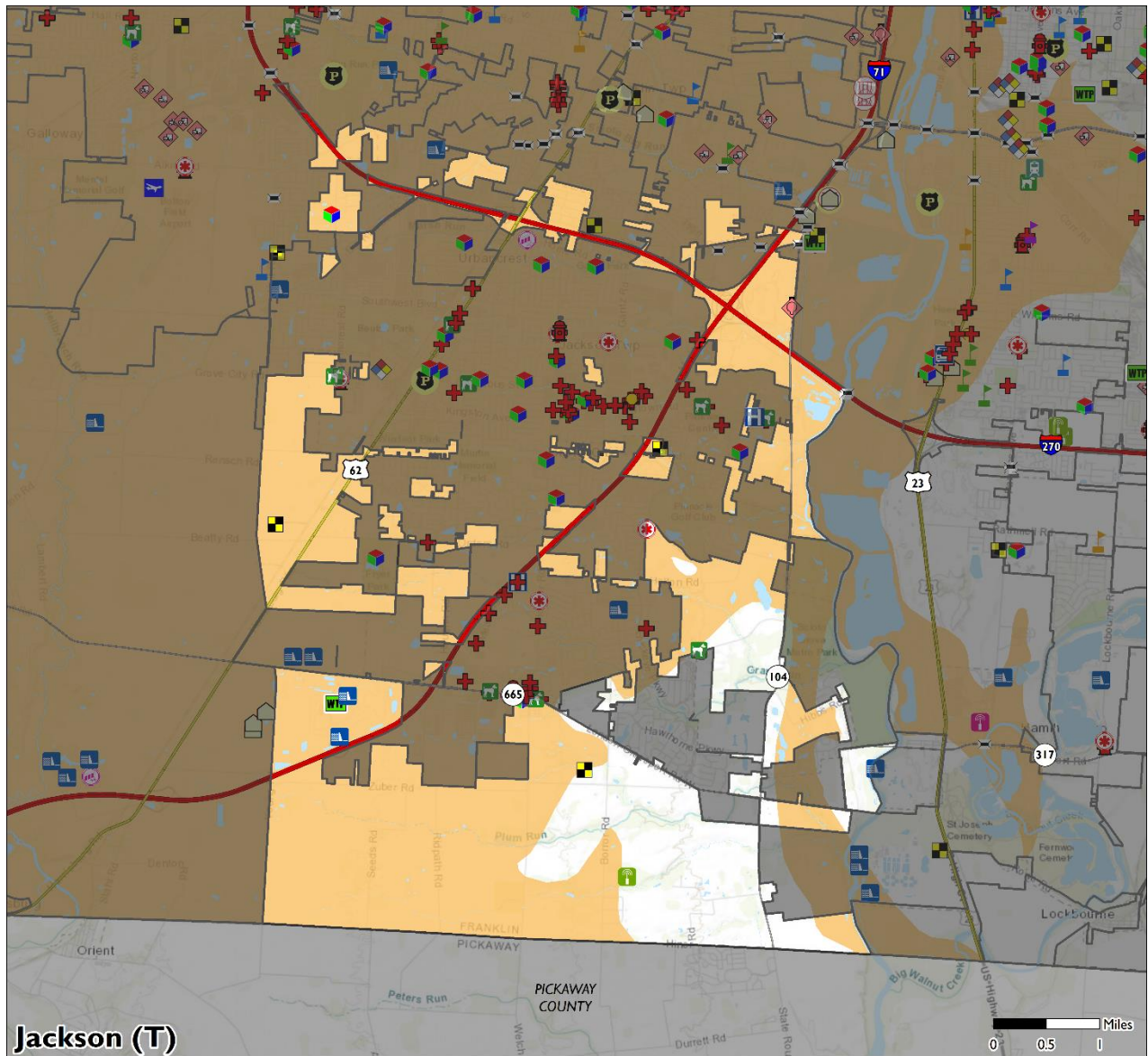
Figure 9.18-2. Jackson Township Hazard Area Extent and Location Map – Flood



Jackson (T)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | FEMA Flood Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | 1-Percent Annual Chance |
| Dam | Intermodal Facility | Research/Development Facility | 0.2-Percent Annual Chance |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | <i>The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.</i> |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | |
| EOC | Medical Supply Chain Facility | Veterinary Services | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESR: FEMA 2021 |
| Electric Substation | Park and Ride | Wastewater Systems | Notes: City (C), Township (T), Village (V) |
| Emergency Medical Service | | | |

Figure 9.18-3. Jackson Township Hazard Area Extent and Location Map – Land Subsidence



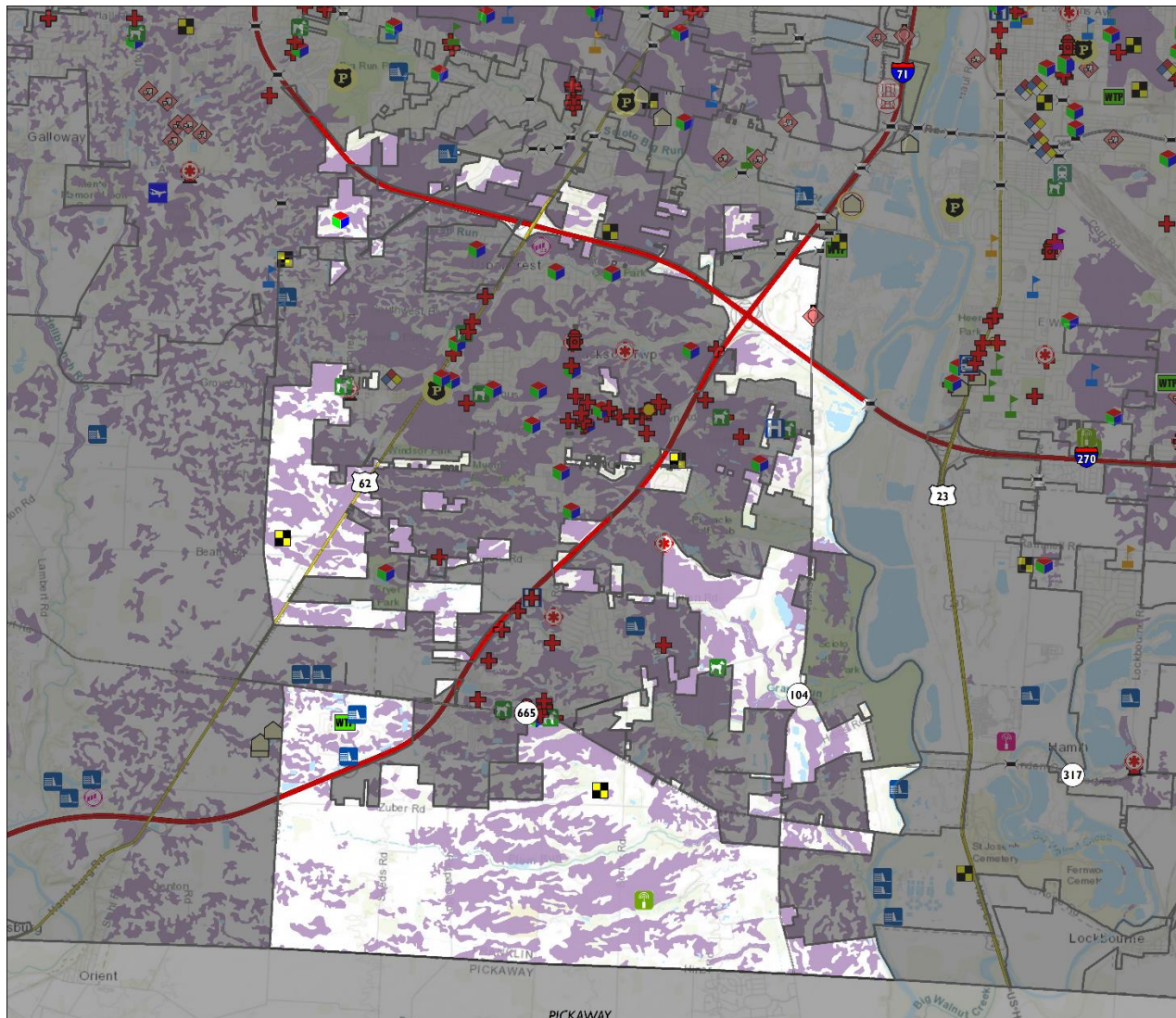
Jackson (T)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|------------------------------------|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Land Subsidence Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | Carbonate Rock |
| Dam | Intermodal Facility | Secondary Education Facility | |
| Daycare Facility | Medical Clinic Facility | Tornado Siren | |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Research/Development Facility | |
| EOC | Medical Supply Chain Facility | Secondary Education Facility | |
| Electric Substation | Park and Ride | Veterinary Services | |
| Emergency Medical Service | | Wastewater Systems | |

Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; Ohio Department of Natural Resources, Division of Geological Survey 2022

Notes: City (C), Township (T), Village (V)

Figure 9.18-4. Jackson Township Hazard Area Extent and Location Map – Inland Erosion



Jackson (T)

0 0.5 1 Miles

- | | | | |
|-------------------------------------|---------------------------------|-----------------------------------|-----------------------------------|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Inland Erosion Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | K-Factor: ≥ 0.49 |
| Dam | Intermodal Facility | Research/Development Facility | |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | |
| EOC | Medical Supply Chain Facility | Veterinary Services | |
| Electric Substation | Park and Ride | Wastewater Systems | |
| Emergency Medical Service | | | |

Data Sources: Franklin County 2021, 2022;
Ohio Department of Natural Resources 2012;
ESRI; United States Department of Agriculture,
Natural Resources Conservation Service 2022
Notes: City (C), Township (T), Village (V)

Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

Jackson Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Township of Jackson experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.18-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| April 3-4, 2018 | EF-1 Tornado | N/A | Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage. | The Township did not experience any damages or losses from this event. |
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Township did not experience any damages or losses from this event. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Township did not experience any damages or losses from this event. |
| March 2020-present | Covid-19 Pandemic, DR-4488 | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Township did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Township of Jackson. Jackson Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.18-14. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee Failure | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temperatures | Medium |
| Flood | Medium |
| Geologic (Erosion) | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornadoes | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.18-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Jackson Township

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | - |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | 6 | 5 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 9 | 8 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | 1 | 1 |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Jackson Township identified the following vulnerabilities within its community:

- The Township has limited methods for public education of all hazard risks.
- The Township has not developed public outreach regarding all hazards and the Township's susceptibility to those hazards.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.18.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.18-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|---------------------------|--|---|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding for public information including outreach projects and technical assistance to property owners. (10,000 / 1 year) | Township Trustee's Office | No Progress | Yes | Limited public outreach on all hazards and property owners are unsure how to apply for assistance. | Township Trustee's Office |
| Work with Franklin County Emergency Management and Homeland Security to develop public outreach regarding all natural hazards, and the county's susceptibility to those hazards, and make available on website. (5,000 /ongoing) | Township Trustee's Office | No Progress | Yes | Limited public outreach on all hazards. | Township Trustee's Office |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Township of Jackson identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, the Township of Jackson has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

Township of Jackson participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.18-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee Failure | - | - | - | X | - | - | X | - | - | - |
| Disease Outbreak | - | - | - | X | - | - | X | - | - | - |
| Drought | - | - | - | X | - | - | X | - | - | - |
| Earthquake | - | - | - | X | - | - | X | - | - | - |
| Extreme Temperatures | - | - | - | X | - | - | X | - | - | - |
| Flood | - | - | - | X | - | - | X | - | - | - |
| Geologic (Erosion) | - | - | - | X | - | - | X | - | - | - |
| Invasive Species | - | - | - | X | - | - | X | - | - | - |
| Severe Summer Weather | - | - | - | X | - | - | X | - | - | - |
| Severe Winter Weather | - | - | - | X | - | - | X | - | - | - |
| Tornadoes | - | - | - | X | - | - | X | - | - | - |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.18-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Jackson Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.18-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------|--------------------------------------|---|--|-----------|--------------------|--|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-Jackson-001 | Property Owner Assistance | <p>Problem: The Township has limited methods for public education of all hazard risks.</p> <p>Solution: Seek funding for public information to conduct research projects and technical assistance to property owners.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 4, 5 | 2 years | Township Trustee's Office | BRIC, HMGP, Local Funds | Medium | Low | High | EAP | PI |
| 2023-Jackson-002 | All Hazards Public Outreach Campaign | <p>Problem: The Township has not developed public outreach regarding all hazards and the Township's susceptibility to those hazards.</p> <p>Solution: Work with Franklin County EM&HS to develop a public outreach campaign, which would include the use of social media, the Township website, and quick guides.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 4, 5 | 2 years | Township Trustee's Office, Franklin County EM&HS | BRIC, HMGP, Local Funds | High | Low | High | EAP | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------|---------------------------------|--|---------------------------|-----------|--------------------|---|---|--|--------------------------|----------|---------------------|--------------|
| 2023-Jackson-003 | Repetitive Loss Area Mitigation | Problem: Portions of the Township experienced repetitive flooding. Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | Flood | 6 | 4 years | Township Trustee's Office, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.

- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.18-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-------------------|--------------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Jackson-001 | Property Owner Assistance | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 10 | High |
| 2023- Jackson-002 | All Hazards Public Outreach Campaign | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 10 | High |
| 2023- Jackson-003 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.19 JEFFERSON TOWNSHIP

This section presents the jurisdictional annex for Jefferson Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Jefferson Township participated in the planning process, an assessment of Jefferson Township’s risk and vulnerability, the different capabilities used in Jefferson Township, and an action plan that will be implemented to achieve a more resilient community.

9.19.1 Hazard Mitigation Planning Team

Jefferson Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Jefferson Township departments, including Department of Public Safety, Zoning, and Service. The Township Administrator/Public Safety Director and the Assistant Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.19-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|--|
| Name/Title: | Dion Grener, Township Administrator and Public Safety Director | Name/Title: | Kelly Kiener, Assistant Township Administrator |
| Address: | 6545 Havens Road Blacklick, Ohio 43004 | Address: | 6545 Havens Road Blacklick, Ohio 43004 |
| Phone Number: | (614) 855-4260 | Phone Number: | (614) 855-4260 |
| Email: | dgrener@jeffersontownship.org | Email: | kkiener@jeffersontownship.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Charles McCroskey, Zoning Administrator and Inspector | | |
| Address: | 6545 Havens Road, Blacklick, Ohio 43004 | | |
| Phone Number: | (614) 855-4265 | | |
| Email: | cmccroskey@jeffersontownship.org | | |
| Additional Contributors: | | | |
| Name/Title: | Bradford Shull, Fire Chief | | |

| | |
|--------------------------|--|
| Method of Participation: | Assisted in the completion of Worksheets A-E |
| Name/Title: | Joe Gerhart, Service Department Superintendent |
| Method of Participation: | Assisted in the completion of Worksheets A-E |

9.19.2 Municipal Profile

Jefferson Township is near the northeast corner of Franklin County and borders the Licking County. Located 15 miles northwest of the City of Columbus, Jefferson Township is known for its rural character, quiet atmosphere, and abundance of open space. Jefferson Township has a total area of 15.3 square miles, 14.7 square miles of land and 0.2 square miles of water.

According to the U.S. Census, the 2020 population for Jefferson Township was 14,027, a 27.84 percent increase from the 2010 Census. Data from the 2020 U.S. Census indicate that 10.4 percent of the population is 5 years of age or younger and 17.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.19.3 Jurisdictional Capability Assessment and Integration

Jefferson Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Jefferson Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Jefferson Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.19-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|--|---|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Ohio Basic Building Code | Local (commercial) Franklin County (residential) | Jefferson Township Zoning/Building & FC Development |
| <i>How does this reduce risk?</i> Provides restrictions and requirements on how buildings must be constructed. | | | | |
| Zoning/Land Use Code | Yes | Jefferson Township Zoning Resolution | Jefferson Twp | Zoning/Building |
| <i>How does this reduce risk?</i> Specifies the allowable uses of land within each district, the regulations pertaining to the development and use of the land, and buildings are uniform for each class or kind of building. Zoning ordinance discourages development in floodways, wetlands and floodplains. | | | | |
| Subdivision Ordinance | Yes | Franklin County Subdivision Regulations | Franklin County | Matt Brown |
| <i>How does this reduce risk?</i> Manage growth and development in accordance with plans, policies, and resolutions of the FCPC, county and townships and surrounding area plans. Provide for adequate and convenient open spaces for traffic, utilities, fire and maintenance forces, recreation, light and air. Provide for the preservation of natural resources, sensitive natural areas, and natural features. Provide safety from fire, flood, and other danger. Address public requirements and facilities, traffic circulation, stormwater management, water and sanitary services, open space, airport noise and hazard areas. | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | Yes | Stormwater Pollution Prevention Plan (NPDES) Co-Permittee with Franklin County Engineer | Franklin County | Franklin County |
| <i>How does this reduce risk?</i> To help improve/ in-sure proper drainage and to protect natural water ways. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | Yes | Comprehensive Plan / Land Use Plan | Local | Economic Development and Planning |
| <i>How does this reduce risk?</i> Aim to keep density to 1 unit per gross acre. | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | Special Resolution National Flood Insurance Program Regulation – September 26, 1978; Revised September 17, 2007 | County | Franklin County Planning Department |
| <i>How does this reduce risk?</i> Regulations designed to promote the public health, safety, and general welfare and to minimize public and private loss due to flooding. | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Jefferson Township Comprehensive Land Use Plan | Jefferson Township | Planning and Zoning Coordinator |
| <i>How does this reduce risk?</i> Provides a vision that achieves the goals of preparing for future growth while protecting the township's rural roots; enhancing the quality of life for Jefferson Township residents; and ensuring that the community is safe and well cared for. The plan also aims to mitigate congestion and to preserve the rural aesthetic of road corridors. | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | Yes | Franklin County Stormwater Management Plan – December 19, 2016 | County-Local Partnership | Franklin County / Jefferson Twp Service Department |
| <i>How does this reduce risk?</i> The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. Polluted stormwater runoff is often transported through municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. To address this reality, federal and state regulations require the establishment of MS4 stormwater management programs to improve the nation's waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events. The MS4 Stormwater Permit outlines six minimum measures (MCMs) that a SWMP must address. These minimum measures are: 1) public education and outreach, 2) public participation / involvement, 3) illicit discharge detection and elimination (IDDE), 4) construction site runoff control, 5) post-construction runoff control and 6) pollution prevention / good housekeeping for municipal operations. | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | No | - | - | - |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Continuity of Operations Plan | Yes | COOP Plan | Local | All |
| <i>How does this reduce risk?</i> Primarily focused on alternate locations to operate from. | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | Yes | Franklin County Risk Assessment | County | EMA |
| <i>How does this reduce risk?</i> Identifies risks associated with the hazards in the area and how to potentially mitigate those risks. | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of Jefferson Township to oversee and track development.

Table 9.19-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? • If yes, what department is responsible? | Yes | For Zoning and commercial building |
| If you do not issue development permits, what is your process for tracking new development? | No | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | - |
| Do you have a buildable land inventory? • If yes, please describe | Yes | Assessment of the capacity of land within the Township to accommodate forecasted housing and employment needs. |
| Describe the level of build-out in your jurisdiction. | N/A | The Township is primarily residential – mainly countryside residential compared to suburban. There are small areas of commercial properties, suburban offices, and community services. There are currently areas planned for new residential zoning. Portions of the Township are zoned industrial. |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Jefferson Township and their current responsibilities that contribute to hazard mitigation.

Table 9.19-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|---------------------|---|
| Administrative Capability | | |
| Planning Board | Yes | Zoning Commission: authority to recommend approval with or without conditions, or denial of requests to rezone property or change the text of the zoning resolution |
| Zoning Board of Adjustment | Yes | Board of Zoning Appeals: authority to approve or deny requests for variances, conditional uses, and appeal |
| Planning Department | Yes | Zoning and Building Department, which includes planning functions |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | Yes | Parks Board: no current responsibilities related to hazard mitigation |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | Yes | Service Department of 5 crew members, 1 foreman & Superintendent to maintain roads/ parks/ township buildings & grounds/ cemeteries/ & open spaces |
| Construction/Building/Code Enforcement Department | Yes | Zoning and Building Department (residential zoning, commercial zoning, and building); JTFD’s Community Risk Reduction Bureau responsible for enforcement of fire code |
| Emergency Management/Public Safety Department | Yes | Jefferson Township Fire Department Note: Township Administrator dual role as Public Safety Director |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Participant in Alert Franklin County, although not used by the Township; outdoor warning signals managed by FCEMHS |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Service Department are partners with FCE & Franklin Soil & Water Conservation District to follow the (NPDES) National |



| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|------------------------|--|
| | | Pollution Discharge Elimination System permit process in properly maintaining storm water drainage and run off. Response to service calls. |
| Mutual aid agreements | Yes | Fire Department specific |
| Human Resources Manual | No | - |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | Planning and Zoning Coordinator with education in City and Regional Planning |
| Engineers or professionals trained in building or infrastructure construction practices | No | - |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | Yes | Township Administrator dual role as Public Safety Director |
| Grant writer(s) | Yes | Shared across all departments |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |
| How do your administrative/technical capabilities contribute to risk reduction in your community? | | |
| The Township of Jefferson’s administrative and technical capabilities contribute to integration with the HMP and risk reduction through the review and issuance of permits and the maintenance of the Township. Together, the capabilities allow the Township to be prepared for the hazards which may impact its residents and visitors. | | |

Fiscal Capability

The table below summarizes financial resources available to Jefferson Township.

Table 9.19-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas, or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | No |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | Yes |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | Yes |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Jefferson Township.

Table 9.19-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|--|
| Public information officer or communications office | Yes | We have staff whose responsibilities include communications, but no dedicated position or department |
| Personnel skilled or trained in website development | Yes | We maintain website content internally |
| Hazard mitigation information available on your website | Yes | Link to Alert Franklin County (Everbridge) |
| Social media for hazard mitigation education and outreach | Yes | Facebook and Nextdoor used to communicate with residents |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Tornado sirens, Alert Franklin County (Everbridge, requires signup) |
| Natural disaster/safety programs in place for schools | No | Managed by school districts |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | Yes | Social media, e-newsletter, emails for HOA points-of-contact, Everbridge |

Community Classifications

The table below summarizes classifications for community programs available to Jefferson Township.

Table 9.19-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | 3 | Sept. 2018 |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | Yes | NIMS certification | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.19-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.19.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Jefferson Township.

Table 9.19-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|-----------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Jefferson (Twp) | NR | NR | NR | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Jefferson Township.

Table 9.19-10. NFIP Summary

| NFIP Topic | Comments |
|--|----------|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | No |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |

| NFIP Topic | Comments |
|--|--|
| Are any RiskMAP projects currently underway in your jurisdiction? • If so, state what projects are underway. | No |
| • How do you make Substantial Damage determinations? • How many were declared for recent flood events in your jurisdiction? | Total cost of repairs is 50 percent or more of the structure's market value before the disaster occurred, regardless of the cause of damage. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded? | 0 declarations. |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why. | Not aware of any |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Franklin County Development |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed? | County is responsible |
| Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability) | County is responsible |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | N/A |
| What are the barriers to running an effective NFIP program in the community, if any? | N/A |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | None |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | N/A |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | Special Resolution National Flood Insurance Program Regulation – September 26, 1978; Revised September 17, 2007 |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | N/A |
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | No |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | Not at Twp level |

9.19.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

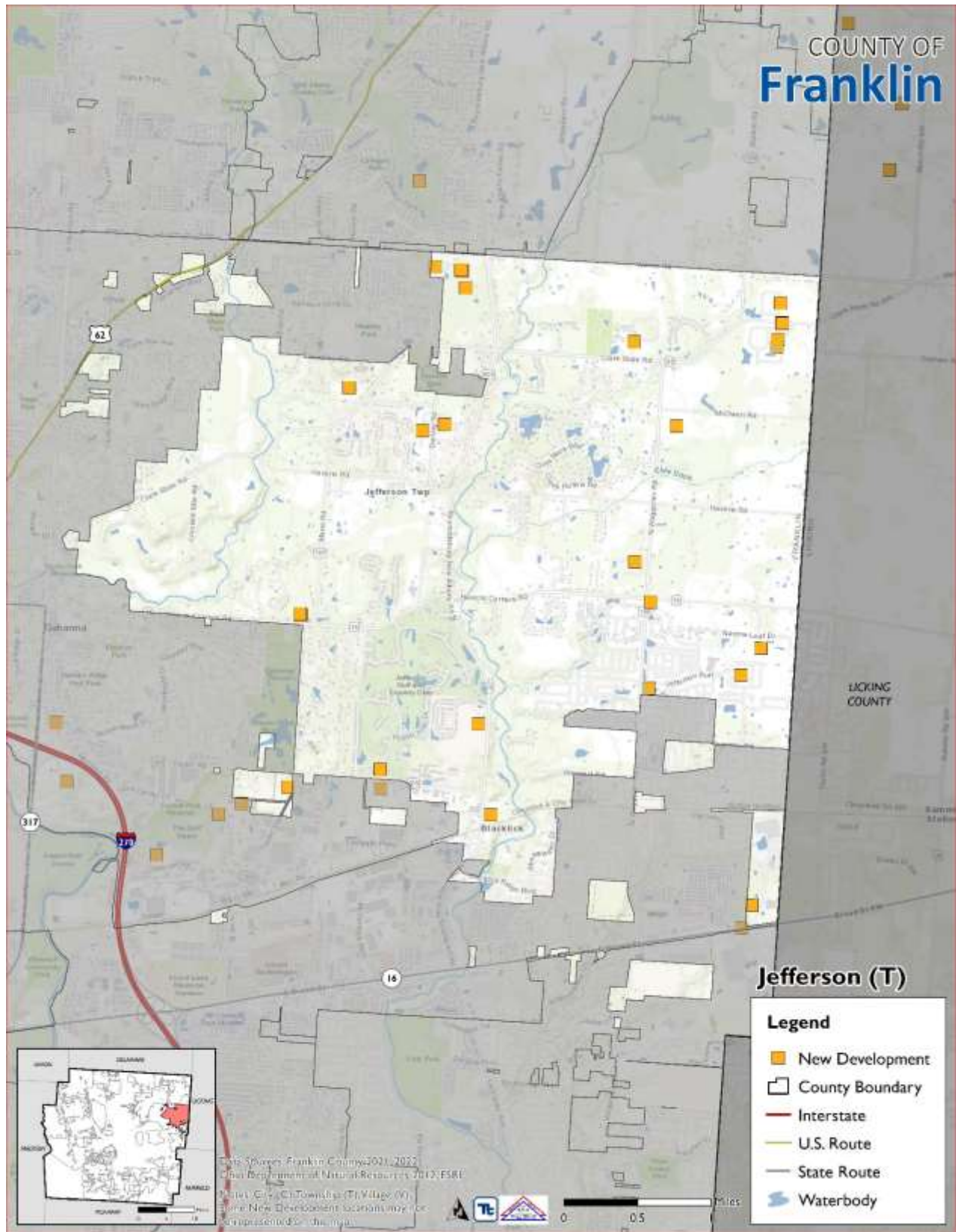
Table 9.19-11. Number of Building Permits for New Construction

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|------------|-------------|---------------|-------------|----------------|-------------|------------|-------------|------------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 131 | - | 153 | - | 200 | - | 215 | - | 126 | - |
| Multi-Family | 0 | - | 4 (108 units) | - | 17 (416 Units) | - | 0 | - | 0 | - |
| Other (commercial, mixed-use, etc.) | 0 | - | 0 | - | 0 | - | 0 | - | 0 | - |
| Total Permits Issued | 131 | - | 157 | - | 217 | - | 215 | - | 126 | - |

Table 9.19-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|---|----------------------|---------------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| Farms at Jefferson | Res | 374 | Clark State between Babbitt and Dixon | - | Single-Family – Construction ongoing |
| Killarney Woods | Res | 200 | Broad Street 171-000562 | - | Multi-Family – Construction finished |
| Courtyards at Morse | Res | 62 | Morse Rd 170-000565 | - | Single-Family – Construction ongoing |
| Gray's Point | Res | 216 | Rey-New Albany Rd 170-000737 | - | Multi-Family – Construction finished |
| Briarfield | Res | 40 | Havens Corners Rd | - | Single-Family – Construction ongoing |
| Adam's Point | Res | 108 | 941 Taylor Station Road 170-000814 | - | Multi-Family- Construction finished |
| Paddock Reserve | Res | 23 | Waggoner Road | - | Single-Family – Construction finished |
| Morrison Farms East | Res | 231 | Havens Corners Rd | - | Single-Family – Construction ongoing |
| Parkwood | Res | 76 | Clark State Rd | - | Single-Family – Construction finished |
| Jefferson Run East | Res | 165 | Waggoner Rd | - | Single-Family – Construction finished |
| Weldon | Res | 78 | Rey-New Albany Rd | - | Single-Family – Construction finished |
| Woodland Creek | Res | 29 | Waggoner Rd | - | Single-Family – Construction finished |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| Reserve at Jefferson | Res | 38 | Waggoner Rd 170-000491 | - | Single-Family |
| Epcos South | Res | 40 | Rey-New Albany Rd 170-000497 170-000497 | - | Single-Family |
| Towns at Morse | Res | 62 | Morse Road Rd 170-001483 | - | Multi-Family |
| Farms at Taylor | Res | 15 | Taylor Road – 170-000214 | - | Single-Family |

Figure 9.19-1. Jefferson Township New Development



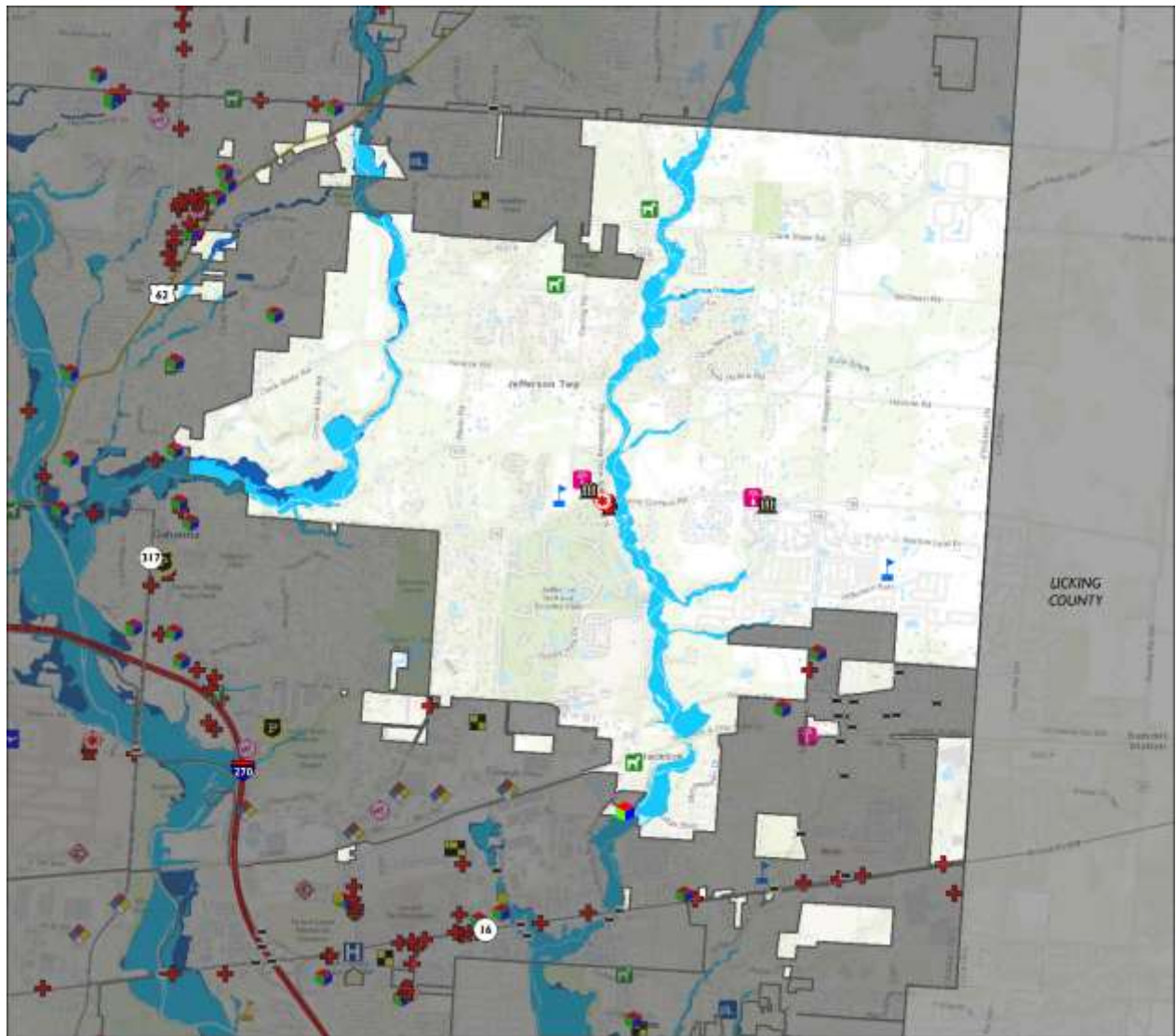
9.19.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Jefferson Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which Jefferson Township has significant exposure. The maps also show the location of potential new development, where available. The facilities listed below were added after the analysis; therefore, the facilities were not included in the risk assessment.

- 6545 Havens Road, Blacklick, Ohio 43004 – Government Building
- 6545 Havens Road, Blacklick, Ohio 43004 – Cellular Tower
- 6620 Havens Corners Road, Blacklick, Ohio 43004 – Government Building
- 6620 Havens Corners Road, Blacklick, Ohio 43004 – Cellular Tower
- 6540 Havens Corners Road, Blacklick, Ohio 43004 – Primary Education Facility (elementary school)
- 1490 Climbing Fig Drive, Blacklick, Ohio 43004 – Primary Education Facility (elementary school)
- 7297 Blacklick Ridge Blvd, Blacklick, Ohio 43004 – Daycare Facility

Figure 9.19-2. Jefferson Township Hazard Area Extent and Location Map – Flood



Jefferson (T)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | FEMA Flood Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | 1-Percent Annual Chance |
| Dam | Intermodal Facility | Research/Development Facility | 0.2-Percent Annual Chance |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | <i>The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.</i> |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | Tetra Tech Logo |
| EOC | Medical Supply Chain Facility | Veterinary Services | <small>Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESR; FEMA 2021</small> |
| Electric Substation | Park and Ride | Wastewater Systems | <small>Notes: City (C), Township (T), Village (V)</small> |
| Emergency Medical Service | | | |

0 0.45 0.9

Figure 9.19-3. Jefferson Township Hazard Area Extent and Location Map – Land Subsidence

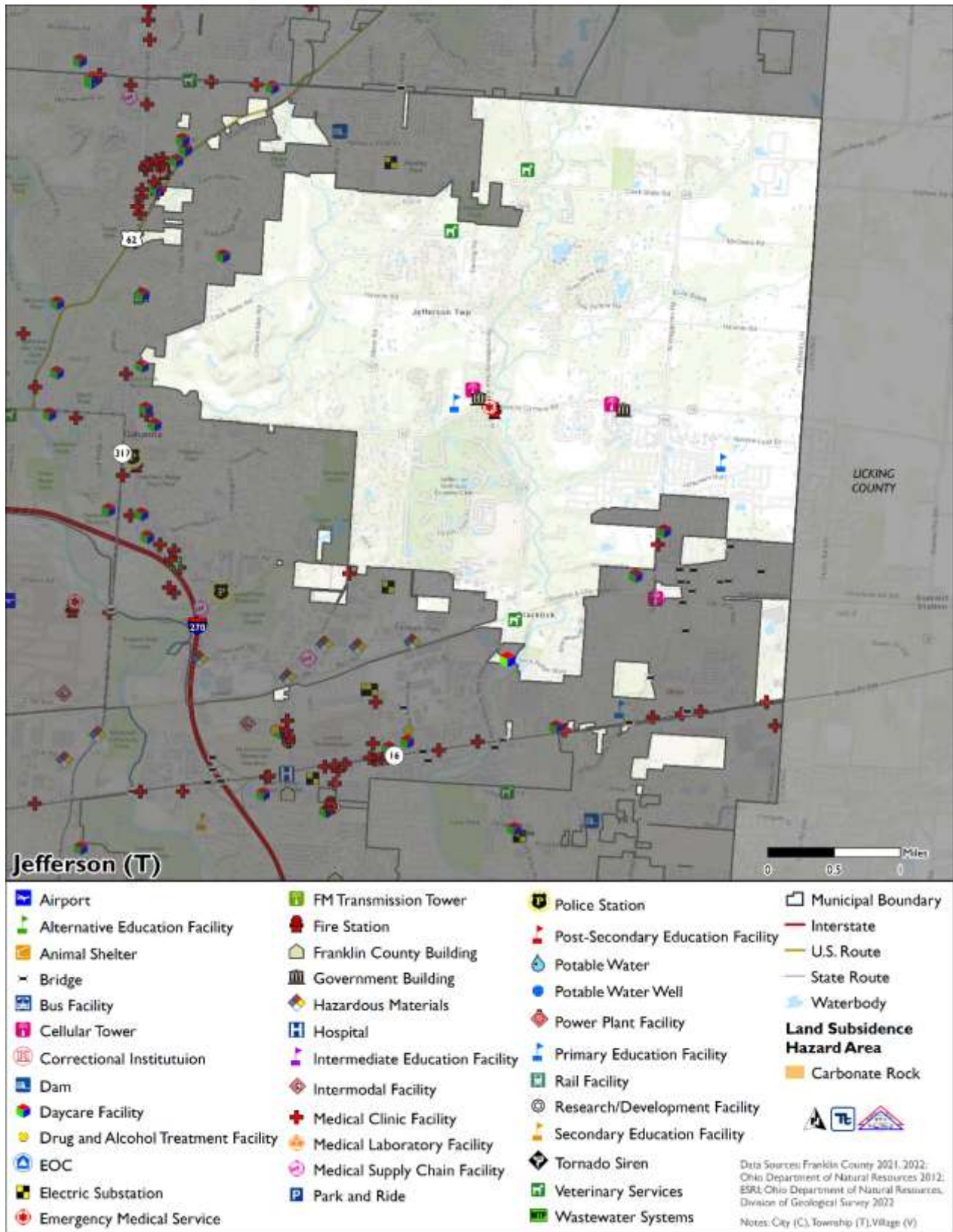
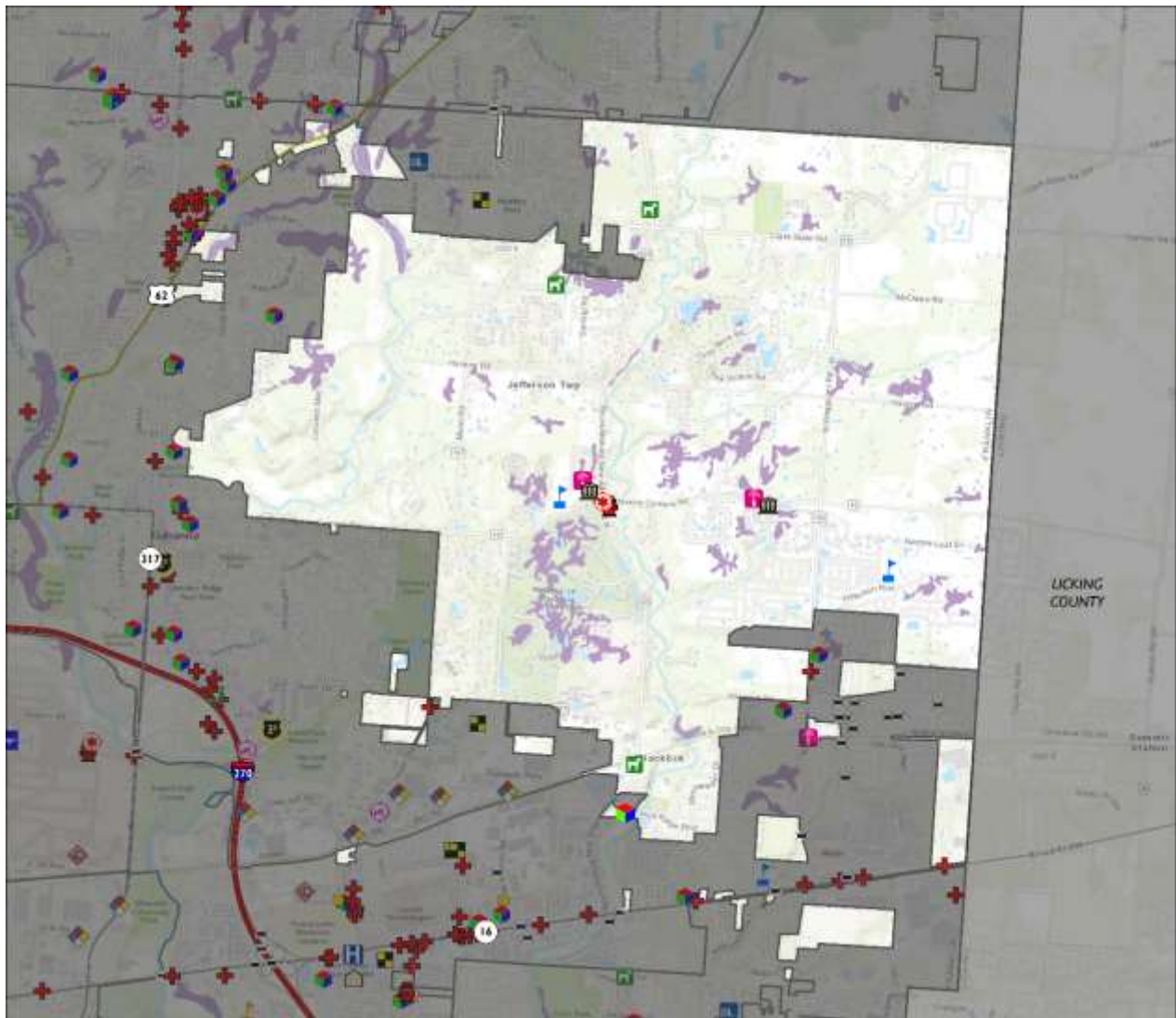


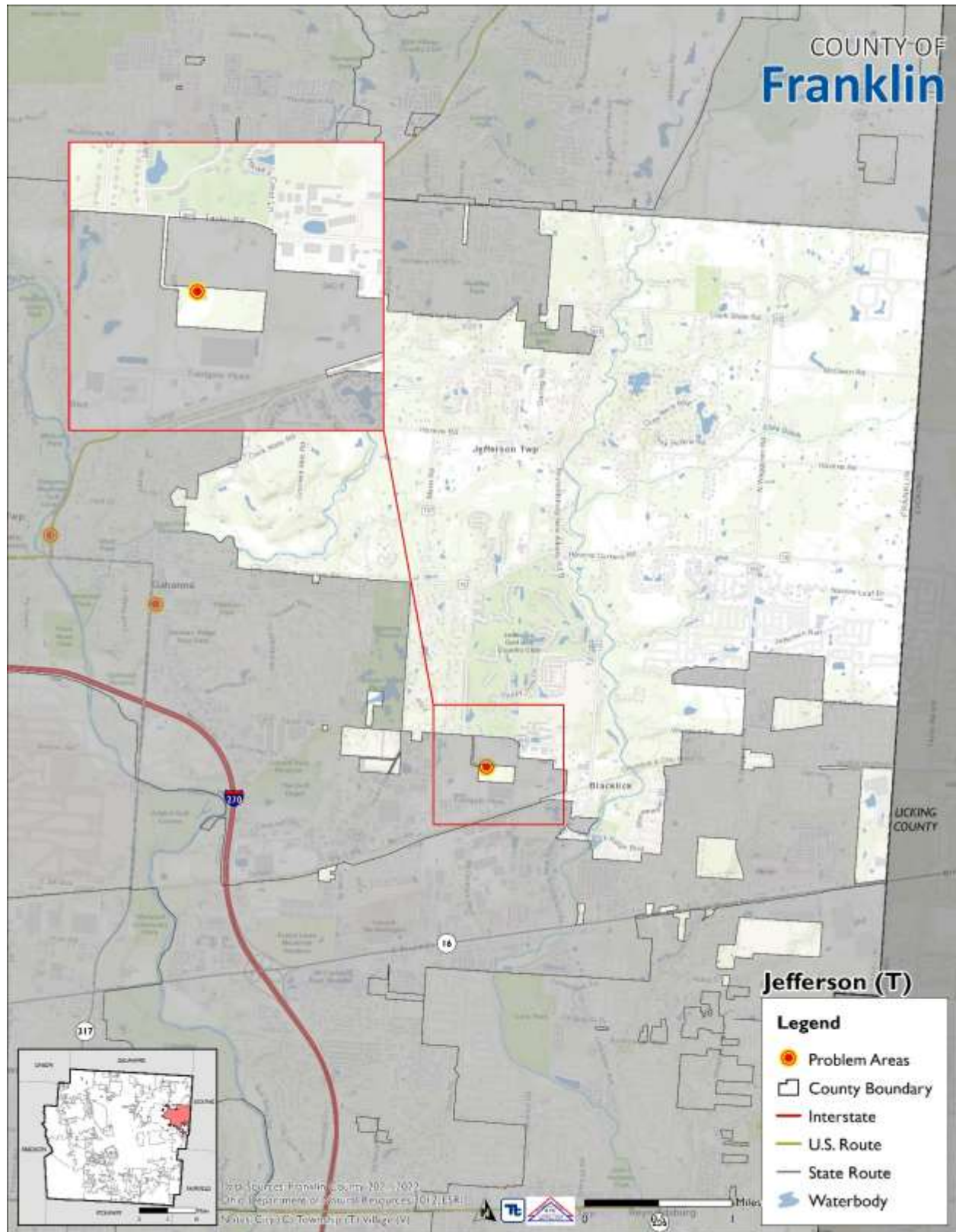
Figure 9.19-4. Jefferson Township Hazard Area Extent and Location Map – Inland Erosion



Jefferson (T)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|---|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Inland Erosion |
| Correctional Institution | Intermediate Education Facility | Rail Facility | K-Factor: ≥ 0.49 |
| Dam | Intermodal Facility | Research/Development Facility | |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | <small>Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI, United States Department of Agriculture, Natural Resources Conservation Service 2022.</small> |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | <small>Notes: City (C), Township (T), Village (V)</small> |
| EOC | Medical Supply Chain Facility | Veterinary Services | |
| Electric Substation | Park and Ride | Wastewater Systems | |
| Emergency Medical Service | | | |

Figure 9.19-5. Jefferson Township Problem Areas



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Jefferson Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage Jefferson Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.19-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|-----------------------------------|---|--------------------|--|---|
| April 3-4, 2018 | EF-1 Tornado | N/A | Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage. | None incurred |
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | None incurred |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | None incurred |
| March 2020-present | Covid-19 Pandemic, DR-4488 | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | None incurred |
| March 20, 2020 | Major Flooding | No | Showers and thunderstorms developed through the early morning hours as a low-pressure system moved through the Ohio Valley. Some of the storms produced locally heavy rainfall amounts of 2 to 3 inches. Several Township and County roads remained closed due to the earlier heavy rainfall. | Olde Quarry Park gravel parking lot and mulch trail was washed out. The gravel parking lot was re-graded, but the walking trail was not re-mulched. |
| August 11, 2021 – August 12, 2021 | Major Flooding | No | Isolated thunderstorms developed along a slow-moving boundary in central Ohio. Township and County roads remained closed due to flooded roadways. Many roads which had never flooded in previous heavy rain events. | No losses to townships roads / or township owned properties |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4

(Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for Jefferson Township. Jefferson Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Jefferson Township indicated that the hazard rankings were appropriate.

Table 9.19-14. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.19-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Jefferson Township

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | - |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1 Identified Issues

In addition to the risk assessment, the City of Bexley identified the following vulnerabilities within its community:

- High winds, and its associated debris, have caused damages to above ground wires.
- Multiple stormwater drains are below capacity, causing flooding on the following roads: McOwen Road, Havens Road, Cob Tail Way, Dixon Road, Creek Hollow Road, and Jackson Hole Dr. at Poppy Hills Drive.
- The Township has limited methods for public education of hazard risks, including how to mitigate damages to property.
- Tornado sirens do not cover the entire Township, which directly impacts life safety.
- ALERT Franklin County does not always notify residents of hazards occurring in the jurisdiction.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.19.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.19-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|---|---|--|---|--|
| | | | Yes/No | If yes, please describe the original problem (i.e., hazard, location, historic losses) | If yes, identify the responsible department/person to implement the project. |
| Burying above-ground utility lines to mitigate wind/tree damage | AEP/Utilities | No Progress | Yes | Wind and tree damage from high winds and severe summer and winter weather to above ground wires. | Jefferson Township service dept with assistance from Franklin County Engineer's Office |
| Improve stormwater drainage system capacity at McOwen Road, Havens Road, Cob Tail Way, Dixon Road, Creek Hollow Road, Longstreth Park Place, Mann Road (Box Culvert) | Franklin County Engineer & Jefferson Township | Ongoing | Yes | NOTE: Longstreth Park Place, Mann Road complete Add intersection of Jackson Hole Dr. @ Poppy Hills Drive | Jefferson Township service dept with assistance from Franklin County Engineer's Office |
| Seek funding for public information including outreach projects and technical assistance to property owners. (10,000 / 1 year) | Township Trustee's Office | No Progress | Yes | Limited methods for public education of hazard risks. | Administration |
| Work with Franklin County Emergency Management and Homeland Security to develop public outreach regarding all natural hazards, and the county's susceptibility to those hazards, and make available on website. (5,000 /ongoing) | Township Trustees Office | No Progress | Yes | Limited methods for public education of hazard risks. | Public Safety/Administration |
| Mitigate stream flooding in Fieldstone. | Franklin Soil and Water Conservation District | In Progress | No | - | - |
| Seek funding for the purchase of additional tornado sirens to increase coverage. (\$50,000.00) | Township Trustees Office | No Progress | Yes | Tornado sirens do not cover the entire Township. The Township would like to purchase additional sirens to provide coverage to the entire community. | Public Safety |



| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|--------------------------|---|--|--|--|
| | | | Yes/No | If yes, please describe the original problem (i.e., hazard, location, historic losses) | If yes, identify the responsible department/person to implement the project. |
| Incorporating Code Red to provide all residents and businesses in the township with access to emergency notifications and severe weather alerts. | Township Trustees Office | No Progress | Yes | The Township utilizes ALERT Franklin, but not all residents may be signed up for the service. The Township would like to expand this emergency notification program and not focus on Code Red. | Public Safety |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, Jefferson Township identified the following mitigation efforts completed since the last HMP:

- The drainage system on Longstreth Park Place at Clark State Road was improved/upsized.
- A deteriorating box culvert was replaced on Mann Road between Havens Road and Havens Corners Road.
- A deteriorating metal culvert pipe was replaced with a large concrete pipe on Mann Road between Wynfield Drive and Clark State Road.
- A ditch petition was initiated by the Township for improvements to Cole Ditch.

Since the adoption of the County’s first HMP, Jefferson Township has made significant mitigation progress in the following areas:

- Advancing flood mitigation measures through the replacement of culverts, upgrading drainage systems, and initiating petitions for ditch improvements.

Proposed Hazard Mitigation Initiatives for the HMP Update

Jefferson Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.19-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | - | - | - | X | - | - | X | - | - | X |
| Disease Outbreak | - | - | - | X | - | - | X | - | - | X |
| Drought | - | - | - | X | - | - | X | - | - | X |
| Earthquake | - | - | - | X | - | - | X | - | - | X |
| Extreme Temp | - | - | - | X | - | - | X | - | - | X |
| Flood | - | X | - | X | - | X | X | - | X | X |
| Geologic | - | - | - | X | - | - | X | - | - | X |
| Invasive Species | - | - | - | X | - | - | X | - | - | X |
| Severe Summer Weather | - | X | - | X | - | X | X | - | - | X |
| Severe Winter Weather | - | X | - | X | - | X | X | - | - | X |
| Tornado | - | X | - | X | - | X | X | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.19-17). Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Jefferson Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.19-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CFS Category |
|--------------------|---|---|---|-----------|--------------------|--|--|--------------------|-----------------|----------|---------------------|--------------|
| 2023-Jefferson-001 | Underground Powerlines | Problem: Wind and tree damage from high winds associated with tornadoes, severe summer weather, and severe winter weather to above ground wires. Solution: Bury above-ground utility lines to mitigate damages. | Severe Summer Weather, Severe Winter Weather, Tornadoes | 4 | 5 years | American Electric Power, Jefferson Township, Franklin County Engineer's Office | BRIC | High | High | Medium | SIP | PP |
| 2023-Jefferson-002 | Increasing of Drainage Capacity- Cole Ditch | Problem: Cole Ditch is below capacity and causing flooding and erosion on the following roads: McOwen, Havens Road, Cob Tail Way, Dixon Road, and Creek Hollow Road as well as on private property Solution: Make improvements along Cole Ditch and place on the County's Drainage Maintenance Program | Flood | 4 | 3 years | Franklin County Engineer's Office, Franklin County Commissioners, Jefferson Township | BRIC, HMGP, Local Funds Tax Assessment | High | High | High | SIP | PP, SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------|---|---|--|-----------|--------------------|---|--|--------------------|-----------------|----------|---------------------|--------------|
| | | via the Ditch Petition process. | | | | | | | | | | |
| 2023-Jefferson-003 | Increasing of Drainage Capacity – Jefferson Meadows | <p>Problem: Although stormwater drains are built the standard, the area of Poppy Hills Drive, Jackson Hole Drive, and Taylor Road floods during intense rain events.</p> <p>Solution: Collaborate with the Franklin County Engineer’s Office to upsize drainage system/improve outlets.</p> | Flood | 4 | 3 years | Jefferson Township, Franklin County Engineer’s Office | BRIC, HMGP, Local Funds Tax Assessment | High | High | High | SIP | PP, SP |
| 2023-Jefferson-004 | Property Owner Assistance | <p>Problem: The Township has limited methods for public education of all hazard risks.</p> <p>Solution: Seek funding for public information to conduct research projects and technical assistance to property owners.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 4, 5 | 2 years | Jefferson Township, Administration | BRIC, HMGP, Local Funds | Medium | Low | High | EAP | PI |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------|--------------------------------------|--|--|-----------|--------------------|--|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-Jefferson-005 | All Hazards Public Outreach Campaign | Problem: The Township has not developed public outreach regarding all hazards and the Township's susceptibility to those hazards. Solution: Work with Franklin County EM&HS to develop a public outreach campaign, which would include the use of social media, the Township website, and quick guides. | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 4, 5 | 2 years | Jefferson Township Public Safety, Jefferson Township Administration, Franklin County EM&HS | BRIC, HMGP, Local Funds | High | Low | High | EAP | PI |
| 2023-Jefferson-006 | Tornado Siren Coverage | Problem: The tornado sirens do not cover the entire Township. Solution: Seek funding for the purchase of additional tornado sirens to increase coverage. | Tornado | 4 | 4 years | Jefferson Township Public Safety | BRIC, HMGP | Medium | Medium | Medium | SIP | ES |
| 2023-Jefferson-007 | Alert Franklin County Campaign | Problem: Although there are notification methods in place, Township residents may not be informed of the Franklin County text alerts for hazards. | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic, | 4,5 | 2 years | Franklin County EM&HS, Jefferson Township Administration | HMGP, Local Funds | High | Low | High | EAP | ES |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------|---------------------------------|--|---|-----------|--------------------|---|---|--|-----------------|--------------------------|---------------------|--------------|
| | | Solution: Along with Franklin County EM&HS, assist with the promotion of the text alert system so residents can stay informed and aware of any impending hazards. | Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | | | | | | | | | |
| 2023-Jefferson-008 | Repetitive Loss Area Mitigation | Problem: Portions of the Township experienced repetitive flooding. Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | Flood | 6 | 4 years | Jefferson Township Administration, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | High | >\$100,000 per structure | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline
 Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.

- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.19-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|--------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Jefferson-001 | Underground Powerlines | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 8 | Medium |
| 2023-Jefferson-002 | Increasing of Drainage Capacity- Cole Ditch | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 9 | High |
| 2023-Jefferson-003 | Increasing of Drainage Capacity – Jefferson Meadows | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 9 | High |
| 2023-Jefferson-004 | Property Owner Assistance | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 10 | High |



| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|--------------------|--------------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Jefferson-005 | All Hazards Public Outreach Campaign | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 10 | High |
| 2023-Jefferson-006 | Tornado Siren Coverage | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 8 | Medium |
| 2023-Jefferson-007 | Alert Franklin County Campaign | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 10 | High |
| 2023-Jefferson-008 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.20 VILLAGE OF LOCKBOURNE

This section presents the jurisdictional annex for the Village of Lockbourne that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Village of Lockbourne participated in the planning process, an assessment of the Village of Lockbourne’s risk and vulnerability, the different capabilities used in the Village of Lockbourne, and an action plan that will be implemented to achieve a more resilient community.

9.20.1 Hazard Mitigation Planning Team

the Village of Lockbourne identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many the Village of Lockbourne departments, including the Mayor’s Office. The Deputy Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.20-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|---------------------------------------|
| Name/Title: | Christie Ward, Mayor | Name/Title: | Kendall Collins, Deputy Administrator |
| Address: | 85 Commerce St., Lockbourne, OH 43137 | Address: | 85 Commerce St., Lockbourne, OH 43137 |
| Phone Number: | (614) 491-3161 | Phone Number: | (614) 491-3161 |
| Email: | christie.ward@lockbourneohio.us | Email: | deputy.admin@lockbourneohio.us |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Matt Brown, Planning and Floodplain Administrator | | |
| Address: | 150 S. Front St., FSL, Suite 10, Columbus, OH 43215 | | |
| Phone Number: | (614) 525-5647 | | |
| Email: | mybrown@franklincountyohio.gov | | |
| Additional Contributors: | | | |
| Name/Title: | Lindsey McKnight, Safety Committee Chair & Council Member | | |
| Method of Participation: | Submitted problem and solutions online form; completed the hazard ranking worksheet | | |

9.20.2 Municipal Profile

the Village of Lockbourne is in south central Franklin County and borders Pickaway County. Located 10 miles south of the City of Columbus, the Village of Lockbourne is known for its rich history, including its involvement in the construction of the Ohio and Erie Canal line, which the Lockbourne Feeder Canal was a main channel (Village of Lockbourne n.d.). the Village of Lockbourne has a total area of 0.80 square miles, 0.75 square miles of land and 0.05 square miles of water.

According to the U.S. Census, the 2020 population for the Village of Lockbourne was 236, a 0.42 percent decrease from the 2010 Census population. Data from the 2020 U.S. Census indicate that 15.3 percent of the population is 5 years of age or younger and 11.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.20.3 Jurisdictional Capability Assessment and Integration

the Village of Lockbourne performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Village capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Village of Lockbourne to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Lockbourne and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.20-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Ohio Basic Building Code | County | Franklin County Planning Department |
| <i>How does this reduce risk?</i> Building Codes give specific regulations to ensure that buildings meet minimum health and safety standards. This code reduces casualties, costs, and damage by creating stronger buildings designed to withstand disasters. | | | | |
| Zoning/Land Use Code | Yes | Zoning Code adopted in 1994 Currently reviewing and updating | Local | Planning Commission |
| <i>How does this reduce risk?</i> Zoning establishes several applicable zone districts in the community. Residential, Commercial, Agricultural. Requirements for setbacks, parking, and other layout elements to ensure the safety of the residents. Zoning Code prevents mix of incompatible land use. Zoning Ordinance discourages development within the floodplain. | | | | |
| Subdivision Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | Yes | Stormwater Pollution Prevention Plan (NPDES) | Franklin County | Committee with Franklin County Engineer |
| <i>How does this reduce risk?</i> Helps reduce flooding and unclean water to enter into Big Walnut Creek. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | Special Resolution National Flood Insurance Program Regulation – September 26, 1978; Revised September 17, 2007 | County | Franklin County Planning Department |
| <i>How does this reduce risk?</i> Promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---|---|---|---|
| Climate Change Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Capital Improvement Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Disaster Debris Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Floodplain Management or Watershed Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Stormwater Management Plan | Stormwater Pollution Prevention Plan (NPDES) Co-Permittee with Franklin County Engineer | Franklin County | Franklin County | Stormwater Pollution Prevention Plan (NPDES) Co-Permittee with Franklin County Engineer |
| <p><i>How does this reduce risk?</i></p> <p>The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. Polluted stormwater runoff is often transported through municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. To address this reality, federal and state regulations require the establishment of MS4 stormwater management programs to improve the nation's waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events. The MS4 Stormwater Permit outlines six minimum measures (MCMs) that a SWMP must address. These minimum measures are:</p> <ol style="list-style-type: none"> 1) public education and outreach, 2) public participation / involvement, 3) illicit discharge detection and elimination (IDDE), 4) construction site runoff control, 5) post-construction runoff control and 6) pollution prevention / good housekeeping for municipal operations. | | | | |
| Open Space Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Urban Water Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Habitat Conservation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Economic Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Shoreline Management Plan <i>How does this reduce risk?</i> | No | - | - | - |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other - Emergency Preparedness Plan <i>How does this reduce risk?</i> Our plan lists the steps that you take to make sure you are safe before, during and after an emergency or natural disaster. | Yes | Emergency Preparedness Plan, Unknown | Local | Safety Committee |

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Lockbourne to oversee and track development.

Table 9.20-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? • If yes, what department is responsible? | Yes | Planning & Zoning Committee and Village Administrator |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | Building permits are required through Franklin County Planning Department |
| Do you have a buildable land inventory? • If yes, please describe | No | - |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Lockbourne and their current responsibilities that contribute to hazard mitigation.

Table 9.20-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|---------------------|--|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | No | - |
| Planning Department | Yes | Limited staff, all future and current planning |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | No | - |
| Construction/Building/Code Enforcement Department | No | - |
| Emergency Management/Public Safety Department | No | - |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Tornado siren, Alert Franklin County |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | No | - |
| Mutual aid agreements | Yes | Tornado siren |
| Human Resources Manual | Yes | One Village Maintenance employee |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | - |
| Engineers or professionals trained in building or infrastructure construction practices | No | - |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |



| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |
| How do your administrative/technical capabilities contribute to risk reduction in your community? | | |
| We are a small Village with limited resources and funding. We utilize the help of organizations like M.O.R.P.C and Franklin Soil and Water Conservation District to ensure the safety and mitigation of certain hazards. | | |

Fiscal Capability

The table below summarizes financial resources available to the Village of Lockbourne.

Table 9.20-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | No |
| User fees for water, sewer, gas, or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | No |
| Incur debt through special tax bonds | No |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Lockbourne.

Table 9.20-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|--|------------------------|--|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | No | - |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | Yes | We gained a large following of residents and community members alike via social media. When and if there is a disaster/hazard we can notify the community immediately. |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | We have a tornado siren located in the Village. |
| Natural disaster/safety programs in place for schools | No | - |

| Outreach Resources | Available? (Yes/No) | Comment: |
|--|---------------------|--|
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | Yes | The Village Safety Committee has implemented an Emergency Preparedness Plan in which we are able to notify residents of potential hazards or emergency events. |

Community Classifications

The table below summarizes classifications for community programs available to the Village of Lockbourne.

Table 9.20-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.20-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee Failure | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temperatures | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Moderate |
| Severe Winter Weather | Strong |
| Tornadoes | Moderate |

9.20.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Village of Lockbourne.

Table 9.20-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|----------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Lockbourne (V) | 1 | 1 | \$9,250.18 | NR | NR |

Sources: *a* BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)
b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported
 RL Repetitive Loss
 SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Village of Lockbourne.

Table 9.20-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | We have parkland in the flood zone. Currently you are not allowed to build in the flood zone. There is not a list of properties maintained. |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | There is not a list maintained. 5 or less. |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also |

| NFIP Topic | Comments |
|--|---|
| | triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure’s market value (excluding land value). None |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded? | Zero properties |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why. | Yes |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Franklin County Planning Department |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed? | Yes, beneficial training would be considered. |
| Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability) | The Village sets regulations and policies dealing with the floodplain. At this time no residential development can occur in the floodplain area. |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Planning and Zoning committee would review the plans and decide |
| What are the barriers to running an effective NFIP program in the community, if any? | Lack of staffing – residents |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | N/A |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | Through Franklin County Planning Department |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | It meets the requirements |
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Not currently |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | Yes, the community is interested in joining the CRS program |

9.20.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards

of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Franklin County EDP is responsible for issuing building permits for 1-, 2-, and 3-family structures in unincorporated areas and seven villages of Franklin County. These villages include Canal Winchester, Harrisburg, Lockbourne, Minerva Park, Riverlea, Urbancrest and Valleyview. Multi-family and commercial building permits are through the applicable commercial building department. Generally, the State of Ohio, Department of Commerce, Division of Industrial Compliance is responsible for issuing commercial building permits in unincorporated areas; however, some townships have formed their own building departments or contract with other municipalities to provide this service in their township. Townships with commercial building departments include Blendon, Clinton, Franklin, Jefferson, and Prairie. The City of Groveport issues commercial building permits for Madison Township.

The tables below summarize the number of building permits issued for new construction and recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.20-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | - | - | - | - | - | - | - | - | - |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | - | - | - | - | - | - | - | - | - | - |

Table 9.20-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g., Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|--------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| Single Family House | Residential | 1 | 104 Commerce Street | N/A | On-going |
| Single Family House | Residential | 1 | 85 Landis Street | N/A | Built 2022 |
| Single Family House | Residential | 1 | 33 Williams Street | N/A | Built 2022 |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

9.20.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Village of Lockbourne's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Village of Lockbourne has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.20-2. the Village of Lockbourne Hazard Area Extent and Location Map - Flood

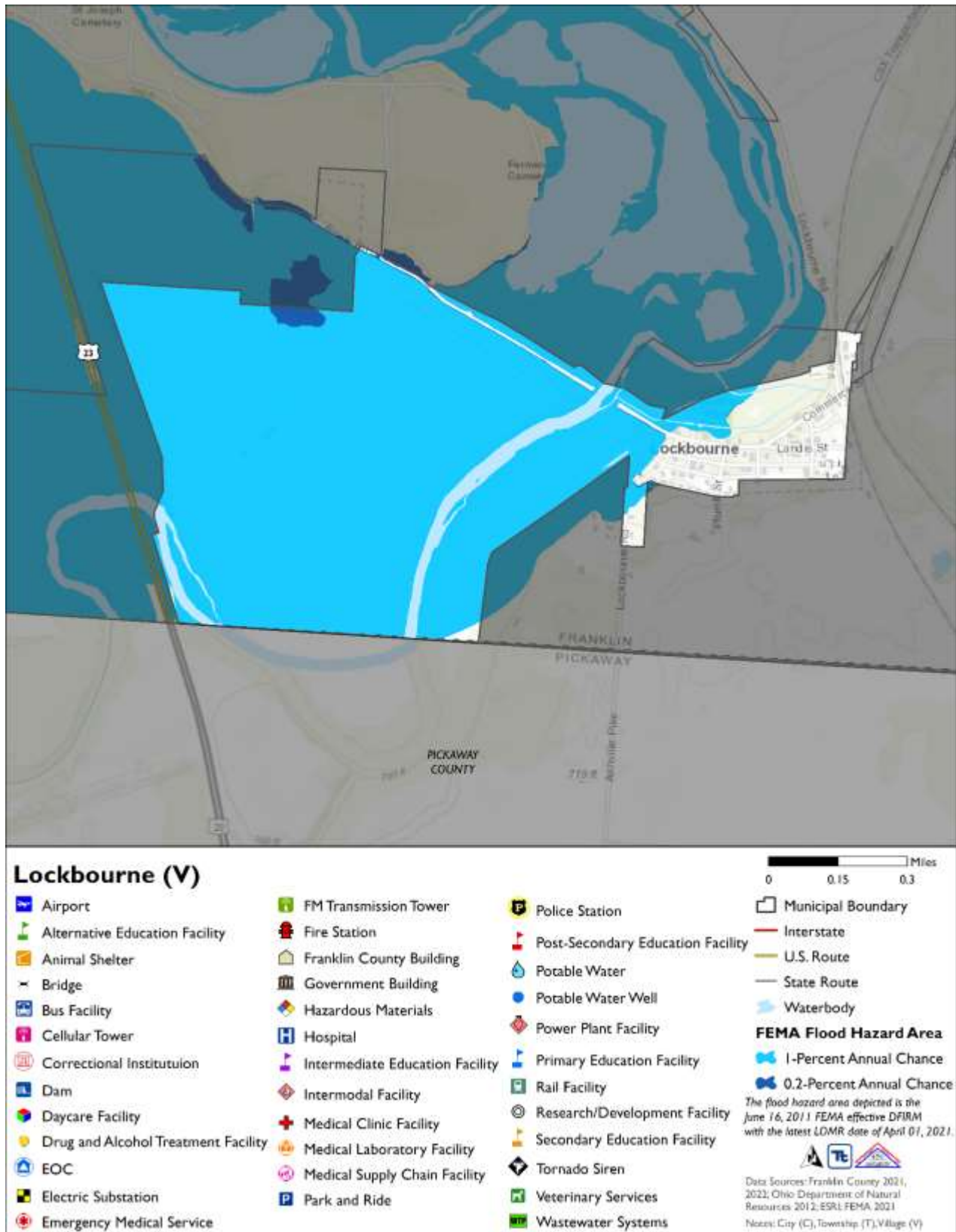


Figure 9.20-3. the Village of Lockbourne Hazard Area Extent and Location Map - Land Subsidence

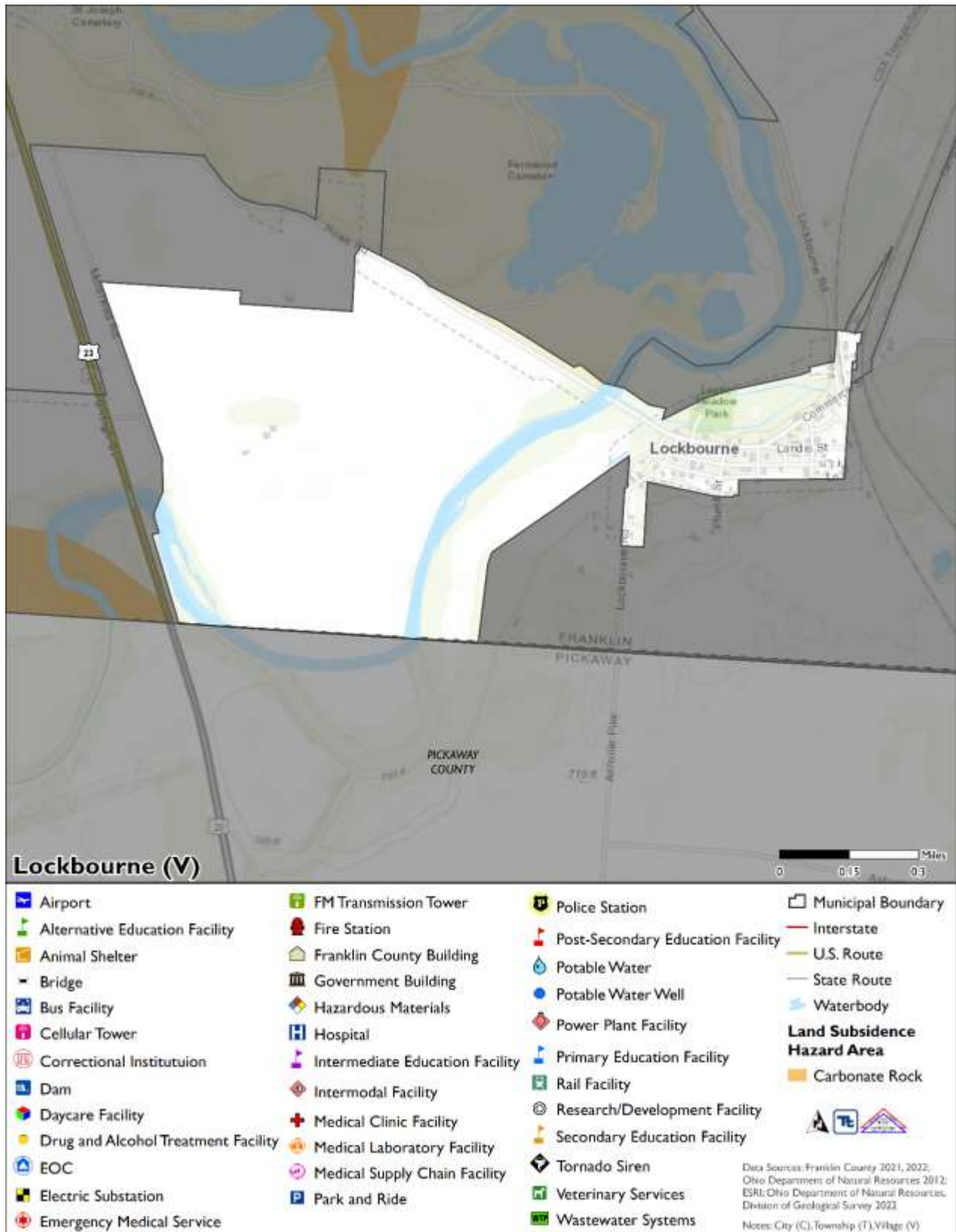


Figure 9.20-4. the Village of Lockbourne Hazard Area Extent and Location Map - Inland Erosion

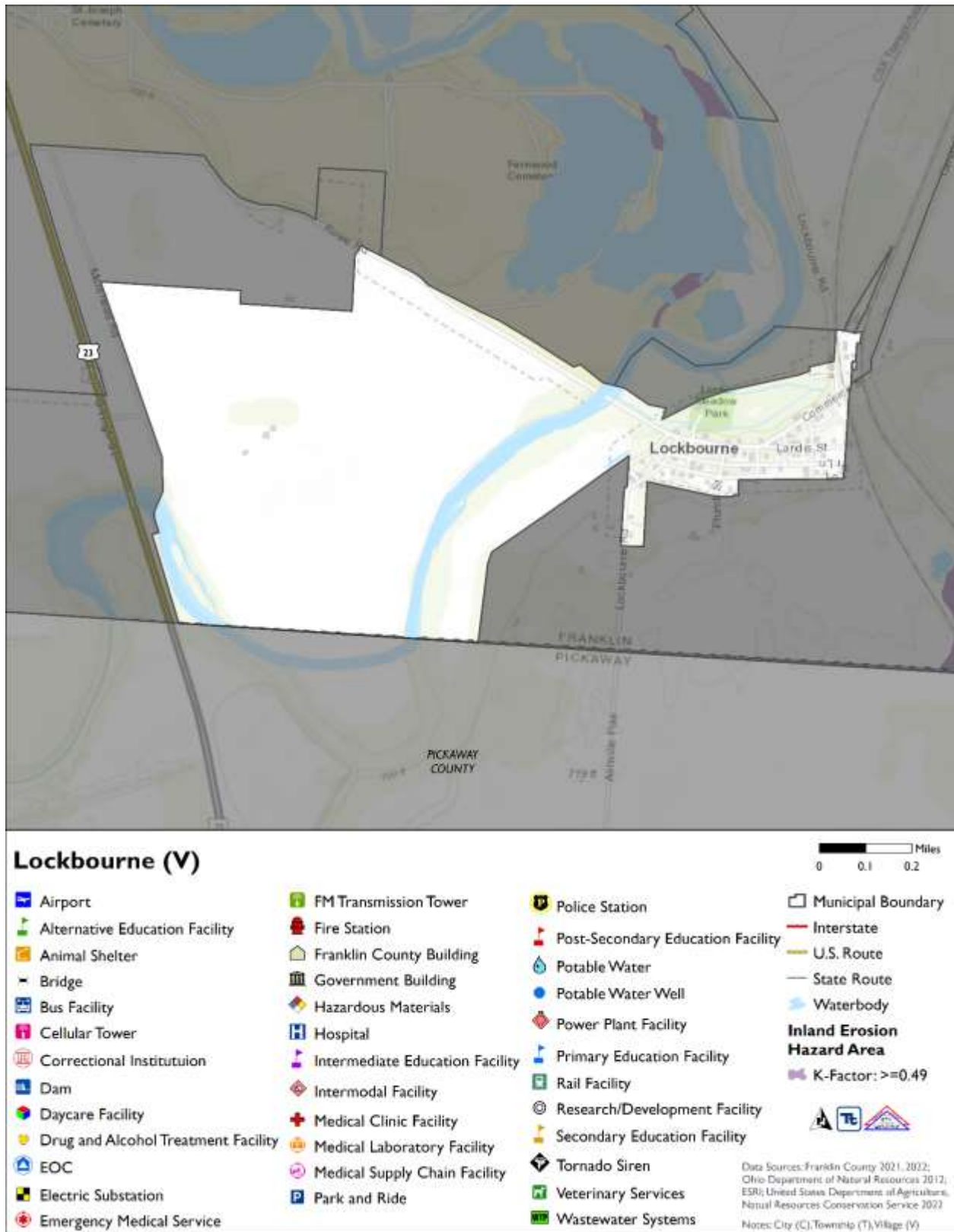


Figure 9.20-5. the Village of Lockbourne Hazard Area Extent and Location Map - Problem Areas



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

The Village of Lockbourne’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Village of Lockbourne experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.20-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| April 3-4, 2018 | EF-1 Tornado | N/A | Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage. | The Village did not experience any notable damages or losses. |
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Village did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Village did not experience any notable damages or losses. |
| March 2020-present | Covid-19 Pandemic, DR-4488 | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Village did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each

municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Lockbourne. The Village of Lockbourne reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Village of Lockbourne indicated the following:

- The Village agreed that the calculated rankings accurately reflected the risk posed to the community.

Table 9.20-14. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee Failure | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temperatures | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | Low |
| Severe Winter Weather | High |
| Tornadoes | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.20-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Village of Lockbourne

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | 2 | 2 |
| Delaware Dam Inundation (MH Breach) Hazard Area | 1 | 1 |

Source: Franklin County; Hazus v5.

Identified Issues

In addition to the risk assessment, the Village of Lockbourne identified the following vulnerabilities within its community:

- Severe summer and winter weather frequently causes power outages in the Village, leaving the elderly and individuals with pre-existing conditions no place to go.
- The Emergency Shelter, located at the Village Hall, does not have an emergency generator to support its residents in the event of a power outage from hazards.

- Several houses surrounding Locke Meadow Park are impacted by flooding.
- Locke Meadow Park and Commerce Street, which is the entryway into the Park, have become eroded by flood waters.
- Spring Alley Ditch, located in Locke Meadow Park and goes along Commerce Street, suffers from pooling water following periods of rain, which promotes mosquito activity. The Spring Alley Ditch also contains invasive plant species, which negatively impact the environment of the Locke Meadow Park.
- Lock 30 at the Columbus Feeder Canal lock, a site on the National Registry of Historic Place, is eroding from flood waters. Stones within the Columbus Feeder Canal are also experiencing erosion issues due to flood waters. It should be noted that Locke Meadow Park encompasses the remnants of Lock 30 and the Big Walnut Creek guard lock, which prevent flood water from entering the main canal.

9.20.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.20-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|---|---|--|---|--|
| | | | Yes/No | If yes, please describe the original problem (i.e., hazard, location, historic losses) | If yes, identify the responsible department/person to implement the project. |
| Add Emergency System to Website | Village Administration and Mayor's Office | No Progress | Yes | Reduce local hazards, fire, train, flooding, shooting, etc. | Deputy Administrator |
| Send out emergency information through website opt-in alerts | Village Administration and Mayor's Office | No Progress | Yes | Need for centralized way to contact residents in the event of an emergency; partner with the County to promote ALERT Franklin | Deputy Administrator / Safety Committee |
| Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (2000 / 3 months) | Village Administration and Mayor's Office | No Progress | No | - | - |
| Purchase Tornado Sirens through Franklin County Emergency Management & Homeland Security. (40,000 / 4 months) | Village Administration and Mayor's Office | Complete | No | Completed | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Village of Lockbourne identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County’s first HMP, the Village of Lockbourne has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

the Village of Lockbourne participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.20-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee Failure | - | X | - | X | - | - | X | - | - | X |
| Disease Outbreak | - | X | - | X | - | - | X | - | - | X |
| Drought | - | X | - | X | - | - | X | - | - | X |
| Earthquake | - | X | - | X | - | - | X | - | - | X |
| Extreme Temperatures | - | X | - | X | - | - | X | - | - | X |
| Flood | X | X | X | X | X | X | X | X | X | X |
| Geologic | - | X | - | X | - | - | X | - | - | X |
| Invasive Species | - | X | - | X | X | - | X | - | - | |
| Severe Summer Weather | - | X | - | X | - | - | X | - | - | X |
| Severe Winter Weather | - | X | - | X | - | - | X | - | - | X |
| Tornadoes | - | X | - | X | - | - | X | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.20-17)
 Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Village of Lockbourne will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.20-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------|--------------------------------|--|--|-----------|--------------------|--|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-Lockbourne-01 | All-Hazards Education Campaign | <p>Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Village.</p> <p>Solution: Work with Franklin County EM&HS to provide residents of the Village of Lockbourne with the necessary information to protect themselves and understand the threats of all hazards. Update Village website to include this information.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 2, 4, 5 | 2 years | Franklin County EM&HS, Lockbourne Deputy Administrator, Safety Committee | HMGP, Local Funding | High | Low | High | EAP | PI |
| 2023-Lockbourne-02 | Emergency Notification System* | <p>Problem: The Village does not have a centralized way to notify residents of potential hazards.</p> <p>Solution: Partner with Franklin County EM&HS, to promote the ALERT Franklin system so residents can stay</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, | 4, 5 | 2 years | Lockbourne Deputy Administrator, Safety Committee | HMGP, Local Funding | High | Low | Medium | EAP | PI, ES |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------|--------------------------------------|---|--|-----------|--------------------|--|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | informed and aware of any impending hazards. | Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornadoes | | | | | | | | | |
| 2023-Lockbourne-03 | Critical Facility Back-Up Generator* | <p>Problem: The Village Hall, a critical facility, is the Village's emergency shelter location. The facility does not have back-up power.</p> <p>Solution: Install a back-up/emergency generator and transfer switch to the facility to maintain continuity of operations and provide a safe location for residents in the event of an emergency.</p> | Dam/Levee Failure, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornadoes | 6 | 5 years | the Village of Lockbourne Administration | BRIC, HMGP | High | Medium | High | SIP | ES |
| 2023-Lockbourne-04 | Increase NFIP Capabilities | <p>Problem: Repetitive loss residences and Critical Facilities are in the floodplain.</p> <p>Solution: Begin maintaining lists of properties damaged by flooding and of property owners who are interested in flood mitigation.</p> | Flood | 1, 2 | 1 year | the Village of Lockbourne Administration, Franklin County Planning Department, Planning and Zoning Committee | HMGP, FMA, Local Funding | Medium | Low | Medium | LPR | PP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------|-------------------------------------|---|---------------------------|-----------|--------------------|--|---|--------------------|-----------------|----------|---------------------|--------------|
| 2023-Lockbourne-05 | FMA Program Consideration | Problem: Several properties surrounding the Locke Meadow Park are impacted by flooding. Solution: Investigate feasibility of FMA Program to acquire or elevate affected properties. | Flood | 6 | 2 to 3 years | the Village of Lockbourne Administration, Franklin County Planning Department, Planning and Zoning Committee | FMA | High | High | High | SIP | PP |
| 2023-Lockbourne-06 | Spring Alley Ditch Project | Problem: Spring Alley Ditch, located in Locke Meadow Park and goes along Commerce Street, suffers from pooling water following periods of rain, which promotes mosquito activity. The Spring Alley Ditch also contains invasive plant species, which negatively impact the environment of the Locke Meadow Park. Solution: Fill in Spring Alley Ditch and regrade to influence the flow of water and negate the adverse side effects of the ditch. | Flood, Invasive Species | 3, 6 | 3 to 4 years | Village Administrator, Franklin County Engineering | BRIC, HMGP, Local Funding | High | Medium | High | SIP | PR |
| 2023-Lockbourne-07 | Columbus Feeder Canal Preservation* | Problem: Lock 30 at the Columbus Feeder Canal lock, a site on the National Registry of Historic Place, is eroding from flood waters. Stones within the Columbus Feeder Canal are also | Flood | 4, 6 | 4 to 5 years | Village Administrator, Franklin County Planning Department | Historic Preservation Fund, Ohio History Fund Grant | High | High | High | SIP | PP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------|--|--|---------------------------|-----------|--------------------|---|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | <p>experiencing erosion issues due to flood waters. It should be noted that Locke Meadow Park encompasses the remnants of Lock 30 and the Big Walnut Creek guard lock, which prevent flood water from entering the main canal.</p> <p>Solution: Seek funding to restore the degraded portions of the Columbus Feeder Canal.</p> | | | | | | | | | | |
| 2023-Lockbourne-08 | Locke Meadow Park Flood Mitigation Measures* | <p>Problem: Locke Meadow Park and Commerce Street, which is the entryway into the Park, have become eroded by flood waters.</p> <p>Solution: Investigate methods to mitigate flooding from Big Walnut Creek, which inundates Locke Meadow Park and Commerce Street. Such methods may include structural projects like floodwalls and retaining walls, or natural protections including corridor restoration, erosion control, and stream management.</p> | Flood | 3, 4, 6 | 2 to 3 years | Lockbourne Deputy Administrator, Safety Committee | BRIC, HMGP, Local Funding | Medium | Medium | High | SIP, NSP | SP, NR |

*Mitigation initiative is related to a critical facility and/or community lifeline
 Notes: Not all acronyms and abbreviations defined below are included in the table.



Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.20-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|--------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Lockbourne-01 | All-Hazards Education Campaign | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 9 | High |
| 2023-Lockbourne-02 | Emergency Notification System | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 8 | Medium |
| 2023-Lockbourne-03 | Critical Facility Back-Up Generator | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 9 | High |
| 2023-Lockbourne-04 | Increase NFIP Capabilities | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 8 | Medium |
| 2023-Lockbourne-05 | FMA Program Consideration | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 9 | High |
| 2023-Lockbourne-06 | Spring Alley Ditch Project | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 10 | High |
| 2023-Lockbourne-07 | Columbus Feeder Canal Preservation | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 9 | High |
| 2023-Lockbourne-08 | Locke Meadow Park Flood Mitigation Measures | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.21 MADISON TOWNSHIP

This section presents the jurisdictional annex for Madison Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Madison Township participated in the planning process, an assessment of Madison Township’s risk and vulnerability, the different capabilities used in Madison Township, and an action plan that will be implemented to achieve a more resilient community.

9.21.1 Hazard Mitigation Planning Team

Madison Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Madison Township departments. The Public Works Superintendent represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.21-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|--|
| Name/Title: | Susan Brobst, Township Administrator | Name/Title: | Dave Watkins, Public Works Superintendent |
| Address: | 4575 Madison Lane Groveport, Ohio 43125 | Address: | 4585 Madison Lane Groveport, Ohio 43125 |
| Phone Number: | (614) 836-5308 | Phone Number: | (614) 836-4467 |
| Email: | sbrobst@madisontownship.org | Email: | d Watkins@madisontownship.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Matt Brown, Planning and Floodplain Administrator | | |
| Address: | 150 S. Front St., FSL, Suite 10, Columbus, OH 43215 | | |
| Phone Number: | (614) 525-5647 | | |
| Email: | mybrown@franklincountyohio.gov | | |
| Additional Contributors: | | | |
| Name/Title: | Stephen Moore, Groveport Building Official | | |
| Method of Participation: | Submitted commercial construction building permits for Madison Township. | | |

9.21.2 Municipal Profile

Madison Township is in the southwest corner of Franklin County and borders Hamilton Township, Truro Township, and the Counties of Fairfield and Pickaway. Located 10 miles southeast of the City of Columbus, Madison Township was originally the largest township geographically in Franklin County. Its fertile soil and many waterways, along with four major creeks - Big Walnut, Blacklick, Alum, and Little Walnut, encouraged farming and other related agricultural enterprises. Today, Madison Township has a total area of 40.6 square miles, 39.9 square miles of land and 0.8 square miles of water.

According to the U.S. Census, the 2020 population for Madison Township was 25,896, a 10.15 percent increase from the 2010 Census population. Data from the 2020 U.S. Census indicate that 5.1 percent of the population is 5 years of age or younger and 17.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.21.3 Jurisdictional Capability Assessment and Integration

Madison Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Madison Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Madison Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.21-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|--|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | 2019 Residential Code of Ohio | Franklin County | Franklin County Economic Development and Planning Department |
| <i>How does this reduce risk?</i> Provides restrictions and requirements on how buildings must be constructed. | | | | |
| Zoning/Land Use Code | Yes | Franklin County Zoning Resolution – October 11, 2022 | Franklin County | Zoning Officer |
| <i>How does this reduce risk?</i> Specifies the allowable uses of land within each district, the regulations pertaining to the development and use of the land, and buildings are uniform for each class or kind of building. Structures are not permitted to be built in the floodplain. | | | | |
| Subdivision Ordinance | Yes | Franklin County Subdivision Regulations – March 27, 2012 | Franklin County | Franklin County Economic Development and Planning Department |
| <i>How does this reduce risk?</i> Manage growth and development in accordance with plans, policies, and resolutions of the FCPC, county and townships and surrounding area plans. Provide for adequate and convenient open spaces for traffic, utilities, fire and maintenance forces, recreation, light and air. Provide for the preservation of natural resources, sensitive natural areas, and natural features. Provide safety from fire, flood, and other danger. Address public requirements and facilities, traffic circulation, stormwater management, water and sanitary services, open space, airport noise and hazard areas. | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | Yes | Franklin County Stormwater Drainage Manual – March 13, 2012 | Franklin County | Franklin County Economic Development and Planning Department |
| <i>How does this reduce risk?</i> To help improve/ensure proper drainage and to protect natural water ways. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | Franklin County's Flood Damage Reduction Regulation – September 19, 2007 | Franklin County | Franklin County Floodplain Administrator |
| <i>How does this reduce risk?</i> Regulations designed to promote the public health, safety, and general welfare and to minimize public and private loss due to flooding. | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Wellhead Protection <i>How does this reduce risk?</i> | No | - | - | - |
| Emergency Management Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Change Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan <i>How does this reduce risk?</i> Provides a vision that achieves the goals of preparing for future growth while protecting the desires of the community; enhancing the quality of life for Madison Township residents; and ensuring that the community is safe and well cared for. Plan does discuss a desire to mitigate congestion, preserve green space and agricultural areas. | Yes | Blacklick-Madison Area Plan – November 08, 2011 | Franklin County | Franklin County Economic Development and Planning Department |
| Capital Improvement Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Disaster Debris Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Floodplain Management or Watershed Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Stormwater Management Plan <i>How does this reduce risk?</i> The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. Polluted stormwater runoff is often transported through municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. To address this reality, federal and state regulations require the establishment of MS4 stormwater management programs to improve the nation's waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events. The MS4 Stormwater Permit outlines six minimum measures (MCMs) that a SWMP must address. These minimum measures are: 1) public education and outreach, 2) public participation / involvement, 3) illicit discharge detection and elimination (IDDE), 4) construction site runoff control, 5) post-construction runoff control and 6) pollution prevention / good housekeeping for municipal operations. | Yes | Franklin County Stormwater Management Plan – December 19, 2016 | Franklin County | Stormwater Executive Committee |
| Open Space Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Urban Water Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Habitat Conservation Plan <i>How does this reduce risk?</i> | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Economic Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Shoreline Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> Identifies risks associated with the hazards in the area and how to potentially mitigate those risks. | Yes | Franklin County Risk Assessment | County | Franklin County EMA |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of Madison Township to oversee and track development.

Table 9.21-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? • If yes, what department is responsible? | No | Residential permits for Madison Township are issued by the Franklin County Building Department; commercial permits are issued by the City of Groveport, City of Canal Winchester, and City of Columbus. |
| If you do not issue development permits, what is your process for tracking new development? | N/A | There is no process. The Township relies on City of Groveport, City of Canal Winchester, City of Columbus, and the County to track new development. |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | The building permit application asks for floodplain information so it can be applied to building code requirements if needed. Franklin County Development issues floodplain permits in Madison Township. The permits issued by Franklin County are sent to various departments for review, depending on the nature of the work. If any issues arise, it is noted and discussed. |
| Do you have a buildable land inventory? • If yes, please describe | No | The Township does not have a buildable land inventory. However, the County stores information at the Auditor's Office. Some information can be found online utilizing the Auditor's Office County webpage. |
| Describe the level of build-out in your jurisdiction. | N/A | The Township is primarily residential with parks and open space mixed in the residential areas; much of the residential area to the central-south of the Township is farmland preservation. Office and Commercial use properties are toward the central-north portion of the Township; some areas are mixed with residential areas. The Industrial use locations are primarily in the western portion of the Township, but a small area is located in the central-north just outside of the residential use area. |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Madison Township and their current responsibilities that contribute to hazard mitigation.

Table 9.21-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|----------------------------------|---------------------|---|
| Administrative Capability | | |
| Planning Board | No | Madison Township relies on the Franklin County Planning Commission. The Planning Commission consists of the three Franklin County Commissioners and eight members appointed by the Board of County Commissioners. Three of the eight members are appointed from individuals nominated by the city of Columbus, another three members are appointed from individuals residing in unincorporated Franklin County recommended by townships of the county and the final two members are appointed at the discretion of the Board of County Commissioners with one member residing in unincorporated Franklin County and one member residing in a municipal corporation of the county. The specific powers and duties of the Planning Commission are identified in Section 713.23 of the Ohio Revised Code. The Planning Commission is responsible for reviewing major subdivision |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|------------------------|--|
| | | and rezoning requests, and for completing Comprehensive Plans for townships in Franklin County. |
| Zoning Board of Adjustment | No | Madison Township relies on the Franklin County Board of Zoning Appeals. The Board of Zoning Appeals consists of five members appointed by the Franklin County Board of County Commissioners. Members must reside in the unincorporated area of one of the ten townships with County Zoning. It is a quasi-judicial board that acts on administrative appeals, conditional uses, and variances. It is their duty to maintain the intent and spirit of the zoning district in conformity with the Zoning Resolution. The BZA is responsible for hearing and deciding on three types of applications related to the administration of the Franklin County Zoning Resolution. These include administrative appeals, conditional uses, and variances. |
| Planning Department | No | Madison Township relies on the Franklin County Planning and Zoning Department. The planning and zoning department is responsible for all zoning, code enforcement and land-use planning activities in the unincorporated area of Franklin County. The Economic Development and Planning Department administers county zoning for ten of the seventeen townships in Franklin County: Brown, Clinton, Franklin, Hamilton, Madison, Mifflin, Norwich, Pleasant, Sharon and Truro Townships. |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | Madison Township relies on the Franklin County Community Development section of the Economic Development & Planning Department. This section is responsible for providing funding and technical assistance to support community development activities and initiatives in Franklin County outside the auspices of the City of Columbus. The planning and zoning department is responsible for all zoning, code enforcement and land-use planning activities in the unincorporated area of Franklin County. |
| Public Works/Highway Department | Yes | Madison Township has 40.132 miles of roadway that is maintained by five public works department employees. A wide variety of duties are required to keep the roadways safe, including snow and ice removal, roadside ditch mowing, sign and road maintenance, tree and brush trimming, maintaining equipment, and consulting with residents on various issues. |
| Construction/Building/Code Enforcement Department | No | The Franklin County Building Department is the Building Department for Madison Township. The Building Department is responsible for issuing building permits for 1-, 2- and 3-family residential structures and associated development. The State of Ohio issues commercial building permits. |
| Emergency Management/Public Safety Department | No | The Township of Madison has a Police Department and Fire Department, but not a joint Public Safety Department. Franklin County has an Emergency Management and Homeland Security Department that covers the entire County. |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Tornado sirens, Alert Franklin County (Everbridge, requires signup) |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | The staff at the Public Works Department have duties which include tree and brush trimming and storm sewer repair and cleaning. |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|--|
| Mutual aid agreements | Yes | Local agreements with surrounding towns for snow removal. |
| Human Resources Manual | No | Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? No. |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | Franklin County Planning Commission |
| Engineers or professionals trained in building or infrastructure construction practices | No | Franklin County Building Department |
| Planners or engineers with an understanding of natural hazards | No | Franklin County Economic Development & Planning Department |
| Staff with expertise or training in benefit/cost analysis | Yes | The Finance Department in Madison Township |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | No appointed official, but the Police and Fire Departments would be the responders. |
| Grant writer(s) | No | County assist the Township with grants. |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |
| How do your administrative/technical capabilities contribute to risk reduction in your community? | | |
| The Township of Madison is reliant on Franklin County for assistance with many of the administrative/technical capabilities. However, this partnership creates a greater understanding of the risks in the community at the County level so various funding opportunities and projects are able to be implemented. | | |

Fiscal Capability

The table below summarizes financial resources available to Madison Township.

Table 9.21-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | No |
| Incur debt through special tax bonds | No |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | No |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Madison Township.

Table 9.21-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|--|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | No | The position used to be filled but is now empty. |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | Yes | The Township and its Police Department both have Facebook pages. The pages can be used for hazard mitigation education and outreach. |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Tornado sirens, Alert Franklin County (Everbridge, requires signup) |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | Yes | Social Media (Facebook) |

Community Classifications

The table below summarizes classifications for community programs available to Madison Township.

Table 9.21-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | Yes | Commercial – 3 Residential – 3 | May 26, 2020 2018 |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.

- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.21-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee Failure | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temperatures | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.21.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for Madison Township.

Table 9.21-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|---------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Madison (Twp) | NR | NR | NR | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)
^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported
RL Repetitive Loss
SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Madison Township.

Table 9.21-10. NFIP Summary

| NFIP Topic | Comments |
|------------------------------------|----------|
| Flood Vulnerability Summary | |

| NFIP Topic | Comments |
|--|--|
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | No |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | Evaluate the cost of repairs vs the pre-damaged value of structure. No substantial damage determinations made recently. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | Do not know many. |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | No, the most recent map update in 2007 did not include new analysis of streams. |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Franklin County Economic Development & Planning Department (EDP) |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | Unsure |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability) | Franklin County EDP provides permit review, response to resident enquiries about floodplains, enforcement |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Franklin County EDP will evaluate cost of improvements and current value of structure |
| What are the barriers to running an effective NFIP program in the community, if any? | N/A |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | 2017 |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | Special Resolution National Flood Insurance Program Regulation |
| Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? | 2007 |
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Yes, freeboard requirement |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | Floodplain management is administered by Franklin County EDP which also administers county zoning and subdivision regulations. |

9.21.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

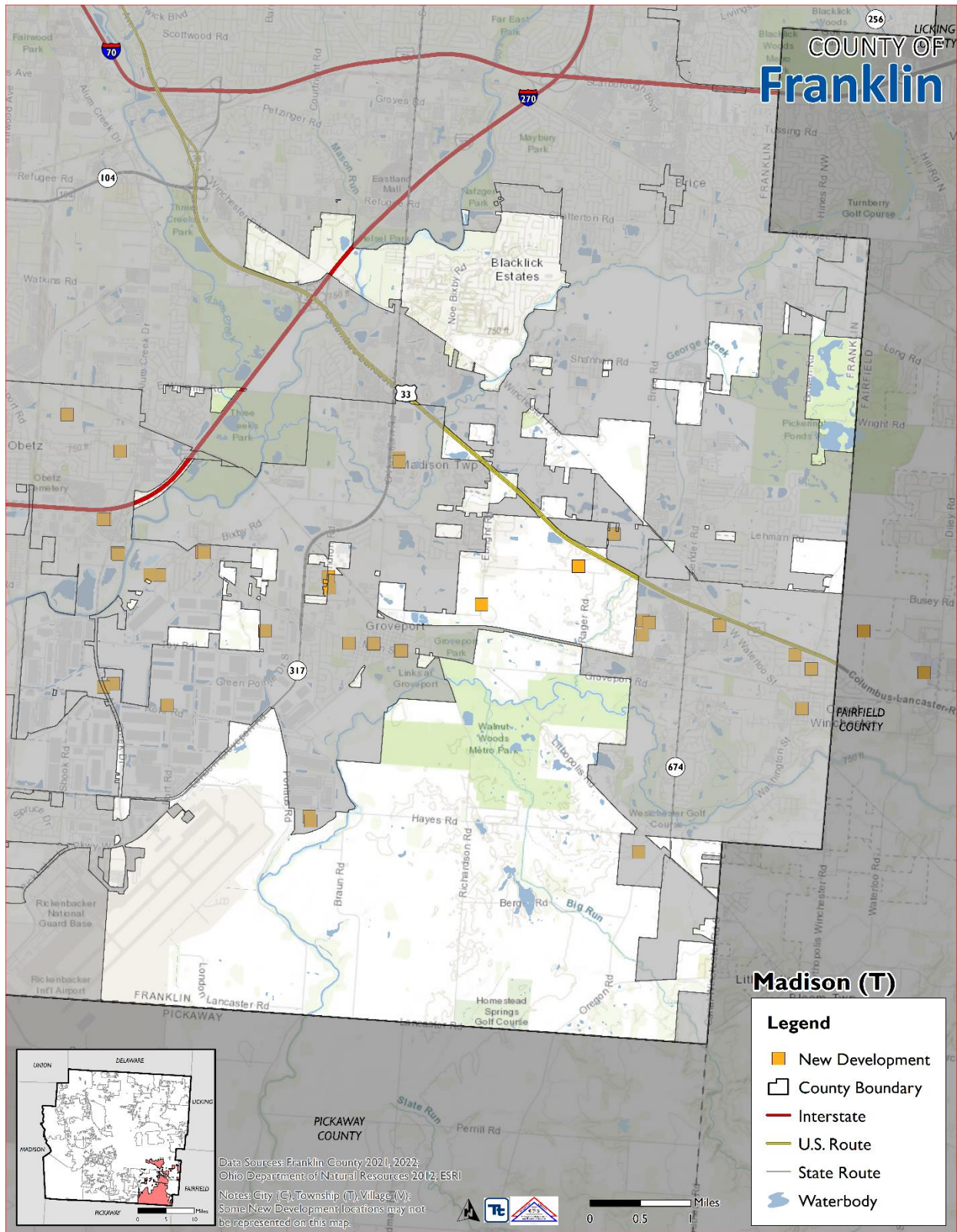
Table 9.21-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | - | - | - | - | - | - | - | - | - |
| Multi-Family | 1 | Yes | 0 | - | 0 | - | 0 | - | 0 | - |
| Other (commercial, mixed-use, etc.) | 2 | - | 1 | - | 0 | - | 1 | Yes | 1 | No |
| Total Permits Issued | 3 | 1 | 1 | - | 0 | 0 | 1 | Yes | 1 | No |

Table 9.21-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g., Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|--------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| There has been no major development or infrastructure from 2018 to present. | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| There are no known or anticipated major development and infrastructure in the next five (5) years. | | | | | |

Figure 9.21-1. Madison Township New Development

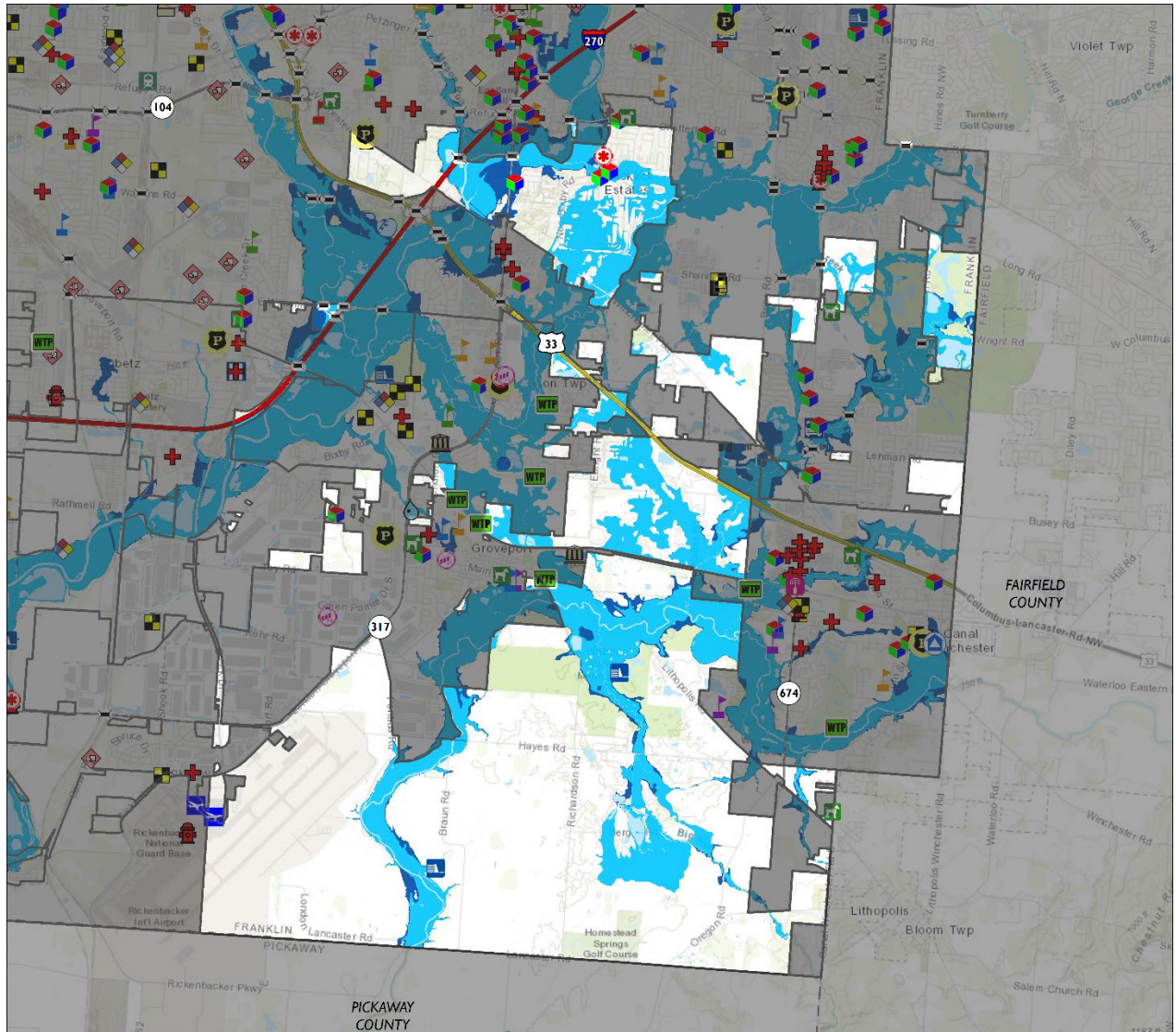


9.21.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Madison Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which Madison Township has significant exposure. The maps also show the location of potential new development, where available.

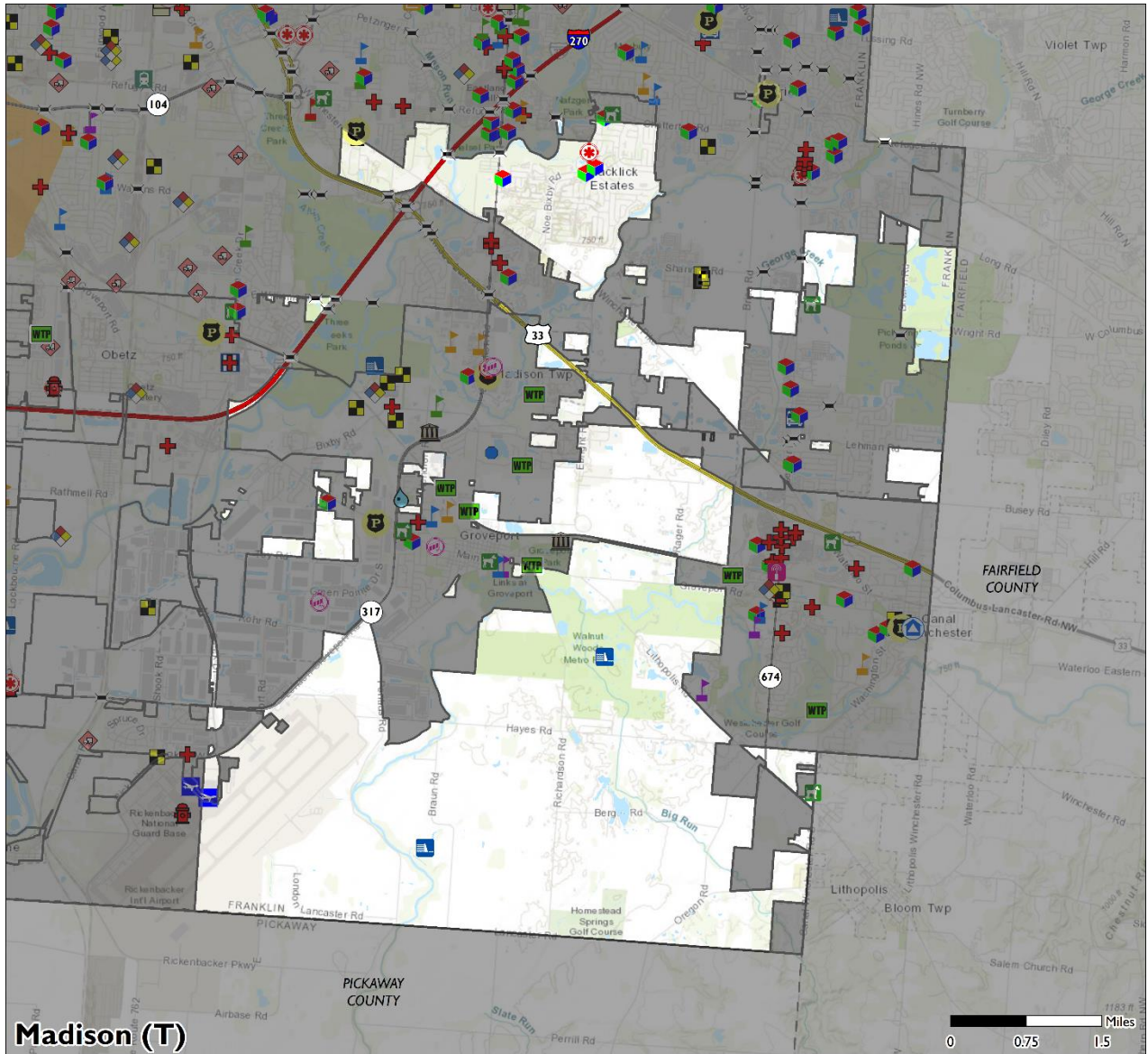
Figure 9.21-2. Madison Township Hazard Area Extent and Location Map - Flood



Madison (T)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | FEMA Flood Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | 1-Percent Annual Chance |
| Dam | Intermodal Facility | Secondary Education Facility | 0.2-Percent Annual Chance |
| Daycare Facility | Medical Clinic Facility | Tornado Siren | <i>The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.</i> |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Research/Development Facility | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021 |
| EOC | Medical Supply Chain Facility | Secondary Education Facility | Notes: City (C), Township (T), Village (V) |
| Electric Substation | Park and Ride | Veterinary Services | |
| Emergency Medical Service | Wastewater Systems | Wastewater Systems | |

Figure 9.21-3. Madison Township Hazard Area Extent and Location Map - Land Subsidence



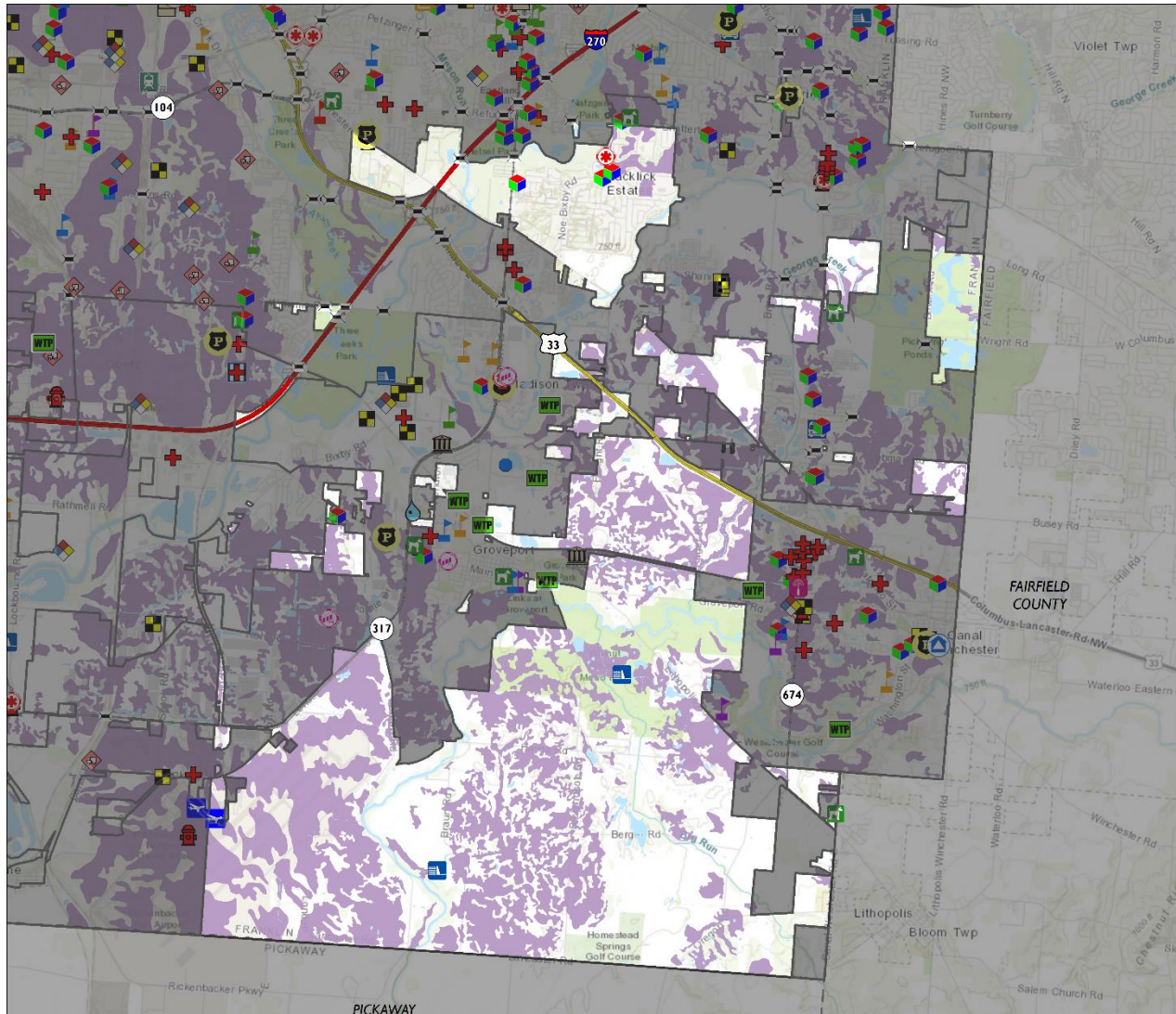
Madison (T)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|------------------------------------|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Land Subsidence Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | Carbonate Rock |
| Dam | Intermodal Facility | Research/Development Facility | |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | |
| EOC | Medical Supply Chain Facility | Veterinary Services | |
| Electric Substation | Park and Ride | Wastewater Systems | |
| Emergency Medical Service | | | |

Data Sources: Franklin County 2021, 2022;
Ohio Department of Natural Resources 2012;
ESRI; Ohio Department of Natural Resources,
Division of Geological Survey 2022

Notes: City (C), Township (T), Village (V)

Figure 9.21-4. Madison Township Hazard Area Extent and Location Map - Inland Erosion



Madison (T)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service

- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems

0 0.5 1 Miles

- Municipal Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody
- Inland Erosion Hazard Area**
- K-Factor: ≥ 0.49



Data Sources: Franklin County 2021, 2022;
Ohio Department of Natural Resources 2012;
ESRI; United States Department of Agriculture,
Natural Resources Conservation Service 2022

Notes: City (C), Township (T), Village (V)

Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Madison Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Madison Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.21-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Township did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Township did not experience any notable damages or losses. |
| March 2020-present | Covid-19 Pandemic | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Township did not experience any notable damages or losses. |
| April 29, 2021 | Heavy Rains, Flooding | No | Showers and thunderstorms ahead of a cold front produced locally heavy rain across central Ohio during the afternoon hours. Isolated rain event, 3-4 inches of rain in a small area, lots of localized flooding. | The Township did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below

summarizes the hazard risk/vulnerability rankings of potential natural hazards for Madison Township. Madison Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Madison Township indicated the following:

- The initial scoring of the Flood hazard (Medium) was increased to 'High', as multiple roadways have had to be closed several times a year due to flooding.

Table 9.21-14. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee Failure | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temperatures | Medium |
| Flood | High |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.21-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Madison Township

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 4 | 2 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 5 | 2 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | 3 | 3 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | 2 | 2 |
| Delaware Dam Inundation (MH Breach) Hazard Area | 1 | 1 |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Bexley identified the following vulnerabilities within its community:

- The basements and first floors of houses in the Township have been flooded from heavy, localized rain storms.
- The Township does not have an emergency shelter identified
- No critical facilities in the Township have back-up power

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.21.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.21-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|--------------------------|--|---|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding for one repetitive loss structure to permanently reduce damage. | Township Trustees Office | No Progress | No | - | - |
| Conduct a study on Berger Road and at the intersection of Groveport and Rager to prevent flooding on these emergency response routes. (2 years) | Township Trustees Office | No Progress | No | - | - |
| Install tornado sirens in the areas of Madison Township where Franklin County EMA has identified the need for sirens. (20,000 / year) | Township Trustees Office | No Progress | Yes | Certain areas in the Township are not able to clearly hear the sirens. | Township Trustees Office, Franklin County EMA |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, Madison Township identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County’s first HMP, Madison Township has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

Madison Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.21-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee Failure | X | X | - | X | X | X | X | - | - | X |
| Disease Outbreak | - | - | - | X | - | - | X | - | - | X |
| Drought | X | X | X | X | X | X | X | X | - | X |
| Earthquake | X | X | - | X | X | X | X | - | - | X |
| Extreme Temperatures | - | X | - | X | - | X | X | - | - | X |
| Flood | X | X | - | X | X | X | X | - | - | X |
| Geologic | X | X | X | X | X | X | X | X | - | X |
| Invasive Species | - | - | - | X | - | - | X | - | - | X |
| Severe Summer Weather | X | X | - | X | X | X | X | - | - | X |
| Severe Winter Weather | X | X | - | X | X | X | X | - | - | X |
| Tornado | X | X | - | X | X | X | X | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.21-17)
 Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Madison Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.21-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------|--------------------------------|---|--|-----------|--------------------|---|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-Madison-01 | Tornado Siren Installation | Problem: Certain areas in the Township are not able to clearly hear tornado sirens. Solution: Install tornado sirens in the areas of Madison Township where Franklin County EMA has identified the need for sirens. | Tornado | 6 | 5 years | Township Trustees Office, Franklin County EMA | HMGP | High | Medium | High | SIP | ES |
| 2023-Madison-02 | All-Hazards Education Campaign | Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township. Solution: Work with Franklin County EM&HS to provide residents of Madison Township with the necessary information to | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, | 2, 4, 5 | 2 years | Franklin County EM&HS and Madison Township Administration | HMGP, Local Funds | High | Low | High | EAP | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------|-----------------------------------|---|---|-----------|--------------------|---|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | protect themselves and understand the threats of all hazards. | Tornadoes | | | | | | | | | |
| 2023-Madison-03 | Storm Maintenance Program Updates | <p>Problem: Local roadways become inundated with flood waters during heavy rainfalls.</p> <p>Solution: Update stormwater maintenance program to include maintenance activities prior to an upcoming storm.</p> | Flood, Severe Summer Weather | 3, 6 | 1 year | Madison Township Public Works | Local Funds | High | Low | High | SIP | PR |
| 2023-Madison-04 | Alert Franklin County Campaign | <p>Problem: Although there are notification methods in place, Madison Township residents may not be informed of the Franklin County text alerts for hazards.</p> <p>Solution: Along with Franklin County EM&HS, assist with the promotion of the text alert system so residents can stay informed and aware of any impending hazards.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species Severe Summer Weather, Severe Winter Weather, Tornadoes | 4, 5 | 2 years | Franklin County EM&HS and Madison Township Administration | HMGP, Local Funds | High | Low | High | EAP | ES |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------|-------------------------------------|--|--|-----------|--------------------|---------------------------------|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-Madison-05 | Emergency Shelter Identification | <p>Problem: Madison Township currently does not have a specified location for a shelter in case of emergency.</p> <p>Solution: Identify a location for an emergency shelter which residents can go to in case of an emergency.</p> | Dam/Levee Failure, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornadoes | 1, 4 | 5 years | Madison Township Administration | Local Funds | Medium | Low | Medium | LPR | ES |
| 2023-Madison-06 | Critical facility Back-Up Generator | <p>Problem: Although currently undefined, an emergency shelter would need to provide basic needs for residents, including heating and air conditioning. No buildings or facilities in Madison Township currently have back-up power.</p> <p>Solution: Install a back-up/emergency generator and transfer switch to the identified building or facility which will be used as an emergency shelter.</p> | Dam/Levee Failure, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornadoes | 6 | 5 years | Madison Township Administration | BRIC, HMGP | Medium | Medium | Medium | SIP | PP, ES |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------|---------------------------------|---|---------------------------|-----------|--------------------|---|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-Madison-07 | Drought Contingency Plan | <p>Problem: The Township experiences periods of drought, which results in depleted water supply for crops, soils, and residents drinking water.</p> <p>Solution: The Township will develop a Drought Contingency Plan to address the different degrees of drought, water shortage, and expansive soil problems.</p> | Drought, Geologic | 1 | 3 years | Madison Township Administration, Franklin County Soil and Water Conservation District | Local and County Funds | Medium | Low | Low | LPR, NSP, EAP | PR, NR |
| 2023-Madison-08 | Native Landscaping Requirements | <p>Problem: Non-native landscaping can be damaged by drought.</p> <p>Solution: The Township will work with the Franklin County Building Department to establish landscape requirements that include native landscaping to better withstand drought.</p> | Drought, Geologic | 1 | 2 years | Madison Township Administration and Public Works, Franklin County Building Department | Local and County Funds | Low | Low | Low | LPR, NSP | PR, NR |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------|---------------------------------|--|---|-----------|--------------------|---|---|--|--------------------------|----------|---------------------|--------------|
| 2023-Madison-09 | Debris Management Plan | <p>Problem: The Township does not have an overarching Debris Management Plan to coordinate clean-up of debris after hazard events.</p> <p>Solution: The Township will work with the Franklin County EM&HS to develop a debris management plan as a framework for organizing the rapid, safe, and cost-effective separation, removal, collection, recycling, and disposal of debris after a disaster. This plan will include goals to minimize debris-related threats to public health, safety, and the environment following any hazard event.</p> | Dam/Levee Failure, Earthquake, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornadoes | 1 | 4 years | Madison Township Administration and Public Works, Franklin County EM&HS | Local and County Funds | Medium | Low | Medium | LPR | PR |
| 2023-Madison-10 | Repetitive Loss Area Mitigation | <p>Problem: Portions of the Township experienced repetitive flooding.</p> | Flood | 6 | 4 years | Madison Township Administration, Franklin County, and Federal Emergency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|----------------------------|---|---------------------------|-----------|--------------------|---------------------------|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | | | | Management Agency | | | | | | |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.21-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-----------------|-------------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Madison-01 | Tornado Siren Installation | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 9 | High |
| 2023-Madison-02 | All-Hazards Education Campaign | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 10 | High |
| 2023-Madison-03 | Storm Maintenance Program Updates | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 11 | High |
| 2023-Madison-04 | Alert Franklin County Campaign | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 9 | High |
| 2023-Madison-05 | Emergency Shelter Identification | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 8 | High |
| 2023-Madison-06 | Critical facility Back-Up Generator | 0 | 1 | 1 | 1 | 0 | 1 | 0 | -1 | 0 | 0 | 1 | 1 | 0 | 0 | 5 | Medium |
| 2023-Madison-07 | Drought Contingency Plan | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | -1 | 1 | 1 | -1 | 0 | 4 | Low |
| 2023-Madison-08 | Native Landscaping Requirements | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | -1 | 1 | 1 | -1 | 0 | 4 | Low |
| 2023-Madison-09 | Debris Management Plan | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 5 | Medium |
| 2023-Madison-10 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.22 VILLAGE OF MARBLE CLIFF

This section presents the jurisdictional annex for the Village of Marble Cliff that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Village of Marble Cliff participated in the planning process, an assessment of the Village of Marble Cliff’s risk and vulnerability, the different capabilities used in the Village of Marble Cliff, and an action plan that will be implemented to achieve a more resilient community.

9.22.1 Hazard Mitigation Planning Team

The Village of Marble Cliff identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Village of Marble Cliff departments, including the Fiscal Department and Engineer. The Assistant Fiscal Officer represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.22-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|--|
| Name/Title: | Peggy Shanahan, Assistant Fiscal Officer | Name/Title: | Stephanie Evans, Fiscal Officer |
| Address: | 1600 Fernwood Avenue Columbus, OH 43212 | Address: | 1600 Fernwood Avenue Columbus, OH 43212 |
| Phone Number: | 614-486-6993 | Phone Number: | 614-486-6993 |
| Email: | admin@marblecliff.org | Email: | fiscal@marblecliff.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Joshua Ford, PE, Project Engineer, Burgess & Niple, Inc. | | |
| Address: | 330 Rush Alley Suite 700 Columbus, OH 43215 | | |
| Phone Number: | 614-459-2050 x1242 | | |
| Email: | joshua.ford@burgessniple.com | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.22.2 Municipal Profile

The Village of Marble Cliff is located in the west-central portion of Franklin County, just three miles northwest of downtown Columbus, sitting on the eastern shore of the Scioto River. The village is bordered on three sides by the cities of Upper Arlington, Grandview Heights, and Columbus.

According to the American Community Survey, the 2021 population for the Village of Marble Cliff was 782, a 36.47 percent increase from the 2010 Census population of 573. Data from the 2021 American Community Survey indicates that 2.8 percent of the population is 5 years of age or younger and 23.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.22.3 Jurisdictional Capability Assessment and Integration

The Village of Marble Cliff performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Village capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Village of Marble Cliff to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Marble Cliff and field provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.22-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|--|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Chapter 150 Building Regulations; BOCA National Fire Prevention Code. | Local | Grandview Heights |
| <i>How does this reduce risk?</i> The Village has adopted the Ohio Basic Building Code of Ohio to ensure new development and redevelopment meets modern design standards. The Village has adopted the BOCA National Fire Prevention Code. | | | | |
| Zoning/Land Use Code | Yes | Chapter 154 Zoning Code | Local | Village Council |
| <i>How does this reduce risk?</i> This Zoning Ordinance is adopted to promote and protect the public health, safety, comfort, prosperity and general welfare by regulating and limiting the use of land areas and building and the erection, restoration and alteration of buildings and the use thereof for residential and business purposes; to regulate the area dimensions of land, yards and open spaces so as to secure adequate light, air and safety from fire and other dangers; to lessen or avoid congestion in the public streets; to regulate and restrict the bulk, height, design, percent of lot occupancy and the location of buildings; to protect the character of the existing residential, business, and public areas and to assure their orderly and beneficial development; to provide for the orderly growth and development of lands, and for the purpose of dividing the Village into various districts. | | | | |
| Subdivision Ordinance | Yes | Chapter 153 Subdivision Regulation | Local | Village Council |
| <i>How does this reduce risk?</i> Each subdivision of land within the Village shall be shown upon a plat and submitted to the Council for approval or disapproval. No individual, partnership, or corporation shall deepen, widen, fill, reroute, or change the course or location of any existing ditch, stream or drain without first obtaining permission from the Council. Plans for such deepening, widening, filling rerouting, or changing the location of any existing ditch, stream or drain shall comply with the specifications of the Council and construction shall be under the supervision of the Village Engineer. | | | | |
| Site Plan Ordinance | Yes | Chapter 153 Subdivision Regulation | Local | Village Council |
| <i>How does this reduce risk?</i> See Subdivision Ordinance | | | | |
| Stormwater Management Ordinance | Yes | Chapter 52 Stormwater Management; Chapter 155 Erosion and Sediment Control | Local | Public Works |
| <i>How does this reduce risk?</i> The purpose of Chapter 52 Stormwater Management is to establish minimum stormwater management requirements and controls for the continued operation and maintenance of stormwater drainage systems in order to ensure the health, safety, and general welfare of the citizens of the Village. This chapter seeks to meet that purpose through the following objectives: (1) Minimize increases in stormwater runoff from any development in order to reduce flooding, siltation and streambank erosion and maintain the integrity of stream channels. (2) Minimize increases in nonpoint source pollution caused by stormwater runoff from development that would otherwise degrade local water quality. (3) Minimize the total annual volume of surface water runoff that flows from any specific site during and following development to not exceed the pre-development hydrologic regime to the maximum extent practicable. (4) Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management controls and to ensure that these management controls are properly maintained and pose no threat to public safety. The purpose of Chapter 155 Erosion and Sediment Control is to safeguard persons, protect property, prevent damage to the environment and promote the public welfare by guiding, regulating, and controlling the design, construction, use, and maintenance of any development or other activity which disturbs or breaks the topsoil or results in the movement of earth on land in the Village. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | Chapter 152 Flood Damage Prevention | Local | Village Engineer |
| <i>How does this reduce risk?</i> It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: (A) Protect human life and health; (B) Minimize expenditure of public money for costly flood control projects; (C) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; (D) Minimize prolonged business interruptions; (E) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard; (F) Help maintain a stable tax base by providing for the proper use and development of areas of special flood hazard so as to minimize future flood blight areas; (G) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions. | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | Yes | Chapter 34 Civil Emergency | Local | - |
| <i>How does this reduce risk?</i> The chapter grants the mayor the ability to declare civil emergencies (Any natural or man-made calamity, disaster, or condition including but not limited to flood, conflagration, cyclone, tornado, earthquake, explosion, or other environmental condition existing within the corporate limits of the Village which poses a threat to the health, safety, and welfare of the public and/or threatens the destruction of property, to such an extent that extraordinary measures must be taken in order to preserve order and protect persons and property). After proclamation of a civil emergency, the Mayor may also in the interest of public safety and welfare make any of the following orders: (A) Order the closing of a business or residence when occupancy of the same would present a clear and immediate danger to its occupants or invitees. (B) Issue other such orders as are imminently necessary for the protection of life and property. (C) Issue such orders as are necessary for the health, safety, and welfare of the public. | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Strategic Plan, The Village of Marble Cliff, Ohio, June 2015 | Local | Village Council |
| <i>How does this reduce risk?</i> The Plan identifies Village strengths and challenges and includes a land use map. | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Stormwater Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Open Space Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Urban Water Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Habitat Conservation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Economic Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Shoreline Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|------------------------------------|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Marble Cliff to oversee and track development.

Table 9.22-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--|
| Do you issue development permits? • If yes, what department is responsible? | Yes | Village Council approves; Grandview Heights coordinates permitting and inspecting. |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | SFHA |
| Do you have a buildable land inventory? • If yes, please describe | No | - |
| Describe the level of build-out in your jurisdiction. | N/A | The Village is largely built out. |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Marble Cliff and their current responsibilities that contribute to hazard mitigation.

Table 9.22-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|---------------------|--|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | No | - |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|--|
| Public Works/Highway Department | Yes | Public Works |
| Construction/Building/Code Enforcement Department | Yes | Building Department |
| Emergency Management/Public Safety Department | Yes | The Village contracts with the City of Grandview Heights for police and fire protection. |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Siren at church – tested every Wednesday at noon |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Grandview Heights Service Department crews will collect yard waste for Marble Cliff residents each Monday from April through the end of November. Leaves are collected from the tree lawn curb strip during October and November. The Village will pay for removal of trees and limbs in the “tree line” between the sidewalk and the street. |
| Mutual aid agreements | No | - |
| Human Resources Manual | No | - |
| Other | Yes | <p>Beautification Committee: The Committee shall study the problems and determine the needs of the Village in connection with the planting, maintenance, removal, fertilization, pruning and bracing of trees on the tree lawns and other public property in the Village. The Committee may recommend a schedule for the periodic maintenance and planting of trees on tree lawns and other public property. Upon approval by Village Council, the Committee shall administer and implement the maintenance and planting schedule. Property owners will be given notice of the maintenance or planting of trees on the tree lawn bordering their private property. The service of the periodic maintenance may be made available to the property owners for maintenance of trees and private property. The Committee shall inform the Village Council of any tree which, because of age, disease or for any other reason, has become dangerous to the health, safety and welfare of the residents of the Village. The Committee shall also inform the Village Council of any tree, on private property that borders on any street, which has not been pruned or trimmed so as to prevent the obstruction of street signs and street lights, passage of pedestrians on sidewalks, and vision of street and alley intersections. In the event the Village Council is informed of the existence of one of these said conditions, the Council has the power to order said property owner to remove or trim the dangerous tree, whichever is appropriate.</p> |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | - |
| Engineers or professionals trained in building or infrastructure construction practices | No | - |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Grant writer(s) | Yes | Grant writing performed as needed by full-time or contracted Village staff. |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | | |

Fiscal Capability

The table below summarizes financial resources available to the Village of Marble Cliff.

Table 9.22-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | No |
| Capital improvements project funding | No |
| Authority to levy taxes for specific purposes | No |
| User fees for water, sewer, gas or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | No |
| Incur debt through special tax bonds | No |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | No |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | ARPA, OPWC – OH Public Works Commission |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Marble Cliff.

Table 9.22-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|---|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | Yes | Contracted out |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | No | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Siren at church – tested every Wednesday at noon |
| Natural disaster/safety programs in place for schools | No | All Marble Cliff children go to Grandview Heights schools |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | No | - |

Community Classifications

The table below summarizes classifications for community programs available to the Village of Marble Cliff.

Table 9.22-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.22-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.22.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Village of Marble Cliff.

Table 9.22-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|------------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Marble Cliff (V) | NR | NR | NR | NR | NR |

Sources: *a* BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Village of Marble Cliff.

Table 9.22-10. NFIP Summary

| NFIP Topic | Comments |
|--|--|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | - |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | - |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also triggered when any combination of costs to repair and improvements |

| NFIP Topic | Comments |
|---|--|
| | to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value). |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded? | - |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why. | Yes |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Burgess & Niple |
| Are any certified floodplain managers on staff in your jurisdiction? | Yes |
| Do you have access to resources to determine possible future flooding conditions from climate change? | Yes |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | - |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | - |
| What are the barriers to running an effective NFIP program in the community, if any? | None identified |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | None that the Village is aware of |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | Unsure |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | 152.25, 152.26, 152.27 |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | Meet |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Marble Cliff does not have development in the floodplain |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.22.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.22-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Multi-Family | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other (commercial, mixed-use, etc.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Permits Issued | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 9.22-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| The Packard | Residential | 30 | 2015 W Fifth Avenue 143-000066-00 | None | Planning |

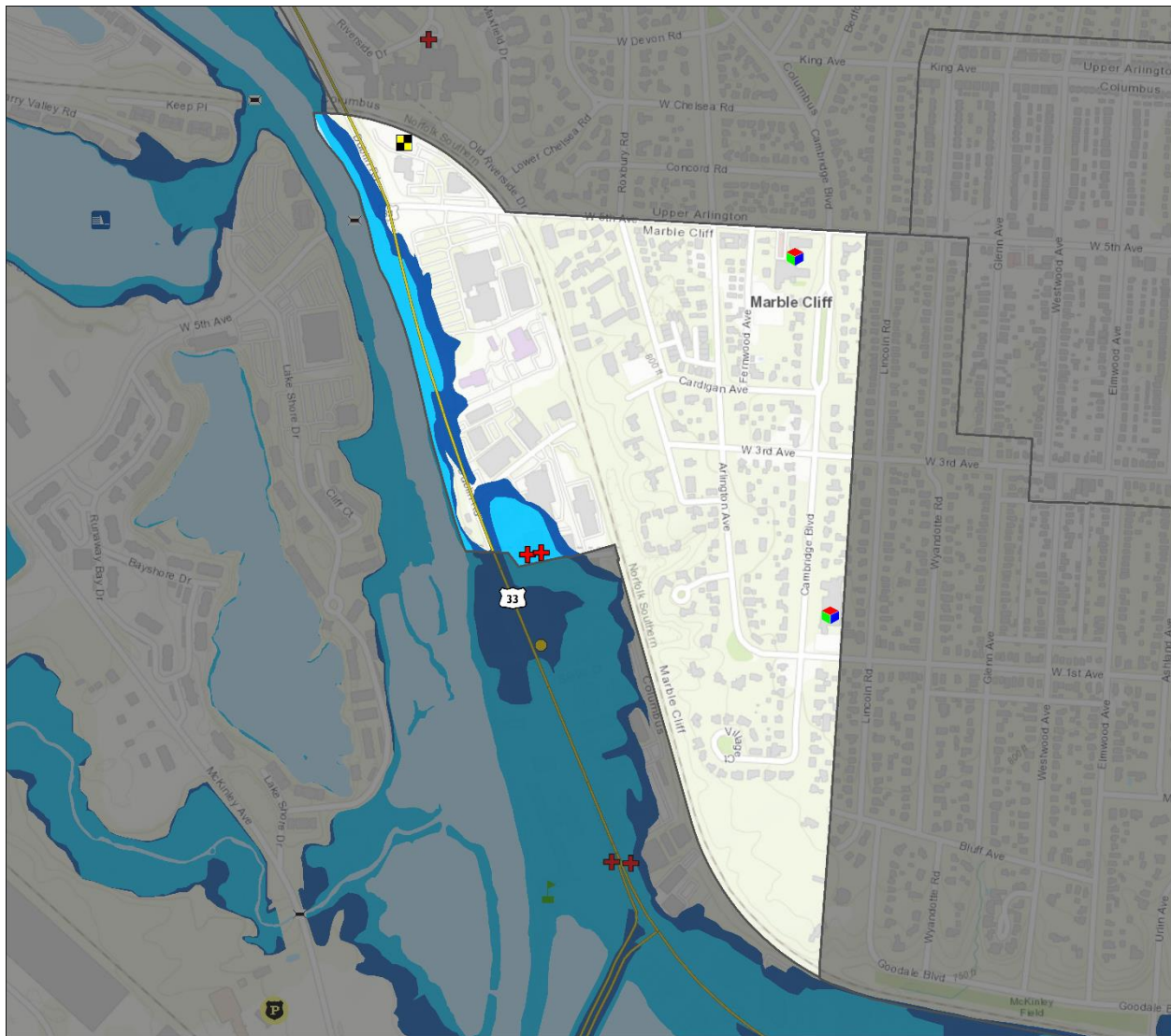
Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.22.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Village of Marble Cliff’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Village of Marble Cliff has significant exposure. The maps also show the location of potential new development, where available.

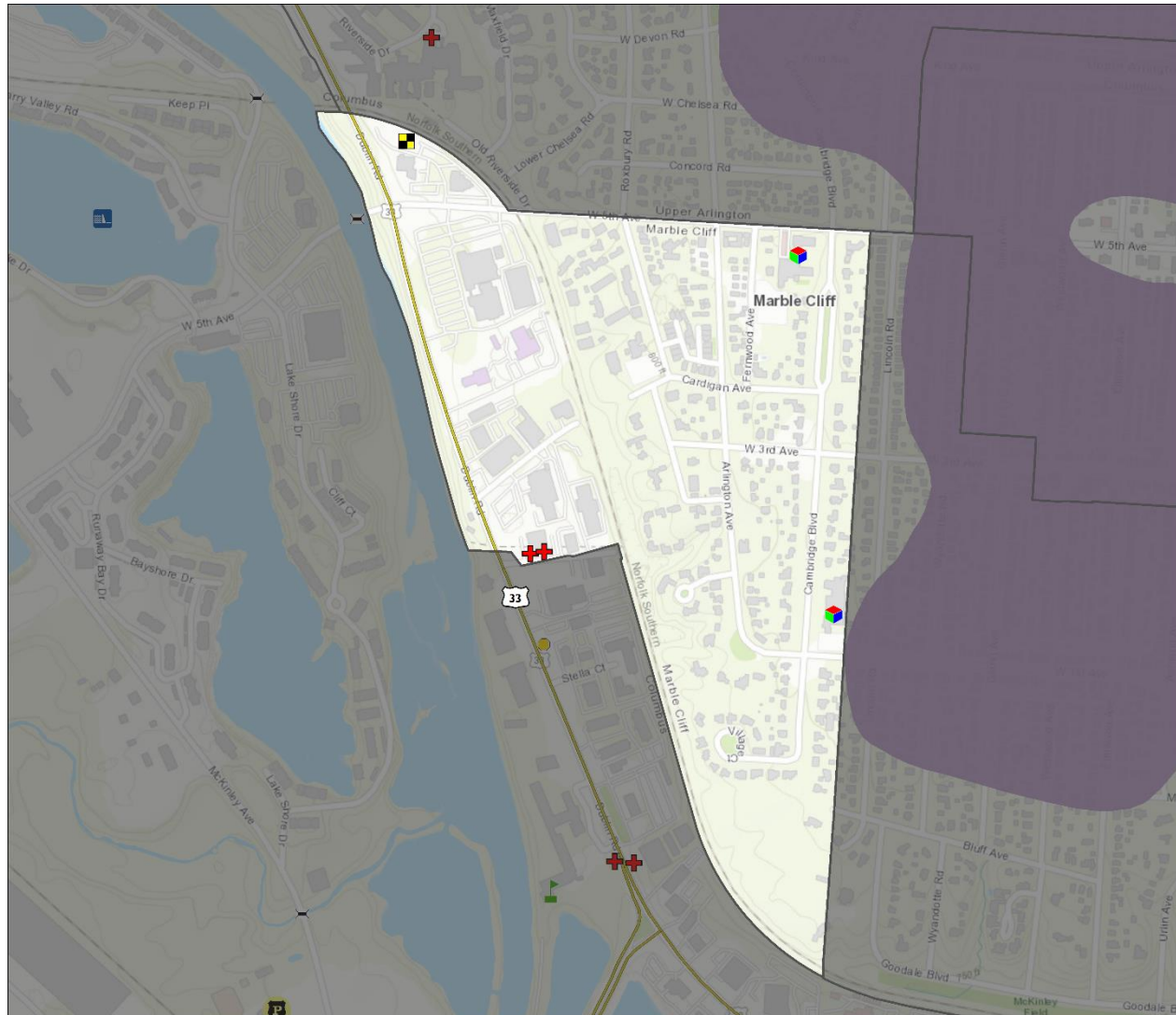
Figure 9.22-1. Village of Marble Cliff Hazard Area Extent and Location Map-Flood



Marble Cliff (V)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | FEMA Flood Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | 1-Percent Annual Chance |
| Dam | Intermodal Facility | Research/Development Facility | 0.2-Percent Annual Chance |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | <i>The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.</i> |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | |
| EOC | Medical Supply Chain Facility | Veterinary Services | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021 |
| Electric Substation | Park and Ride | Wastewater Systems | Notes: City (C), Township (T), Village (V) |
| Emergency Medical Service | | | |

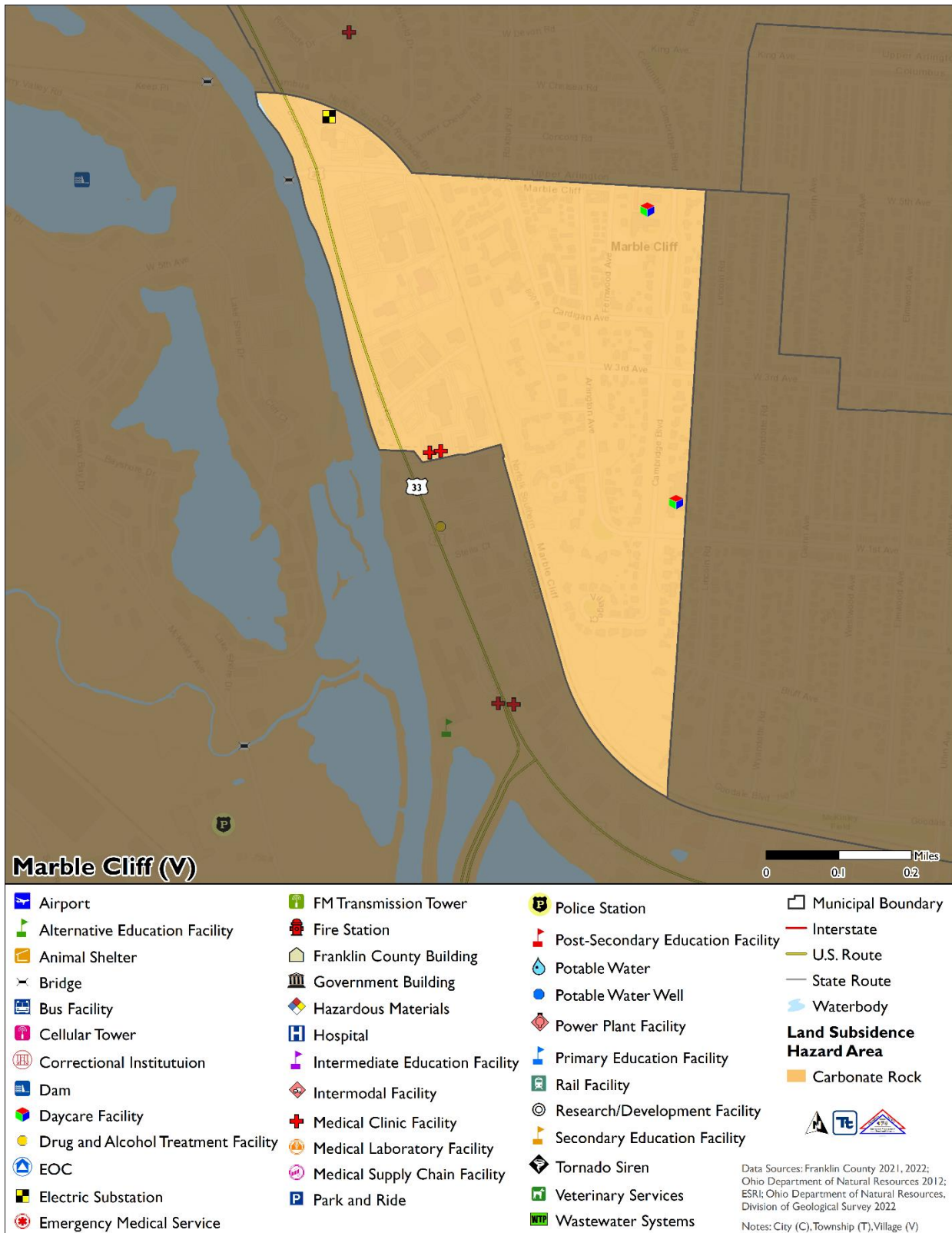
Figure 9.22-2. Village of Marble Cliff Hazard Area Extent and Location Map-Inland Erosion



Marble Cliff (V)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Inland Erosion Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | K-Factor: >=0.49 |
| Dam | Intermodal Facility | Research/Development Facility | |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; United States Department of Agriculture, Natural Resources Conservation Service 2022 |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | Notes: City (C), Township (T), Village (V) |
| EOC | Medical Supply Chain Facility | Veterinary Services | |
| Electric Substation | Park and Ride | Wastewater Systems | |
| Emergency Medical Service | | | |

Figure 9.22-3. Village of Marble Cliff Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Village of Marble Cliff’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Village of Marble Cliff experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.22-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | Although the County was impacted, the Village did not report damages. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | Although the County was impacted, the Village did not report damages. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Village was subject to closures and masking/social distancing requirements. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Marble

Cliff. The Village of Marble Cliff reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.22-14. Hazard Ranking Input

| Hazard | Ranking |
|-----------------------|---------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.22-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Village of Marble Cliff

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 2 | 2 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 2 | 2 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 5 | 3 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Bexley identified the following vulnerabilities within its community:

- The Village does not have a hazard alert system implemented in Village public facilities throughout the Village to notify residents that utilize the facilities.
- The Village does not currently have a Post- Disaster Recovery Plan in place to ensure that the Village population can recover from hazard impacts.
- The following critical facilities are municipally owned and located in the special flood hazard area:
 - Mount Carmel Medical Group Tri Village
 - Northeast Dermatology D/B/A Skin Dermat*
- The Village's native species are at risk from invasive species which may harm local ecosystems.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.22.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.22-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|---|--|---|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (2,000 / 3 months) | Village Administration and Mayor's office | No Progress | Yes | Critical facilities require important weather alerts | Village Administration and Mayor's office |
| Use a third party system to email residents in the event of an emergency. (zero funding, ongoing) | Village Administration and Mayor's office | Ongoing Capability. The Village uses the Grandview Heights mass notification and 311 systems | No | - | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Village of Marble Cliff identified the following mitigation efforts completed since the last HMP:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Marble Cliff participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.22-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | - | - | X | - | X | - | - | - | X |
| Disease Outbreak | X | - | - | X | - | X | - | - | - | X |
| Drought | X | - | - | X | - | X | - | - | - | X |
| Earthquake | X | - | - | X | - | X | - | - | - | X |
| Extreme Temp | X | - | - | X | - | X | - | - | - | X |
| Flood | X | X | - | X | - | X | - | - | X | X |
| Geologic | X | - | - | X | - | X | - | - | - | X |
| Invasive Species | X | - | X | | - | X | - | X | - | - |
| Severe Summer Weather | X | - | - | X | - | X | - | - | - | X |
| Severe Winter Weather | X | - | - | X | - | X | - | - | - | X |
| Tornado | X | - | - | X | - | X | - | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.22-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Village of Marble Cliff will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.22-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------------|-----------------------------|---|--|-----------|--------------------|---|---------------------------|--|-----------------|----------|---------------------|--------------|
| 2023-Village of Marble Cliff-001 | NOAA Weather Alert Radios | Problem: The Village does not have a hazard alert system implemented in Village public facilities throughout the Village to notify residents that utilize the facilities. Solution: The Village will purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public to notify them of incoming hazards. | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado | 5 | 3 months | Village Administration and Mayor's office | FEMA, BRIC, HMGP | Facilities that hold a significant amount of people will have quick access to knowledge of an incoming hazard. | \$2,000 | High | EAP | ES |
| 2023-Village of Marble Cliff-002 | Post-Disaster Recovery Plan | Problem: The Village does not currently have a Post-Disaster Recovery Plan in place to ensure that the Village population can recover from hazard impacts. | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, | 1 | 1 Year | Village Administration and Mayor's office | FEMA, BRIC, HMGP, FMA | Residents and Village administration will be better prepared to complete post disaster recovery | >\$5,000 | High | LPR | PP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------------|--------------------------------|--|---|-----------|--------------------|--|---------------------------|--|----------------------------------|----------|---------------------|--------------|
| | | Solution: The Village will develop a Post- Disaster Recovery Plan that integrates the updated Hazard Mitigation Plan to protect people from the hazards of concern. | Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | | | | | measures after a hazard. | | | | |
| 2023-Village of Marble Cliff-003 | Flood Vulnerability Evaluation | <p>Problem: The following critical facilities are municipally owned and located in the special flood hazard area:</p> <ul style="list-style-type: none"> Mount Carmel Medical Group Tri Village Northeast Dermatology D/B/A Skin Dermat* <p>Solution: The Village will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the facilities to protect each to the 500-year flood level. Options include:</p> <ul style="list-style-type: none"> Elevation of facility Floodproofing of facility Mobile flood barriers | Flood | 6 | Less than 5 Years | NFIP Floodplain Administrator, Property Owners | HMGP, FMA, BRIC, CDBG | Critical facilities will be able to continue to operate and will not flood as often. | TBD after feasibility assessment | High | SIP | SP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------------|---------------------------------|---|---------------------------|-----------|--------------------|--|--|---|--------------------------|----------|---------------------|--------------|
| | | Once the most cost-effective option is identified, the Village will carry out the option. | | | | | | | | | | |
| 2023-Village of Marble Cliff-004 | Invasive Species Prevention | Problem: The Village's native species are at risk from invasive species which may harm local ecosystems. Solution: The Village will create and distribute guides to the community through social media and physical print, warning residents of certain species of plants that are considered urban forestry. Additionally, The Village will engage in a social media campaign to educate the Village on how to not to bring in pests and vegetation that may pose a threat. | Invasive Species | 5 | 6 months | Department of Community Relations Department of Service, Division of Urban Forestry | Village Budget | The Village will ensure residents are more knowledgeable. | \$1,000 | High | NSP | NR |
| 2023-Village of Marble Cliff-005 | Repetitive Loss Area Mitigation | Problem: Portions of the Village experienced repetitive flooding. Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | Flood | 6 | 4 years | Village Administration, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Village budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

FEMA Federal Emergency Management Agency
BRIC Building Resilient Infrastructure and Communities Program

HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- *Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.22-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------------------------|---------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Village of Marble Cliff-001 | NOAA Weather Alert Radios | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 12 | High |
| 2023-Village of Marble Cliff-002 | Post-Disaster Recovery Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-Village of Marble Cliff-003 | Flood Vulnerability Evaluation | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 12 | High |
| 2023-Village of Marble Cliff-004 | Invasive Species Prevention | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 12 | High |
| 2023-Village of Marble Cliff-005 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.23 TOWNSHIP OF MIFFLIN

This section presents the jurisdictional annex for the Township of Mifflin that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Township of Mifflin participated in the planning process, an assessment of the Township of Mifflin’s risk and vulnerability, the different capabilities used in the Township of Mifflin, and an action plan that will be implemented to achieve a more resilient community.

9.23.1 Hazard Mitigation Planning Team

The Township of Mifflin identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Township of Mifflin departments, including the Township administration. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.23-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|---|
| Name/Title: | Nancy White/ Township Administrator | Name/Title: | - |
| Address: | 400 West Johnstown Road, Suite 200 Gahanna, OH 43230 | Address: | - |
| Phone Number: | (614) 471-4494 | Phone Number: | - |
| Email: | whiten@mifflin-oh.gov | Email: | - |
| NFIP Floodplain Administrator | | | |
| Name/Title: | - | | |
| Address: | - | | |
| Phone Number: | - | | |
| Email: | - | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.23.2 Municipal Profile

Township of Mifflin is in the northeast of Franklin County and runs along Interstate 270 to its west with proximity to the John Glenn Columbus International Airport. Most of what was once Mifflin Township has since been annexed by the cities of Gahanna in the east and Columbus in the north, west, and south.

According to the American Community Survey, the 2021 population for the Township of Mifflin was 38,121, a 6.75 percent increase from a population of 35,710 from the 2010 Census. Data from the 2020 U.S. Census indicate that 5.6 percent of the population is 5 years of age or younger and 16.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.23.3 Jurisdictional Capability Assessment and Integration

The Township of Mifflin performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Township of Mifflin to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Township of Mifflin and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.23-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Zoning/Land Use Code | Yes | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Subdivision Ordinance | Yes | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | Yes | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| <i>Consider the following:</i> | | | | |
| <ul style="list-style-type: none"> • Are environmental systems that protect development from hazards identified and mapped? • Do environmental policies maintain and restore protective ecosystems? • Do the ordinances prohibit development within, or filling of, wetlands, floodways, and floodplains? • Do environmental policies provide incentives to development that is located outside protective ecosystems? | | | | |
| Flood Damage Prevention Ordinance | Yes | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Clinton-Mifflin Land Use Plan | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|--|---|--|
| <i>Consider the following:</i> | | | | |
| <ul style="list-style-type: none"> Do infrastructure policies limit extension of existing facilities and services that would encourage development in areas vulnerable to natural hazards? Does the future land use map clearly identify natural hazard areas? Do the land use policies discourage development or redevelopment with natural hazard areas? Does the plan provide adequate space for expected future growth in areas located outside natural hazard areas? | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | Yes | Franklin County and Township Stormwater Management Program 2014 – 2019 | Local | Franklin County Stormwater Partnership |
| <i>How does this reduce risk?</i> | | | | |
| The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. Polluted stormwater runoff is often transported through municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> Consider the following: <ul style="list-style-type: none"> Does your CEMP cover short-term response and long-term recovery to address communications, evacuation, and housing necessary for identified hazards? | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of the Township of Mifflin to oversee and track development.

Table 9.23-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|--|--------|--|
| Do you issue development permits? <ul style="list-style-type: none"> If yes, what department is responsible? | No | Franklin County does this for the Township |
| If you do not issue development permits, what is your process for tracking new development? | N/A | Franklin County |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | Floodplain |
| Do you have a buildable land inventory? <ul style="list-style-type: none"> If yes, please describe | N/A | - |

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|--|--------|----------|
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Mifflin and their current responsibilities that contribute to hazard mitigation.

Table 9.23-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|---------------------|--|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | No | - |
| Planning Department | Yes | Mifflin township residents and businesses can apply for permits through the Franklin County Economic Development and Planning Department. |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | Yes | Mifflin township residents and businesses can apply for permits through the Franklin County Economic Development and Planning Department. |
| Public Works/Highway Department | Yes | <p>The Mifflin Township Service Department is responsible for the basic upkeep and maintenance of public roadway, bridges, storm water systems and road signage, code enforcement, and care and maintenance of two Mifflin Township's two cemeteries, fire stations and other township property.</p> <p>The Mifflin Township Division of Service team salts roads in the winter, removes debris from roadways after a storm, tags houses for code violations, overseeing community clean-up days, overseeing burials in one of the two Mifflin cemeteries or fixing a gutter at one of the Township's four fire stations.</p> <p>Funded by the Township Road and Bridge Fund, the State Motor Vehicle License tax and the State Gasoline tax, the Division of Service works in partnership on road issues with municipal, county and state programs to improve the infrastructure and ensure the critical service in the unincorporated community.</p> |
| Construction/Building/Code Enforcement Department | Yes | The Division of Service works in conjunction with Franklin County Code Enforcement and the Franklin County Board of Health to address various code violations. Township staff responds to complaints and patrols neighborhoods for high grass, weeds, trash and other waste, inoperable cars, in addition to working with agencies to improve abandoned properties or vacant houses. |
| Emergency Management/Public Safety Department | Yes | <p>Mifflin Township Police Department.</p> <p>The Mifflin Township Division of Fire provides fire and emergency medical services (EMS) to the City of Gahanna and the unincorporated portion of the Township.</p> |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|--|
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Franklin County's Alert System |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Stormwater Program: The Franklin County Stormwater Partnership and program was initiated in 2003 to join programs related to drainage management, water quality management and stormwater regulation compliance. |
| Mutual aid agreements | Yes | - |
| Human Resources Manual | No | - |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | - |
| Engineers or professionals trained in building or infrastructure construction practices | No | - |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |
| How do your administrative/technical capabilities contribute to risk reduction in your community? | | |

Fiscal Capability

The table below summarizes financial resources available to the Township of Mifflin.

Table 9.23-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | - |
| Capital improvements project funding | - |
| Authority to levy taxes for specific purposes | - |
| User fees for water, sewer, gas or electric service | - |
| Impact fees for homebuyers or developers of new development/homes | - |
| Stormwater utility fee | - |
| Incur debt through general obligation bonds | - |
| Incur debt through special tax bonds | - |
| Incur debt through private activity bonds | - |
| Withhold public expenditures in hazard-prone areas | - |
| Other federal or state Funding Programs | - |
| Open Space Acquisition funding programs | - |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | The Division of Service is funded by the Township Road and Bridge Fund, the State Motor Vehicle License tax, and the State Gasoline tax. |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Township of Mifflin.

Table 9.23-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|--|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | No | - |
| Hazard mitigation information available on your website | Yes | Information on the stormwater management program is present on the Township website. |
| Social media for hazard mitigation education and outreach | - | - |
| Citizen boards or commissions that address issues related to hazard mitigation | - | - |
| Warning systems for hazard events | Yes | Franklin County's Alert System |
| Natural disaster/safety programs in place for schools | - | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | - | - |

Community Classifications

The table below summarizes classifications for community programs available to the Township of Mifflin.

Table 9.23-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.

- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.23-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.23.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Township of Mifflin.

Table 9.23-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|---------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Mifflin (Twp) | NR | NR | NR | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)
^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Township of Mifflin.

Table 9.23-10. NFIP Summary

| NFIP Topic | Comments |
|--|----------|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. | - |

| NFIP Topic | Comments |
|--|--|
| <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | - |
| <p>Are any RiskMAP projects currently underway in your jurisdiction?</p> <ul style="list-style-type: none"> If so, state what projects are underway. | - |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | <p>According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value).</p> |
| <p>How many properties have been mitigated (elevation or acquisition) in your jurisdiction?</p> <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | - |
| <p>Do your flood hazard maps adequately address the flood risk within your jurisdiction?</p> <ul style="list-style-type: none"> If not, state why. | - |
| NFIP Compliance | |
| <p>What local department is responsible for floodplain management?</p> | - |
| <p>Are any certified floodplain managers on staff in your jurisdiction?</p> | - |
| <p>Do you have access to resources to determine possible future flooding conditions from climate change?</p> | - |
| <p>Does your floodplain management staff need any assistance or training to support its floodplain management program?</p> <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | - |
| <p>Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)</p> | - |
| <p>How do you determine if proposed development on an existing structure would qualify as a substantial improvement?</p> | - |
| <p>What are the barriers to running an effective NFIP program in the community, if any?</p> | - |
| <p>Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed?</p> <ul style="list-style-type: none"> If so, state the violations. | - |
| <p>When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?</p> | - |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | - |

| NFIP Topic | Comments |
|---|----------|
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | - |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | - |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | - |

9.23.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The table below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.23-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | - | - | - | - | - | - | - | - | - |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | - | - | - | - | - | - | - | - | - | - |

Table 9.23-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

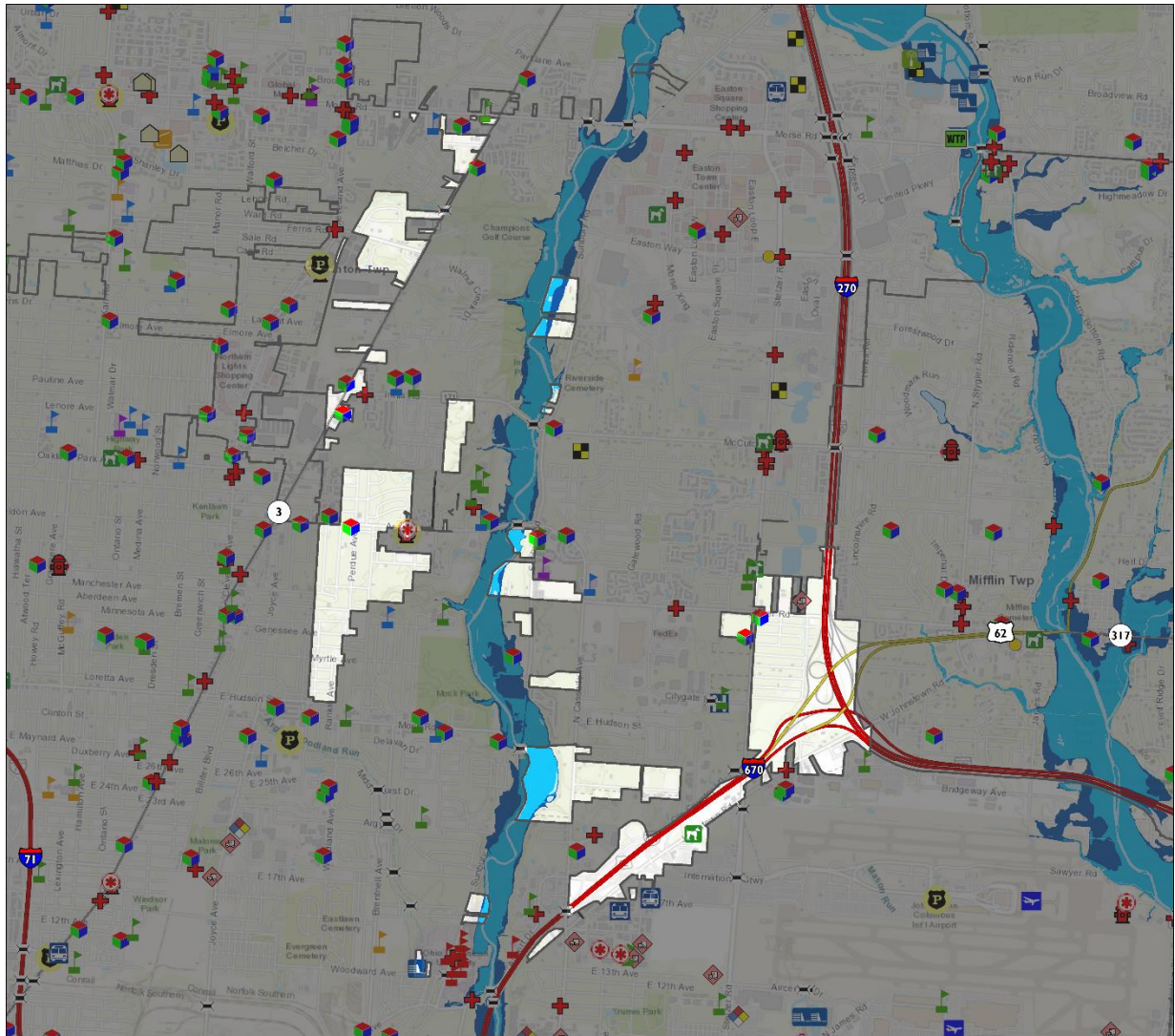
9.23.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Township of Mifflin’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan

and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Township of Mifflin has significant exposure. The maps also show the location of potential new development, where available.

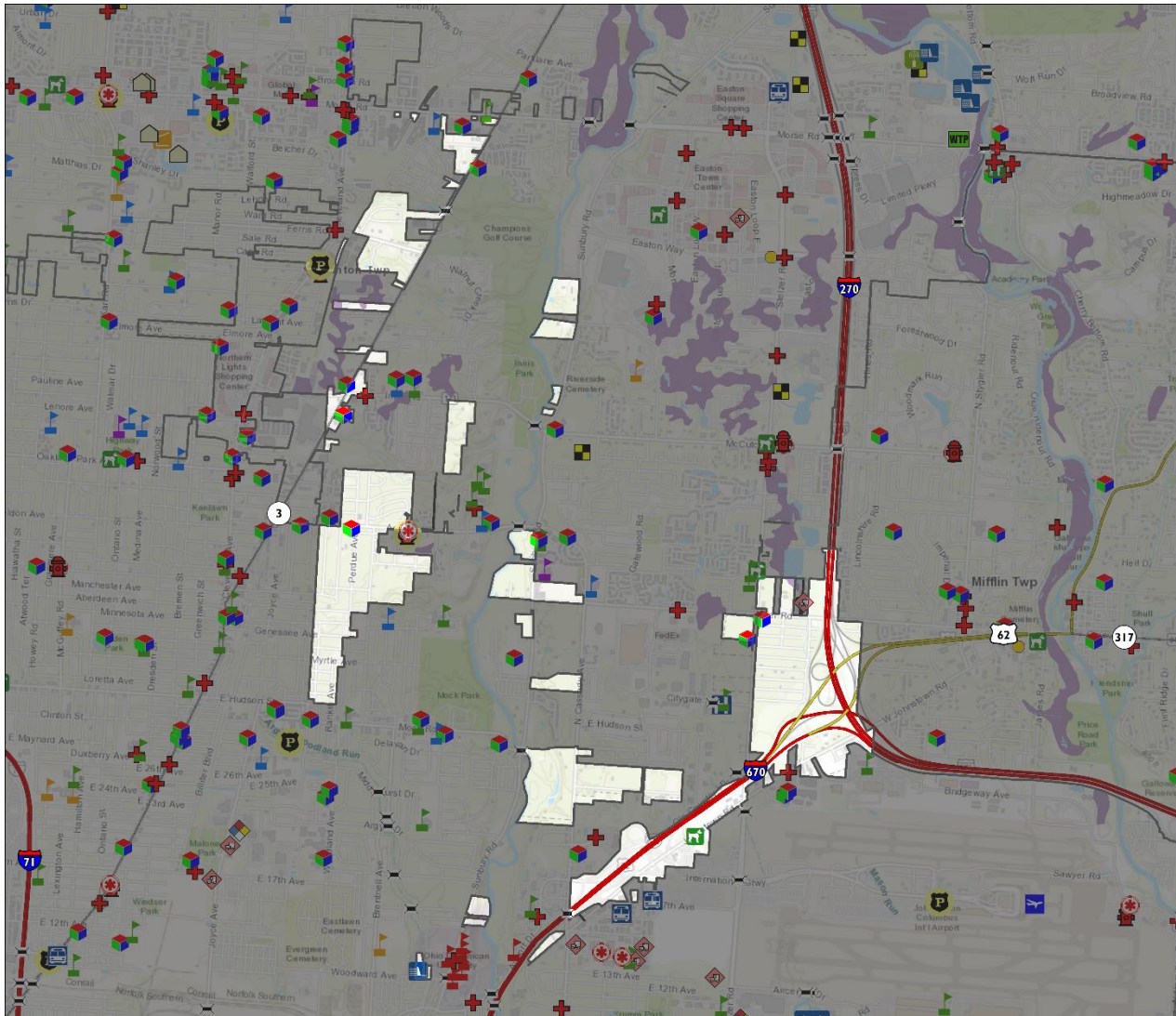
Figure 9.23-1. Township of Mifflin Hazard Area Extent and Location Map-Flood



Mifflin (T)

- | | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Hazardous Materials | Potable Water Well | State Route |
| Bus Facility | Hospital | Power Plant Facility | Waterbody |
| Cellular Tower | Intermediate Education Facility | Primary Education Facility | FEMA Flood Hazard Area |
| Correctional Institution | Intermodal Facility | Rail Facility | 1-Percent Annual Chance |
| Dam | Medical Clinic Facility | Research/Development Facility | 0.2-Percent Annual Chance |
| Daycare Facility | Medical Laboratory Facility | Secondary Education Facility | <i>The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.</i> |
| Drug and Alcohol Treatment Facility | Medical Supply Chain Facility | Tornado Siren | |
| EOC | Park and Ride | Veterinary Services | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESR; FEMA 2021 |
| Electric Substation | Wastewater Systems | | Notes: City (C), Township (T), Village (V) |
| Emergency Medical Service | | | |

Figure 9.23-2. Township of Mifflin Hazard Area Extent and Location Map-Inland Erosion

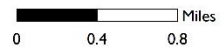


Mifflin (T)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service

- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems

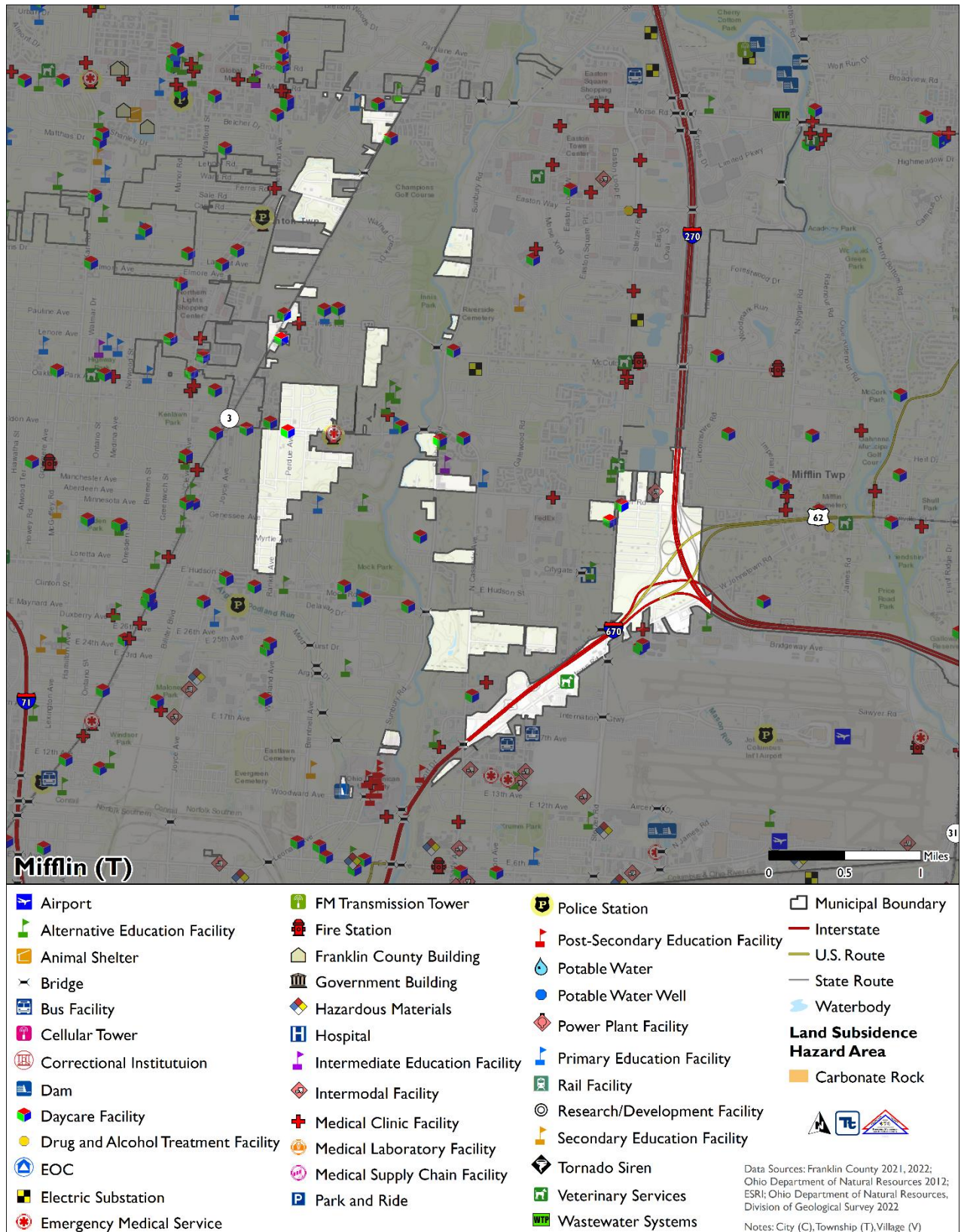


- Municipal Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody
- Inland Erosion Hazard Area**
- K-Factor: ≥ 0.49

Data Sources: Franklin County 2021, 2022;
Ohio Department of Natural Resources 2012;
ESRI; United States Department of Agriculture,
Natural Resources Conservation Service 2022

Notes: City (C), Township (T), Village (V)

Figure 9.23-3. Township of Mifflin Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

Mifflin Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Mifflin Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.23-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Village did not experience additional losses and damages. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Village did not experience additional losses and damages. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Village was subject to closures and masking/social distancing requirements. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Township of Mifflin.

The Township of Mifflin reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.23-14. Hazard Ranking Input

| Hazard | Ranking |
|-----------------------|---------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic (Erosion) | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.23-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Township of Mifflin

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | - |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | 1 | 1 |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Mifflin Township identified the following vulnerabilities within its community:

- The Township does not currently have hazard mitigation information available on their website for easy access to residents.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.23.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the ‘Capability Assessment’ earlier in this annex.

Table 9.23-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|--------------------------|--|---|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding for public information including outreach projects and technical assistance to property owners. (5,000 / 1 year) | Township Trustees Office | No Progress | Yes | The Township does not currently have hazard mitigation information available on their website for easy access to residents. Instead of seeking funding, utilize information available from the County and include potential funding opportunities available for homeowners to perform mitigation activities on their property. | Township Administration |
| Work with Franklin County Emergency Management and Homeland Security to develop public outreach regarding all natural hazards, and the county's susceptibility to those hazards, and make available on website. (5,000 / 1 year) | Township Trustees Office | No Progress | Yes | The Township does not currently have hazard mitigation information available on their website for easy access to residents. | Township Administration |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Township of Mifflin identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County's first HMP, the Township of Mifflin has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Township of Mifflin participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.23-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | - | - | X | - | - | X | - | - | X |
| Disease Outbreak | X | - | - | X | - | - | X | - | - | X |
| Drought | X | - | - | X | - | - | X | - | - | X |
| Earthquake | X | - | - | X | - | - | X | - | - | X |
| Extreme Temp | X | - | - | X | - | - | X | - | - | X |
| Flood | X | - | - | X | - | - | X | - | - | X |
| Geologic (Erosion) | X | - | - | X | - | - | X | - | - | X |
| Invasive Species | X | - | - | X | - | - | X | - | - | X |
| Severe Summer Weather | X | - | - | X | - | - | X | - | - | X |
| Severe Winter Weather | X | - | - | X | - | - | X | - | - | X |
| Tornado | X | - | - | X | - | - | X | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.23-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions that Mifflin Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.23-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|-----------------------------------|--|--|-----------|--------------------|---------------------------|---------------------------|--|-----------------|----------|---------------------|--------------|
| 2023-Township of Mifflin-001 | Hazard Information Website Update | <p>Problem: The Township does not currently have hazard mitigation information available on their website for easy access to residents.</p> <p>Solution: The Township will develop a hazard mitigation part on their website that explains how to mitigate and prepare for a hazard or what funding opportunities may be available for homeowners. Additionally, the Township will use the website and social media to double as a warning system for hazard events for residents.</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 5 | 1 Year | Township Administration | Township Budget | The residents of the Township will be better protected and prepared from hazards of concern. | \$1,000 | High | EAP | ES, PI |
| 2023-Township of Mifflin-002 | Continuity of Operations Plan | <p>Problem: The Township does not have a Continuity of Operations Plan that is developed that addresses the hazards of concern</p> <p>Solution: The Township will develop a Continuity of Operations Plan that will</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, | 5 | 1 Year | Township Administration | Township Budget | The Township will be better prepared to perform continuity of operations after a | Staff Time | High | LPR | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|---------------------------------|--|---|-----------|--------------------|---|---|--|--------------------------|----------|---------------------|--------------|
| | | address the hazards of concern. | Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | | | | | hazard event. | | | | |
| 2023-Township of Mifflin-003 | Repetitive Loss Area Mitigation | Problem: Portions of the Township experienced repetitive flooding. Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | Flood | 6 | 4 years | Township Administration, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.

- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.23-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|------------------------------|-----------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Township of Mifflin-001 | Hazard Information Website Update | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-Township of Mifflin-002 | Continuity of Operations Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 12 | High |
| 2023-Township of Mifflin-003 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.24 VILLAGE OF MINERVA PARK

This section presents the jurisdictional annex for the Village of Minerva Park that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Village of Minerva Park participated in the planning process, an assessment of the Village of Minerva Park’s risk and vulnerability, the different capabilities used in the Village of Minerva Park, and an action plan that will be implemented to achieve a more resilient community.

9.24.1 Hazard Mitigation Planning Team

The Village of Minerva Park identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Village departments, including the Mayors Assistant. The Mayor represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.24-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|---|
| Name/Title: | Tiffany Southard, Mayor | Name/Title: | Mayors Assistant |
| Address: | 2829 Minerva Lake Road Columbus OH 43231 | Address: | 2829 Minerva Lake Road Columbus OH 43231 |
| Phone Number: | 614-882-5743 | Phone Number: | 614-882-5743 |
| Email: | mayor@minervapark.org | Email: | assistantmp@minervapark.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Lynn Eisentrout, Mayor | | |
| Address: | 2829 Minerva Lake Road, Columbus, OH, 43231 | | |
| Phone Number: | (614) 882-5743 | | |
| Email: | - | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.24.2 Municipal Profile

The Village of Minerva Park, an independent village within Columbus, is located in the north-central portion of Franklin County. The Village also encompasses a lake with a stream that flows into it. The Village began in 1895 as Minerva Amusement Park, an attraction managed by the Columbus Railway Company. The amusement park closed in 1902.

According to the American Community Survey, the 2021 population for the Village of Minerva Park was 1,611, a 26.65 percent increase from the 2010 Census Population of 1,272. Data from the 2021 American Community Survey indicates that 8.9 percent of the population is 5 years of age or younger and 16.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.24.3 Jurisdictional Capability Assessment and Integration

The Village of Minerva Park performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Village capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Village of Minerva Park to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Minerva Park and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.24-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Part Fourteen: Building and Housing Code | Local | Building Inspector and Planning and Zoning Clerk |
| <p><i>How does this reduce risk?</i> There is hereby adopted, for the purpose of establishing rules and regulations for the location, design, materials, construction, repair, equipment, use, occupancy, maintenance, removal and demolition of all structures, except insofar as such matters are otherwise specifically provided for in any other applicable law or ordinance those certain codes known as the Ohio Building Code (OBC) and related codes as adopted by the Ohio Board of Building Standards, Ohio Department of Commerce as published in Division 4101:1 et seq. of the Ohio Administrative Code (OAC), as the same may be amended from time to time.</p> | | | | |
| Zoning/Land Use Code | Yes | Title Six: Zoning | Local | Planning and Zoning Commission |
| <p><i>How does this reduce risk?</i> Establishes zoning districts and procedures of the Planning and Zoning Commission.</p> | | | | |
| Subdivision Ordinance | Yes | Title Four: Subdivision Regulations | Local | Planning and Zoning Commission |
| <p><i>How does this reduce risk?</i> No plat of any subdivision shall be entitled to be recorded in the County Recorder's office or to have any validity until it has been approved in the manner prescribed in these subdivision regulations. Before preparing and submitting a preliminary plat to the Planning and Zoning Commission, the subdivider or his or her engineer shall consult with the Commission, while the plat is in sketch form, to ascertain the location of proposed streets, parkways, parks, playgrounds, school sites and other planned developments, to acquaint himself or herself with the Commission's requirements and to familiarize himself or herself with the comprehensive plan, the Thoroughfare Plan, the Parks and Open Space Plan, the Zoning Code and the drainage, sewerage and water systems of the Village.</p> | | | | |
| Site Plan Ordinance | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Stormwater Management Ordinance | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Growth Management | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <p><i>How does this reduce risk?</i></p> | | | | |
| Flood Damage Prevention Ordinance | Yes | Chapter 1276 | Local | Village Engineer |
| <p><i>How does this reduce risk?</i> The following provisions pertaining to the use and development of lands subject to periodic flooding are provided to encourage the use and development of such lands in a manner so as to reduce the perils of flooding and to promote the public health, safety and general welfare.</p> <ul style="list-style-type: none"> • Zones. The floodplain shall be divided into two zones as follows: <ol style="list-style-type: none"> (1) Restricted Zone. The floodway necessary to preserve the natural capacity of a channel for flood water; and | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| <p>(2) Limited Zone. The low-lying area on each side of the restricted zone where flooding is of sufficient frequency to require proofing of structures against flood loss.</p> <ul style="list-style-type: none"> Zone Boundaries. Zone boundaries shall be determined by the Village Engineer and based upon publications of the Ohio Department of Natural Resources pertaining to floods and other appropriate information. Change of Zone Boundaries. Zone boundaries shall only be decreased subject to the provision of flood control or protection works and a finding by the Village Engineer that such control or protection is adequate to prevent flooding of the land being removed from regulation under this section. Development Standards. In addition to the provisions of the established zoning district, the following standards for the arrangement and development of land and buildings are required under this section. <p>(1) Restricted Zone. Within the restricted zone, the use and development of land shall be conducted in such a manner as not to fill the specified channel or otherwise restrict the flow of flood waters and shall be subject to the approval of the Village Engineer.</p> <p>(2) Limited Zone. Within the limited zone, the use shall be so developed as to proof the use or structure against flood damage, by elevating it above the prescribed level or by other appropriate means, and shall be subject to the approval of the Village Engineer.</p> | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | Yes | Chapter 208 Emergency Management | Local | Administration |
| <i>How does this reduce risk?</i> Resolution 1035-88, passed August 30, 1988, of the Board of County Commissioners of Franklin County, Ohio, authorized a written agreement with other political subdivisions, including the Village of Minerva Park, to establish a County-Wide Emergency Management Agency, pursuant to R.C. Ch. 5915, and to continue to provide financial support and funding pursuant to the county-wide agreement. Copies of this resolution and of the agreement may be obtained, at cost, from the Fiscal Officer. | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | No | - | - | - |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Continuity of Operations Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Minerva Park to oversee and track development.

Table 9.24-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|--|--------|---------------|
| Do you issue development permits? <ul style="list-style-type: none"> If yes, what department is responsible? | Yes | Code/Planning |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | - |
| Do you have a buildable land inventory? <ul style="list-style-type: none"> If yes, please describe | No | - |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Minerva Park and their current responsibilities that contribute to hazard mitigation.

Table 9.24-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|---------------------|--|
| Administrative Capability | | |
| Planning Board | Yes | Planner, Planning and Zoning Commission |
| Zoning Board of Adjustment | Yes | Planning and Zoning |
| Planning Department | Yes | Planner |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | Yes | Recreation and Parks Committee: <ul style="list-style-type: none"> Makes recommendations to council for the care and maintenance of the Village grounds and facilities including the pool, lakes/ponds, playground, basketball court, shelters and reserves. This is accomplished with support from the Village Administration. Recreation programs and playgrounds Care of Village lands (mowing, tree trimming, planting, etc.) Maintenance of lakes and lake areas Care of trees on Village property other than street rights of way |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | Yes | Public Works is responsible for services such as curbside leaf collection, snow removal, and maintenance of the stormwater system. |
| Construction/Building/Code Enforcement Department | Yes | Planner/Code |
| Emergency Management/Public Safety Department | Yes | Police |



| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Siren, Nixle, and social media |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Maintenance |
| Mutual aid agreements | Yes | Police |
| Human Resources Manual | No | - |
| Other | Yes | <p>The Safety Committee provides oversight to the Police, Fire, and EMS services of the Village. This is accomplished through regular meetings with the department heads, Mayor and Fiscal Officer. The Committee also works with Code Enforcement specially to review and clarified code ordinances. This is accomplished with support from the Village Administration and code enforcement officer.</p> <p>The Streets Committee makes recommendations for street repair, construction, maintenance programs, refuse collections, mosquito control, leaf pick-up, snow removal; sanitary sewer, storm sewer, general sanitation; oversees street name signs, safety signs, and markings; and maintains trees on street rights of way.</p> |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | Planner and Engineer |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | Planner and Engineer |
| Planners or engineers with an understanding of natural hazards | Yes | Planner and Engineer |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | Planner and Engineer |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | The Village hires out as necessary. |
| Emergency Manager | No | - |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to the Village of Minerva Park.

Table 9.24-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | Yes |
| Stormwater utility fee | Yes |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|---|
| Incur debt through private activity bonds | Yes |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | Yes |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | Yes |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Minerva Park.

Table 9.24-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|---|
| Public information officer or communications office | Yes | The Services Committee provides support for effective and timely communications to Village residents. This is accomplished through the support of the Village Administration, Mayor, and residents. |
| Personnel skilled or trained in website development | Yes | Mayors Assistant |
| Hazard mitigation information available on your website | Yes | Posted as necessary |
| Social media for hazard mitigation education and outreach | Yes | Facebook |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Siren, Nixle, and social media |
| Natural disaster/safety programs in place for schools | Yes | Provided by WCS |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | Yes | Social media, email/text blasts |

Community Classifications

The table below summarizes classifications for community programs available to the Village of Minerva Park.

Table 9.24-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.24-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.24.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Village of Minerva Park.

Table 9.24-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|------------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Minerva Park (V) | 1 | 3 | \$9,248.83 | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)
^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA’s HUX Report.

NR Not reported
 RL Repetitive Loss
 SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Village of Minerva Park.

Table 9.24-10. NFIP Summary

| NFIP Topic | Comments |
|--|--|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | No areas in the Village are prone to flooding. The Village does not maintain a list of properties that have been damaged by flooding. |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No. None. |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | None |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | Yes |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | None |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | - |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Village Planner/Code Officer |
| What are the barriers to running an effective NFIP program in the community, if any? | No |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | Unknown |

| NFIP Topic | Comments |
|---|------------------|
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | Chapter 1276 |
| Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? | Meets |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | No |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | Not at this time |

9.24.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.24-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Multi-Family | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other (commercial, mixed-use, etc.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Permits Issued | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 9.24-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.24.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Village of Minerva Park’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

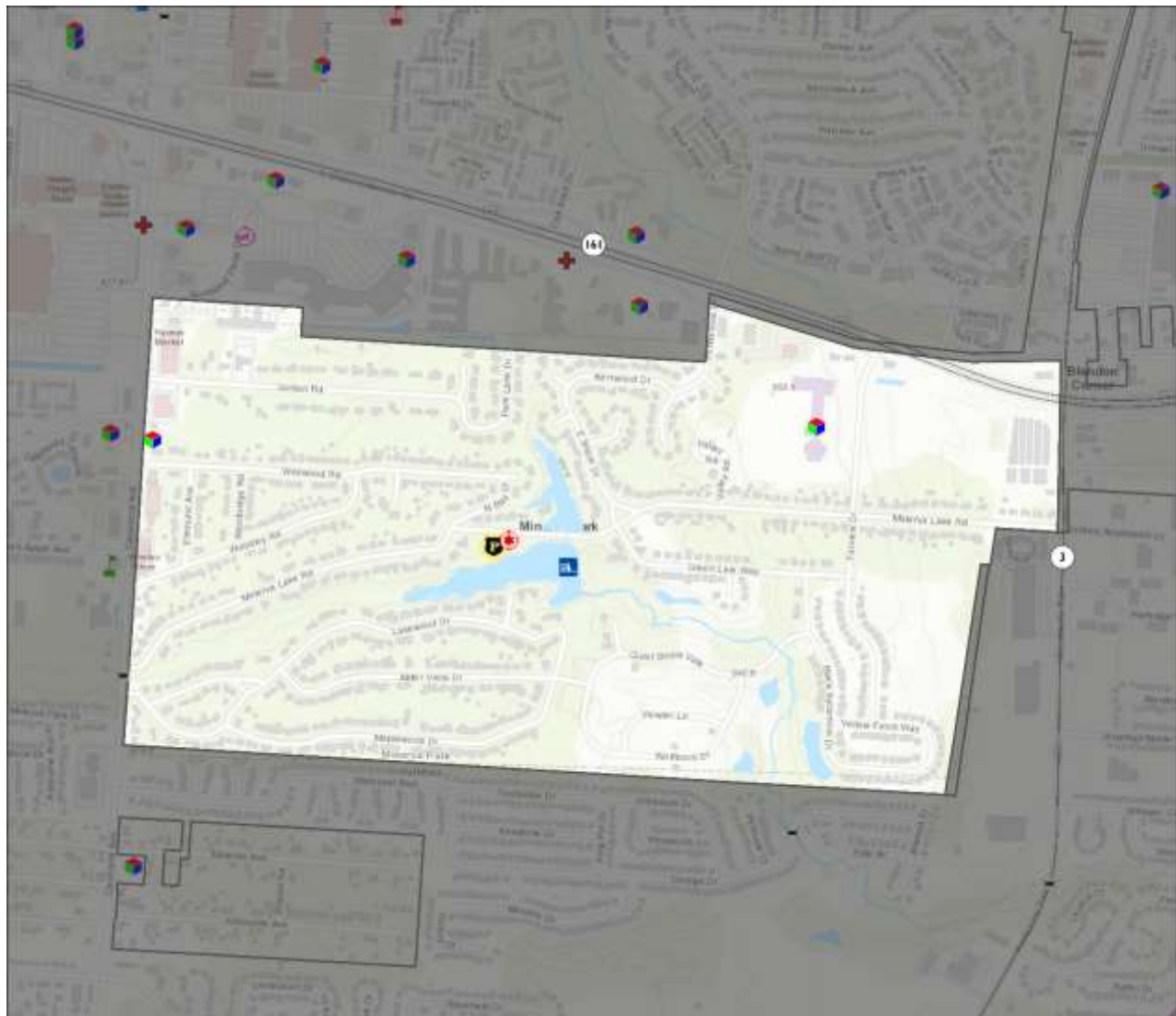


Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Village of Minerva Park has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.24-1. Village of Minerva Park Hazard Area Extent and Location Map-Flood



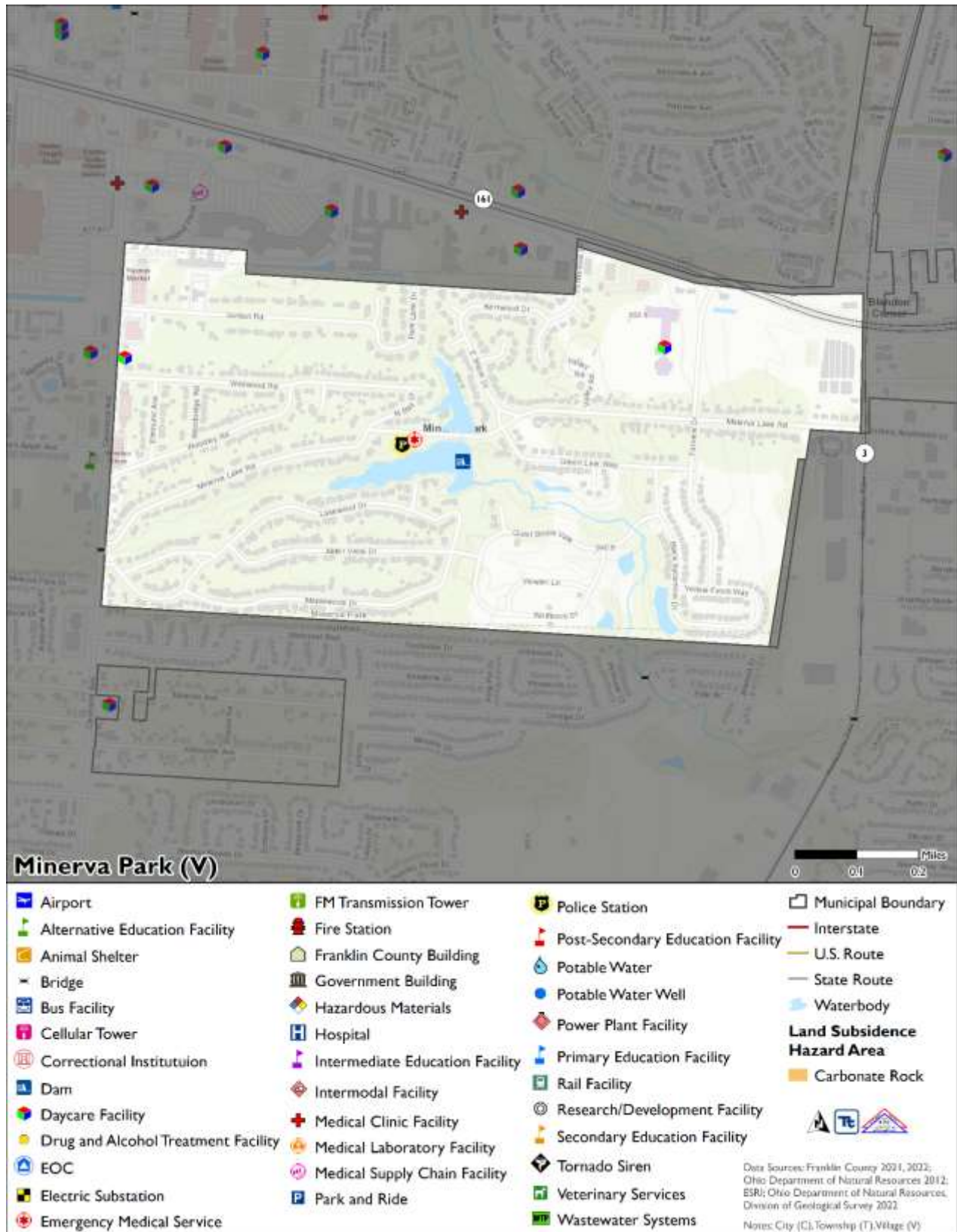
Figure 9.24-2. Village of Minerva Park Hazard Area Extent and Location Map-Inland Erosion



Minerva Park (V)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|---|
| Airport | FM Transmission Tower | Police Station | 0 0.1 0.2 Miles |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Municipal Boundary |
| Animal Shelter | Franklin County Building | Potable Water | Interstate |
| Bridge | Government Building | Potable Water Well | U.S. Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | State Route |
| Cellular Tower | Hospital | Primary Education Facility | Waterbody |
| Correctional Institution | Intermediate Education Facility | Rail Facility | Inland Erosion Hazard Area |
| Dam | Intermodal Facility | Research/Development Facility | K-Factor: >=0.49 |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | Tetra Tech, Inc. and Franklin County logos |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | <small>Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; United States Department of Agriculture, Natural Resources Conservation Service 2022.</small> |
| EOC | Medical Supply Chain Facility | Veterinary Services | <small>Notes: City (C), Township (T), Village (V)</small> |
| Electric Substation | Park and Ride | Wastewater Systems | |
| Emergency Medical Service | | | |

Figure 9.24-3. Village of Minerva Park Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Village of Minerva Park history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Village of Minerva Park experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.24-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | Although the County was impacted, the Village did not report significant damages. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | Although the County was impacted, the Village did not report significant damages. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Village was subject to closures and masking/social distancing requirements. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Minerva

Park. The Village of Minerva Park reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.24-14. Hazard Ranking Input

| Hazard | Ranking |
|-----------------------|---------|
| Dam/Levee | Medium |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.24-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Village of Minerva Park

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | - |
| Inland Erosion (K-Factor: >= 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the Village of Minerva Park identified the following vulnerabilities within its community:

- Over the past 5+ years, administration, council, and residents have been discussing the need for an updated Community/Administration/Police Facility to provide proper services, including emergency response.
- The Village is experiencing storm flow that is no longer contained to the current closed (piped) storm sewer system and is flooding numerous locations within the Village.
- The Village lacks procedures to make Substantial Damage determinations following a disaster event.
- The Village does not currently have a Post Disaster Recovery Plan that integrates and addresses the current hazard of concern.

9.24.7 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessments earlier in this annex.

Table 9.24-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|-------------------|--|---|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (1,000 / 3 months) | Mayor's Office | No Progress | No | - | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Village of Minerva Park identified the following mitigation efforts completed since the last HMP:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Minerva Park participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.24-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | X | - | - | X | X | - | - | - | X |
| Disease Outbreak | X | X | - | - | X | X | - | - | - | X |
| Drought | X | X | - | - | X | X | - | - | - | X |
| Earthquake | X | X | - | - | X | X | - | - | - | X |
| Extreme Temp | X | X | - | - | X | X | - | - | - | X |
| Flood | X | X | - | - | X | X | - | - | X | X |
| Geologic | X | X | - | - | X | X | - | - | - | X |
| Invasive Species | X | X | - | - | X | X | - | - | - | X |
| Severe Summer Weather | X | X | - | - | X | X | - | - | X | X |
| Severe Winter Weather | X | X | - | - | X | X | - | - | X | X |
| Tornado | X | X | - | - | X | X | - | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.24-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Village of Minerva Park will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.24-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------------|--------------------------------------|--|--|-----------|--------------------|---------------------------|---------------------------|--|-----------------|----------|---------------------|--------------|
| 2023-Village of Minerva Park-001 | Community Center | Problem: Over the past 5+ years, administration, council, and residents have been discussing the need for an updated Community/Administration/Police Facility to provide proper services, including emergency response. Solution: Remodel of Community Building to be completed in 2023 | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 6 | 1 year | Administration | Village budget | New Community Building established with updated | \$3.1 million | High | SIP | PP, ES |
| 2023-Village of Minerva Park-002 | 2023 Storm Sewer Improvement Project | Problem: The Village is experiencing storm flow that is no longer contained to the current closed (piped) storm sewer system and is flooding numerous locations within the Village. Solution: The Village will conduct a study to determine if a new closed | Flood, Severe Summer Weather, Severe Winter Weather | 6 | 5 Years | Public Works | FEMA, BRIC, HMGP, FMA | The Village will experience less flooding due to failing storm sewer system. | \$550,000 | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------------|-------------------------------|--|--|-----------|--------------------|---------------------------|---------------------------|---|-----------------|----------|---------------------|--------------|
| | | pipe system or a new combination closed and open channel system are more cost effective and will be more effective at containing storm/sewer water. | | | | | | | | | | |
| 2023-Village of Minerva Park-003 | Substantial Damage Procedures | <p>Problem: The Village lacks procedures to make Substantial Damage determinations following a disaster event.</p> <p>Solution: The Village will develop official procedures for Substantial Damage and Substantial Improvement determinations, including responsible parties.</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 6 | 3 years | Administration | Village Budget | Increased capabilities for disaster response | \$1,000 | High | LPR | PR, ES |
| 2023-Village of Minerva Park-004 | Post Disaster Recovery Plan | <p>Problem: The Village does not currently have a Post Disaster Recovery Plan that integrates and addresses the current hazard of concern.</p> <p>Solution: The Village will develop a comprehensive Post Disaster Recovery Plan that addresses the hazards of concern to help residents after a disaster strikes.</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, | 1 | 1 Year | Administration | Village Budget | Increased capabilities and direction for post disaster response | \$1,000 | High | LPR | ES |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------------|---------------------------------|--|---|-----------|--------------------|--|--|--|-----------------|--------------------------|---------------------|--------------|
| | | | Severe Summer Weather, Severe Winter Weather, Tornado | | | | | | | | | |
| 2023-Village of Minerva Park-005 | Repetitive Loss Area Mitigation | <p>Problem: Portions of the Village experienced repetitive flooding.</p> <p>Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity.</p> | Flood | 6 | 4 years | Administration, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Village budget, Homeowners | Reduction in repetitive losses due to floods | High | >\$100,000 per structure | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:



- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.24-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------------------------|--------------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Village of Minerva Park-001 | Community Center | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-Village of Minerva Park-002 | 2023 Storm Sewer Improvement Project | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-Village of Minerva Park-003 | Substantial Damage Procedures | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 12 | High |
| 2023-Village of Minerva Park-004 | Post Disaster Recovery Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-Village of Minerva Park-005 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.25 CITY OF NEW ALBANY

This section presents the jurisdictional annex for the City of New Albany that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City participated in the planning process, an assessment of the City’s risk and vulnerability, the different capabilities used in the City, and an action plan that will be implemented to achieve a more resilient community.

9.25.1 Hazard Mitigation Planning Team

The City of New Albany identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City departments, including the Planner and Engineering Manager. The Planner represented the community on the Franklin County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.25-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|--|
| Name/Title: | Anna van der Zwaag, Planner II | Name/Title: | Joseph Stefanov, City Manager |
| Address: | 99 W Main Street, PO Box 188 New Albany, Ohio 43054 | Address: | 99 W Main Street, PO Box 188 New Albany, Ohio 43054 |
| Phone Number: | 614-245-8707 | Phone Number: | 614-855-3913 |
| Email: | avanderzwaag@newalbanyohio.org | Email: | jstefanov@newalbanyohio.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Sierra Cratic-Smith, Planner | | |
| Address: | 99 W Main Street, PO Box 188 New Albany, Ohio 43054 | | |
| Phone Number: | 614-939-2254 | | |
| Email: | scratics@newalbanyohio.org | | |
| Additional Contributors: | | | |
| Name/Title: | Cara Denny, Engineering Manager | | |
| Method of Participation: | Provided information NFIP administration | | |

9.25.2 Municipal Profile

The City of New Albany is in the northeast corner of Franklin County, bordered by the City of Westerville and Blendon Township to the west and the City of Gahanna to the south. Located roughly 18 miles northeast of Columbus, New Albany is situated in the headwaters of the Rocky Fork, a tributary of Big Walnut Creek. Rose Run and Sugar Run, tributaries of the Rocky Fork, flow northeast to southwest throughout the City. Blacklick Creek runs through the eastern end of the city.

According to the American Community Survey, the 2021 population for the City of New Albany was 10,962, a 41.92 percent increase from the 2010 Census Population of 7,724. Data from the 2021 American Community Survey indicates that 6.2 percent of the population is 5 years of age or younger and 7.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.25.3 Jurisdictional Capability Assessment and Integration

The City of New Albany performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of New Albany to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of New Albany and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.25-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|------------------------------------|---|---|---|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | C.O. Part 13 | Local; adopted Ohio Building Code in C.O. 1321 | Community Development Department |
| <i>How does this reduce risk?</i> The purpose of the Ohio Building Code is to establish uniform minimum requirements for the erection, construction, repair, alteration, and maintenance of buildings, including construction of industrialized units. Such requirements shall relate to the conservation of energy, safety, and sanitation of buildings for their intended use and occupancy. | | | | |
| Zoning/Land Use Code | Yes | C.O. Part 11 | Local | Community Development Department |
| <i>How does this reduce risk?</i> This Zoning Ordinance is adopted to promote and protect the public health, safety, comfort, prosperity and general welfare by regulating and limiting the use of land areas and building and the erection, restoration and alteration of buildings and the use thereof for residential, business and industrial purposes; to regulate the area dimensions of land, yards and open spaces so as to secure adequate light, air and safety from fire and other dangers; to lessen or avoid congestion in the public streets; to regulate and restrict the bulk, height, design, percent of lot occupancy and the location of buildings; to protect the character of the existing agricultural, residential, business, industrial, and institutional areas and to assure their orderly and beneficial development; to provide for the orderly growth and development of lands, and for the purpose of dividing the Municipality into various districts. The zoning ordinance does discourage development or redevelopment within natural areas, including wetlands, floodways, and floodplains. C.O. 1155 includes provisions for flood damage reduction. | | | | |
| Subdivision Ordinance | Yes | C.O. 1187 | Local | Community Development Department |
| <i>How does this reduce risk?</i> The subdivision ordinance provides standards for development such as drainage & stormwater management requirements. | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | Yes | C.O. 1181 | Local | Community Development Department |
| <i>How does this reduce risk?</i> The stormwater runoff control measures require that land uses and developments which increase the runoff rate and/or volume shall control the discharge rate of runoff prior to its release to off-site land. The purposes of these measures are to: <ul style="list-style-type: none"> (1) Permit development without increasing the flooding potential of other lands; (2) Reduce damage to receiving streams and impairment of their capacity, which may be caused by increases in the quantity and rate of stormwater discharge; and (3) Establish a basis for design of stormwater drainage systems on lands below undeveloped areas which shall preserve the rights and options of both dominant and servient property owners and assure long-term adequacy of storm drainage systems. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|------------------------------------|--|---|---|
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | C.O. 1155 – Flood Damage Reduction; adopted December 6, 2016 | Local | Community Development Department |
| <i>How does this reduce risk?</i> | | | | |
| <ul style="list-style-type: none"> A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water hazards, or which result in damaging increases in flood heights or velocities; B. Requiring that uses vulnerable to floods, including facilities, which serve such uses, be protected against flood damage at the time of initial construction; C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters; D. Controlling filling, grading, dredging, excavating, and other development which may increase flood damage; and, E. Preventing or regulating the construction of flood barriers, which will unnaturally divert flood, waters or which may increase flood hazards in other areas. | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | - | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Village Center Plan Engage New Albany Strategic Plan Rocky Fork Blacklick Accord Master Plan | Local | Community Development Department |
| <i>How does this reduce risk?</i> | | | | |
| Includes provisions for managing stormwater, growth, development, and the environment. | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | Yes | Stormwater Pollution Prevention Plan | Local | Public Service Department |
| <i>How does this reduce risk?</i> | | | | |
| Protects property and infrastructure by the safe conveyance of excessive runoff from extreme events. | | | | |
| Open Space Plan | No | - | - | - |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|------------------------------------|--|---|--|
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | Yes | Economic Development Strategic Plan | Local | Community Development Department / Economic Development Manager |
| <i>How does this reduce risk?</i> Prepares for safe growth and development related to economic development. | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | Yes | Leisure Trail Master Plan Transportation included as chapter of strategic plan | Local | Community Development Department |
| <i>How does this reduce risk?</i> Encourages transportation networks adapted to appropriate scales; determines sufficient capacity, load restrictions, slow zones, etc. | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | No | | | |
| <i>How does this reduce risk?</i> | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | Yes | Emergency Operations Plan (2014) | Local | City Manager |
| <i>How does this reduce risk?</i> The Emergency Operations Plan establishes emergency procedures, including those that require enactment during and after a hazard event. | | | | |
| Continuity of Operations Plan | Yes | Included in EOP | Local | City Manager |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|------------------------------------|---|---|---|
| <i>How does this reduce risk?</i> Establishes procedures to maintain critical services during and after a disaster event. | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the City of New Albany to oversee and track development.

Table 9.25-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? • If yes, what department is responsible? | Yes | Community Development Department |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | - |
| Do you have a buildable land inventory? • If yes, please describe | No | There is a list in the strategic plan; however, it is not kept up to date between plan updates. |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of New Albany and their current responsibilities that contribute to hazard mitigation.

Table 9.25-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|----------------------------------|------------------------|---|
| Administrative Capability | | |
| Planning Board | Yes | Planning Commission |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Zoning Board of Adjustment | Yes | Board of Zoning Appeals |
| Planning Department | Yes | Community Development Department |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | Yes | Sustainability Advisory Board |
| Open Space Board/Committee | Yes | Parks & Trails Advisory Board |
| Economic Development Commission/Committee | Yes | Community Improvement Corporation |
| Public Works/Highway Department | Yes | Public Service Department |
| Construction/Building/Code Enforcement Department | Yes | Community Development Department |
| Emergency Management/Public Safety Department | Yes | Integrated into Police and Public Service departments |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Acquiring two more in 2023 for Licking County portion of New Albany. |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | City Forester tree trimming maintenance; monitoring of stormwater complaints |
| Mutual aid agreements | Yes | Available for city use as needed. City Attorney available. |
| Human Resources Manual | Yes | In place. |
| Other | Yes | Public Service and the City Forester manage an invasive species removal program. |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | Both planners & engineers |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | Both engineers and building inspectors/Chief Building Inspectors |
| Planners or engineers with an understanding of natural hazards | Yes | Planner with hazard mitigation experience. Planners and engineers on staff with education in mitigation/adaptation. |
| Staff with expertise or training in benefit/cost analysis | Yes | Planners, engineers, and other staff. |
| Professionals trained in conducting damage assessments | Yes | Chief building inspectors, building inspectors, engineers, and public service staff. |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | GIS/Systems Analyst |
| Environmental scientist familiar with natural hazards | Yes | Available via consultants/as needed |
| Surveyor(s) | Yes | Available via consultants/as needed |
| Emergency Manager | Yes | County EMA Director available; not on New Albany staff |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to the City of New Albany.

Table 9.25-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|---|
| Community development Block Grants (CDBG, CDBG-DR) | No |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | Yes |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | Yes, the City has the ability |
| Incur debt through special tax bonds | Yes, the City has the ability |
| Incur debt through private activity bonds | Yes, it is assumed the City has the ability |

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|---|
| Withhold public expenditures in hazard-prone areas | Yes, the City has the ability |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | Yes |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | Yes |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of New Albany.

Table 9.25-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|---|
| Public information officer or communications office | Yes | Chief Communications & Marketing Officer and two additional communications staff. |
| Personnel skilled or trained in website development | Yes | Chief Communications & Marketing Officer and two additional communications staff. |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | Yes | Postings for flood mitigation, tornado season, etc. |
| Citizen boards or commissions that address issues related to hazard mitigation | Yes | Review development in floodplain |
| Warning systems for hazard events | Yes | Acquiring 2 more in 2023 for Licking County portion of New Albany |
| Natural disaster/safety programs in place for schools | Yes | Training and drills performed at schools. |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | Yes | Social media, weekly Connects emails to residents |

Community Classifications

The table below summarizes classifications for community programs available to the City of New Albany.

Table 9.25-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | Unknown | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Unknown | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | Yes | Tree City USA community | 2010 |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each

jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.25-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.25.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of New Albany.

Table 9.25-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|----------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| New Albany (C) | 6 | 0 | \$0.00 | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)
^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA’s HUDEX Report.

NR Not reported
 RL Repetitive Loss
 SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of New Albany.

Table 9.25-10. NFIP Summary

| NFIP Topic | Comments |
|--|--|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | The City continues to limit development in the floodplain and control filling/grading to prevent additional flooding. |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | The City works with property owners directly if they are interested in mitigation (i.e. a list is not required, since the City works with owners immediately as needed). |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | C.O. 1155.03 (l) Substantial Damage Determinations. Damages to structures may result from a variety of causes including flood, tornado, wind, heavy snow, fire, etc. After such a damage event, the Floodplain Administrator shall: (1) Determine whether damaged structures are located in special flood hazard areas; (2) Conduct substantial damage determinations for damaged structures located in special flood hazard areas; and (3) Make reasonable attempt to notify owners of substantially damaged structures of the need to obtain a floodplain development permit prior to repair, rehabilitation, or reconstruction. Additionally, the Floodplain Administrator may implement other measures to assist with the substantial damage determination and subsequent repair process. These measures include issuing press releases, public service announcements, and other public information materials related to the floodplain development permits and repair of damaged structures; coordinating with other federal, state, and local agencies to assist with substantial damage determinations; providing owners of damaged structures materials and other information related to the proper repair of damaged structures in special flood hazard areas; and assist owners of substantially damaged structures with increased cost of compliance insurance claims. No substantial damage determinations over the last five years to the City's knowledge. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | None over the last five years to the City's knowledge. |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | Yes |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Community Development Department |
| Are any certified floodplain managers on staff in your jurisdiction? | No |



| NFIP Topic | Comments |
|--|--|
| Do you have access to resources to determine possible future flooding conditions from climate change? | Yes |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | Potentially this could be a good idea. There are resources like the Ohio Floodplain Management Association that has some online resources that the City could utilize. |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | C.O. 1155.03 - Administration <ol style="list-style-type: none"> Evaluate applications for permits to develop in special flood hazard areas. Interpret floodplain boundaries and provide flood hazard and flood protection elevation information. Review zoning/development permits to ensure that no new residential, industrial and/or commercial development occurs in special flood hazard areas. Inspect buildings and lands to determine whether any violations of these regulations have been committed. Make and permanently keep all records for public inspection necessary for the administration of these regulations including Flood Insurance Rate Maps, Letters of Map Amendment and Revision, records of issuance and denial of permits to develop in special flood hazard areas, determinations of whether development is in or out of special flood hazard areas for the purpose of issuing floodplain development permits, elevation certificates, variances, and records of enforcement actions taken for violations of these regulations. Enforce the provisions of these regulations. Provide information, testimony, or other evidence as needed during variance hearings. Coordinate map maintenance activities and FEMA follow-up. Conduct substantial damage determinations to determine whether existing structures, damaged from any source and in special flood hazard areas identified by FEMA, must meet the development standards of these regulations. |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | An application for a floodplain development permit shall be required for all development activities as defined in Section 1155.03(c) located wholly within, partially within, or in contact with an identified special flood hazard area. A substantial improvement would include one that Change the footprint/character of structure. |
| What are the barriers to running an effective NFIP program in the community, if any? | Education regarding code and regulations. |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | Unknown |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? | C.O. 1155 – Flood Damage Reduction; adopted December 6, 2016 |

| NFIP Topic | Comments |
|---|--|
| <ul style="list-style-type: none"> What is the date that your flood damage prevention ordinance was last amended? | |
| Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? | <p>The City meets & exceeds the minimum requirements. The City prohibits the following uses outright from the special flood hazard area:</p> <p>A. Private water supply systems in all special flood hazard areas identified by FEMA, permitted under ORC Ch. 3701. B. Infectious waste treatment facilities in all special flood hazard areas, permitted under ORC Ch. 3734. C. New residential, industrial and/or commercial development.</p> <p>Chapter 1155 of Codified Ordinances provide detailed standards for development that comes in contact with the SFHA.</p> |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | <p>Threat to life & property are considered with every development proposal that goes before the Planning Commission, Board of Zoning Appeals, Architecture Review Board, or City Council.</p> <p>CO 1171 includes regulations for the preservation of natural features, including preservation of riparian corridors.</p> |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.25.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.25-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 40 | - | 45 | - | 54 | - | 103 | - | 54 | - |
| Multi-Family | 8 | - | 11 | - | 9 | - | 14 | - | 14 | - |
| Other (commercial, mixed-use, etc.) | 697 | - | 845 | - | 783 | - | 976 | - | 971 | - |
| Total Permits Issued | 40 | - | 45 | - | 54 | - | 103 | - | 54 | - |

Table 9.25-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |



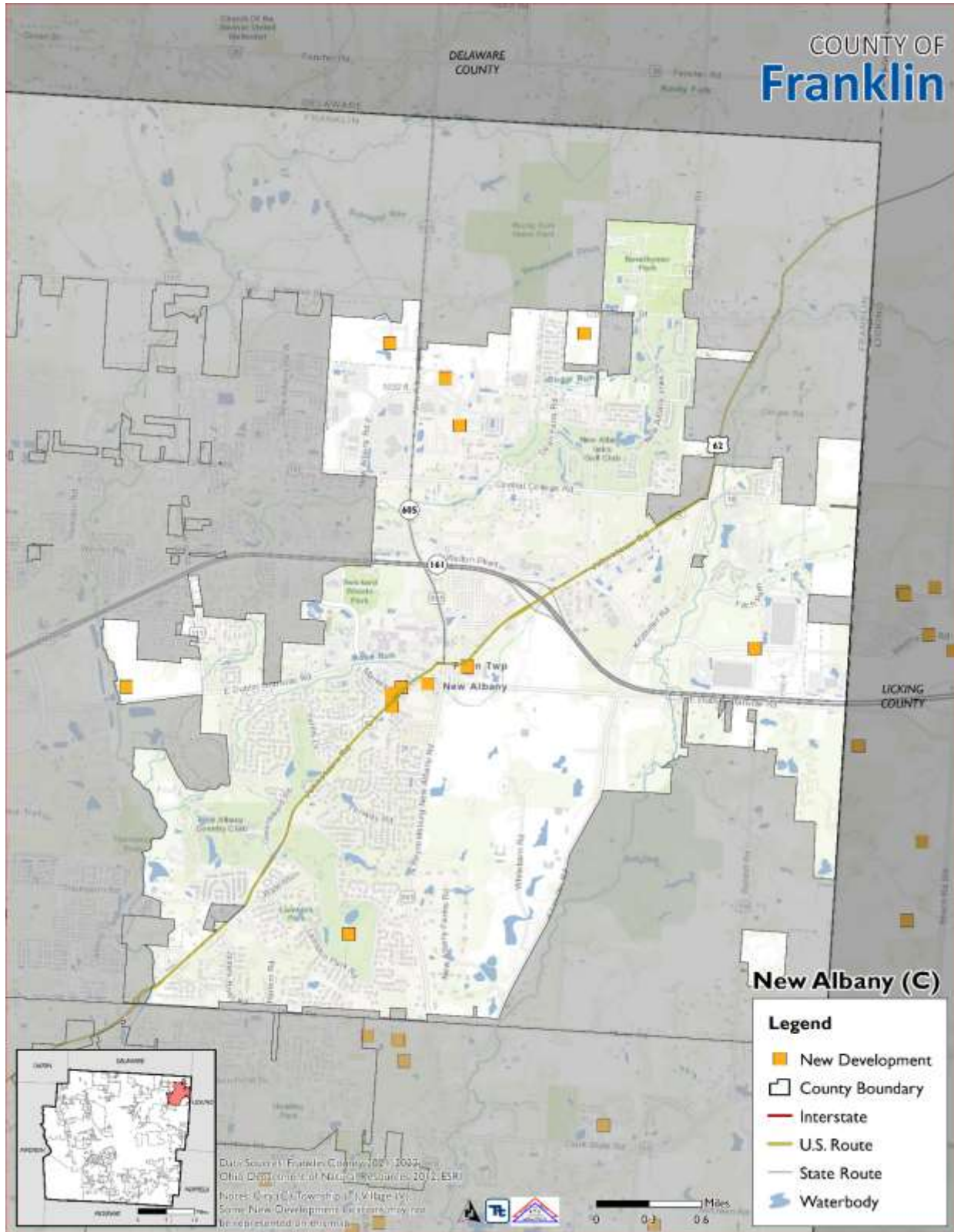
| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|--|---------------------------------|----------------------|--|
| Town Center Apartments Buildings A | Residential | 94,634 sq ft | 200 W Main St | - | Complete |
| Town Center Apartments Building E | Residential | 126,192 sq ft | 195 W Main St | - | Complete |
| Nottingham Trace Subdivision | Residential | 240 single family homes on 94.6+/- acres | Many | - | 81 of 240 lots built as of 11/1/2022 (159 available lots remaining) |
| Courtyard at New Albany Subdivision | Residential | 105 single family homes | Many | - | 93 of 105 lots built as of 11/1/2022 (12 available lots remaining) |
| New Albany Country Club Section 28 (Ebrington) | Residential | 66 single family homes | Many | - | 32 homes built between Dec. 2018 and Oct. 2022 (16 available lots remaining) |
| New Albany Country Club Section 29 (Oxford) | Residential | 30 single family homes | Many | - | 11 homes built between Dec. 2018 and Oct. 2022 (6 available lots remaining) |
| Market & Main/Multi-tenant | Commercial | Occupancy for 10 companies | 160 W Main St | - | Complete |
| Multi-tenant II/Beauty Park | Commercial | 264,000 sq ft | 8820 Smith's Mill | - | Complete |
| AEP Office Building II | Commercial | 163,994 sq ft | 8600 Smiths Mill | - | Complete |
| Axium Building 2 | Commercial | 116,720 sq ft | 8640 Innovation Campus Way | - | Complete |
| Axium Building 3 | Commercial | 97,056 sq ft | 9043 Smith's Mill Rd | - | Complete |
| Axium Building 4 | Commercial | 314,131 sq ft | 10015 Innovation Campus Way | - | Estimated completion Winter 2023 |
| Vertex | Commercial | 124,873 sq ft | 13425 Worthington Rd | - | Estimated completion Winter 2023 |
| VeePak Expansion | Commercial | 174,360 sq ft | 9040 Smith's Mill Rd | - | Complete |
| Northeast 302 | Commercial | 302,880 sq ft | 9750 Innovation Campus Way | - | Complete |
| Alene Candles | Commercial | 278,950 sq ft | 9485 Innovation Campus Way | - | Complete |
| Google | Commercial | 178,350 sq ft | 1101 Beech Rd | - | Complete |
| Google Building II | Commercial | 281,792 sq ft | 1101 Beech Rd | - | Complete |
| Meta — NAO 1 & 2 Building 1 | Commercial | 973,670 sq ft | 1500 Beech Rd | - | Complete |
| Meta — NAO3 Building 2 | Commercial | 518,184 sq ft | 1500 Beech Rd | - | Complete |
| Meta – NAO 5 & 6 Building 3 | Commercial | 976,626 sq ft | 1500 Beech Rd. | - | Estimated completion July 2023 |
| VanTrust Site J Building I | Commercial | 196,000 sq ft | 8300 Innovation Campus Way West | - | Complete |



| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|---|---|----------------------|--|
| VanTrust Site J Building II | Commercial | 196,000 sq ft | 8200 Innovation Campus Way West | - | Estimated completion Sept 2021 |
| VanTrust, Cupertino Warehouse | Commercial | 445,940 sq ft | 13101 Worthington Rd | - | Estimated completion Winter 2022 |
| American Regents Expansion | Commercial | 178,302 sq ft | 6610 New Albany Rd East | - | Estimated completion Aug 2021 |
| Amazon Building 315 | Commercial | 1,005,649 sq ft | 1245 Beech Rd. | - | Complete |
| Innovation Industrial | Commercial | 317,086 sq ft | 8950 Smith's Mill Rd. N. | - | Complete |
| Amgen, Inc. | Commercial | 130,096 sq ft | 9360 Innovation Campus Way | - | Complete |
| Amgen, Inc. | Commercial | 290,454 sq ft | 4150 Ganton Parkway | - | Estimated completion Winter 2023 |
| Lincoln Properties | Commercial | 448,080 sq ft | 3210 Horizon Court | - | Estimated completion Spring 2023 |
| Lincoln Properties | Commercial | 177,054 sq ft | 3450 Horizon Court | - | Estimated completion Spring 2023 |
| Speculative Warehouse | Commercial | 523,761 sq ft | 9850 Innovation Campus Way | - | Estimated completion Fall 2022 |
| Speculative Warehouse | Commercial | 351,851 sq ft | 9885 Innovation Campus Way | - | Estimated completion Winter 2023 |
| New Albany Commerce I | Commercial | 542,737 sq ft | 7915 Smith's Mill Rd. | - | Estimated completion Winter 2022 |
| Innovation III | Commercial | 302,630 sq ft | 8255 Innovation Campus Way W | - | Estimated completion Winter 2022 |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| Intel – 2 fabs | Commercial | 1,000+/- acres | TBD | - | Intel's two fabs estimated completion by 2025. Surrounding suppliers, tbd. https://newalbanyohio.org/answers/new-albany-silicon-heartland/ |
| Intel Suppliers | Commercial | 200+/- acres | TBD | - | TBD |
| Woodhaven Subdivision | Residential | 60 single family homes on 35.7+/1 acres | Many – located at corner of 7555 Bevelhymer Rd and 7325 Walnut St | - | TBD |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

Figure 9.25-1. City of New Albany New Development Map



9.25.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of New Albany's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of New Albany has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.25-2. City of New Albany Hazard Area Extent and Location Map-Flood

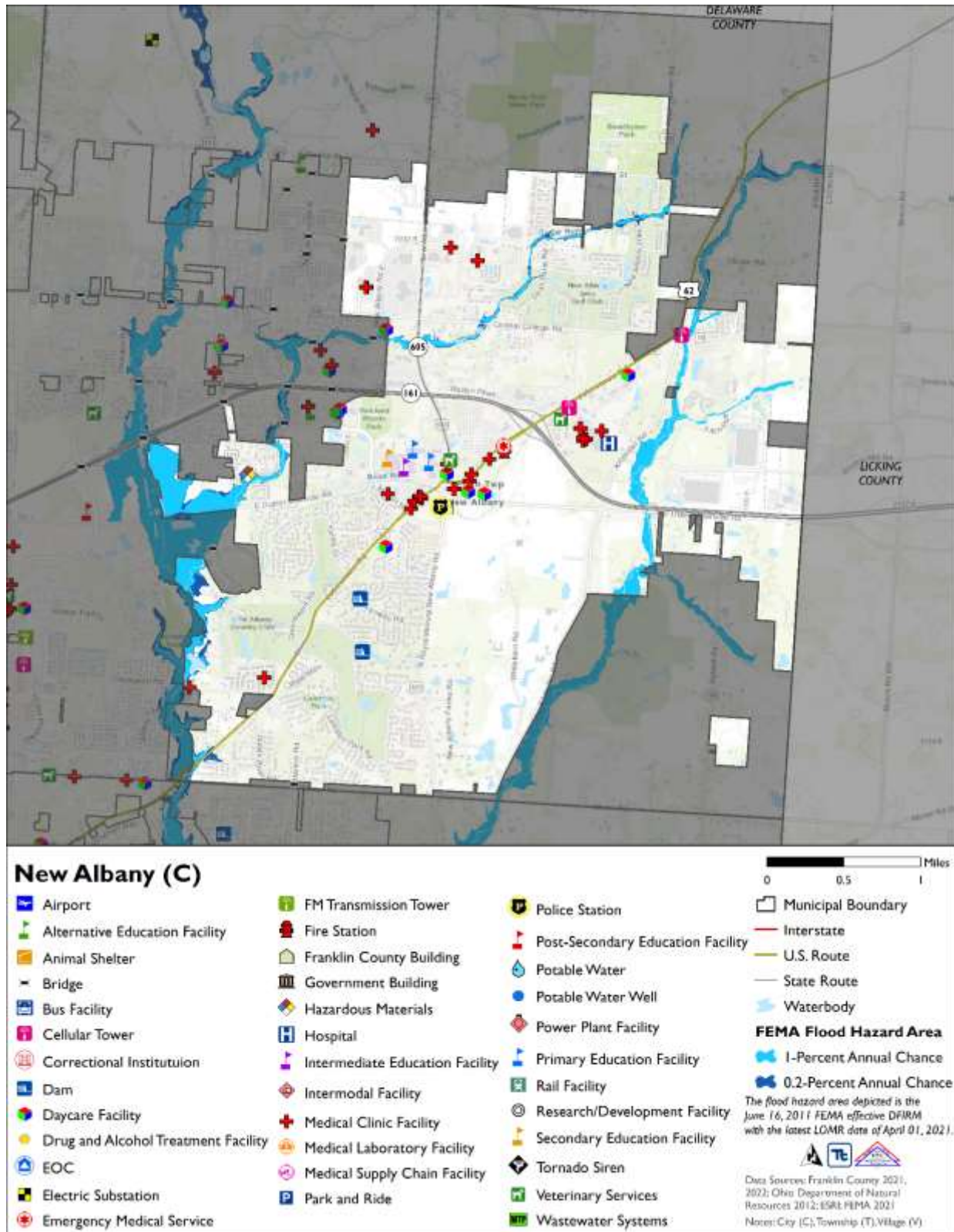


Figure 9.25-3. City of New Albany Hazard Area Extent and Location Map-Inland Erosion

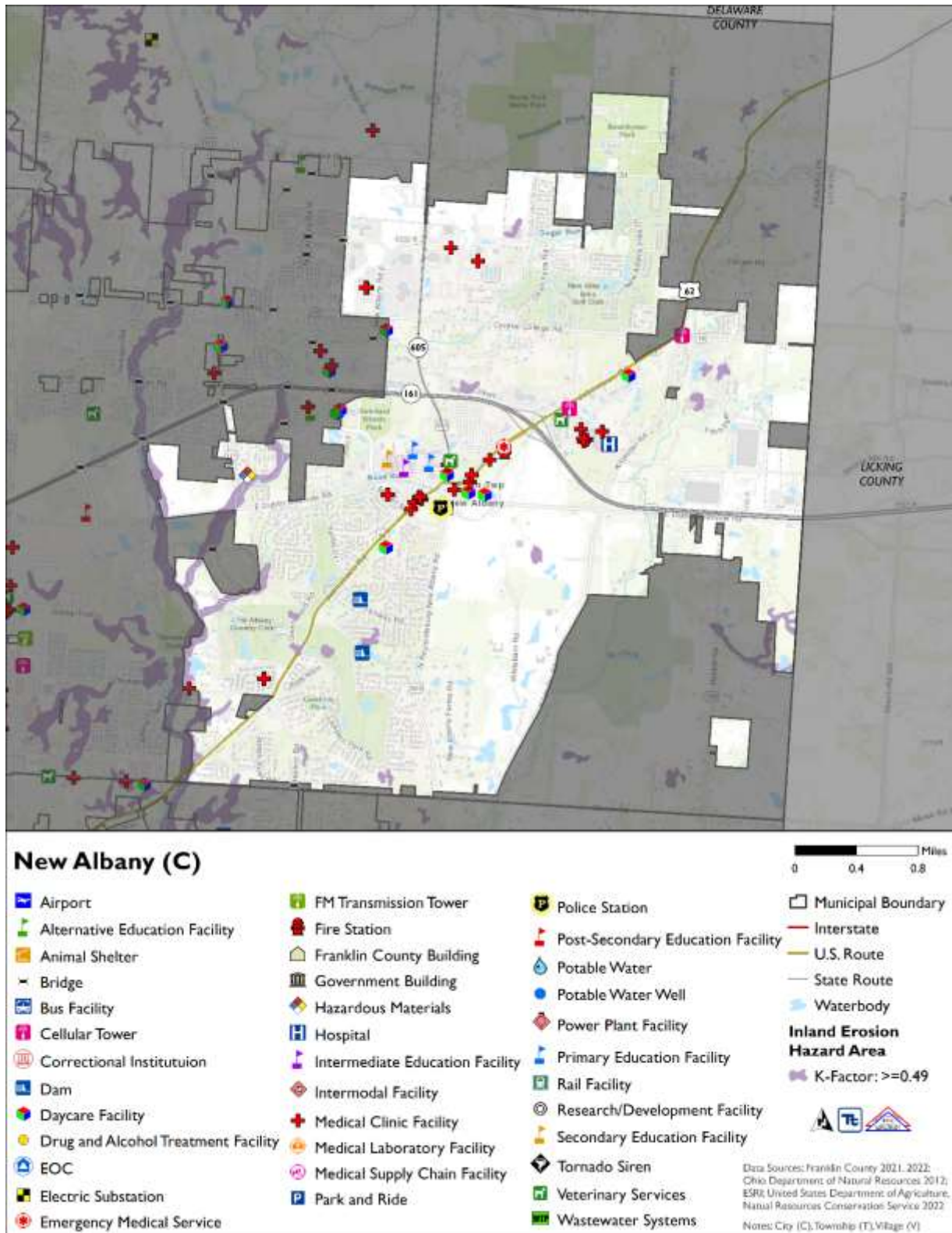
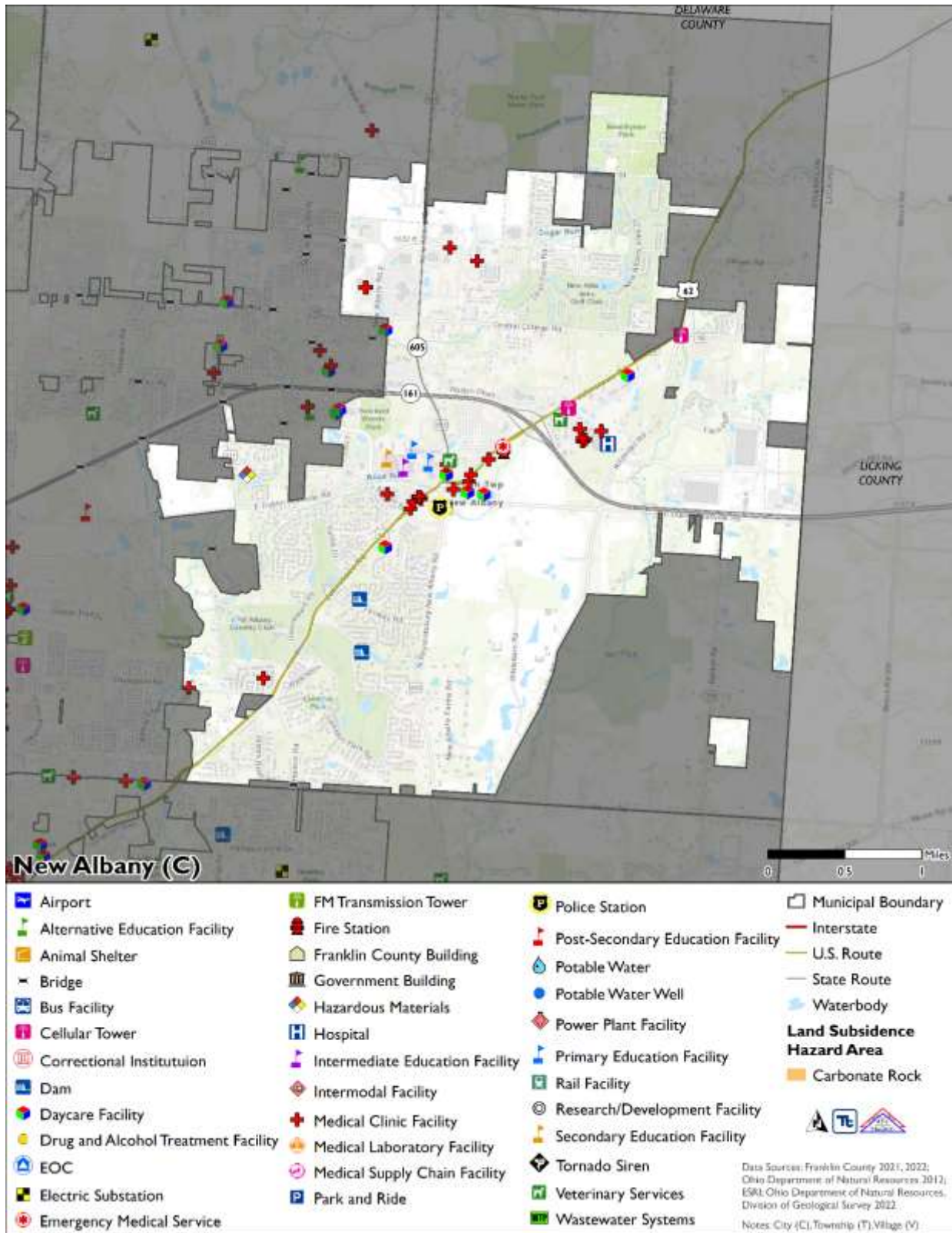


Figure 9.25-4. City of New Albany Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of New Albany’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of New Albany experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.25-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| April 3-4, 2018 | EF-1 Tornado | N/A | Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage. | Although the County was impacted, the City did not report significant damages. |
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | Although the County was impacted, the City did not report significant damages. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | Although the County was impacted, the City did not report significant damages. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The City continues to update the website as relevant information is disseminated. Ongoing analysis on economic impacts of covid, including the potential loss of income tax associated with 20,000+ business park employees working remotely in other jurisdictions. https://newalbanyohio.org/answers/covid-19/ |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each

hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of New Albany. The City of New Albany reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.25-14. Hazard Ranking Input

| Hazard | Ranking |
|-----------------------|---------|
| Dam/Levee | Low |
| Disease Outbreak | Low |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Low |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.25-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of New Albany

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 2 | 2 |
| Inland Erosion (K-Factor: >= 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of New Albany identified the following vulnerabilities within its community:

- The Engage New Albany Strategic Plan recommended the city provide safe and efficient collection of stormwater and continue to maintain and improve water quality of New Albany's tributaries.
- The Engage New Albany Strategic Plan identified the Market Street Extension project as an opportunity to create a public green space featuring regional stormwater retention ponds.
- The City is in process of developing Taylor Farm Park, an approximately 100-acre property that was farmed until recently and will be converted to a community park with ~3 miles of leisure trail, playground, community gardens, native landscaping, and other community amenities. Located along Rocky Fork.
- There are two (2) privately owned properties with structures that encompass the Head Waters of the Rose Run Stream corridor which are subject to damage when stream waters reach flooding stages.
- The City does not have adequate emergency sirens to provide adequate public emergency alerts (Tornado, Flooding, etc.) to all areas within New Albany.
- To eradicate the infestation of the EAB in New Albany the City has developed a management plan for the removal and disposal of Ash trees on City property and within the right-of-way and replace them with a better tree variety that is disease and insect resistant. The City has replaced all impacted Ash street trees.
- The City experiences drainage problems that contribute to flooding due to regional growth. *
- There are six (6) privately owned properties with structures that encompass the Rose Run Stream corridor which are subject to damage when stream waters reach flooding stages.
- The City Administration and the public are unaware of codes and regulations that have been updated and designed to protect from the hazards of concern. *
- The City of New Albany contains two private dams. With any dam, failure can place additional storage requirements downstream.
- The City has experienced issues with disease outbreak, extreme temperatures, and droughts.
- The City is currently experiencing growth - both in residential and commercial areas. The need for regional stormwater solutions is important to allow for this growth while also mitigation potential for flooding from increased stormwater runoff associated with new development.
- Slope areas along stream corridors such as Rose Run and along Rocky Fork are especially susceptible to geologic hazards such as erosion. These areas are often overrun with invasive species that can also cause ecological, environmental, and potentially economic damage.
- The City updates its strategic plan every 5 years and currently does not address the current hazards of concern. This provides a good opportunity to integrate projects that can reduce risks to hazards.

*

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.25.7 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.25-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|------------------------|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding for repetitive loss structures within the Village of New Albany to permanently reduce damage to these structures. (1 structure at 250,000 / 1 year) | City Managers Designee | No Progress | No | - | - |
| Seek funding for the implementation of the Rose Run Greenway Corridor Study to control flooding of the Rose Run Stream and improve its water quality. (\$200,000 / 1 year) | City Managers Designee | In Progress | Yes | The Engage New Albany Strategic Plan recommended the city provide safe and efficient collection of stormwater and continue to maintain and improve water quality of New Albany's tributaries. The improvements along the Rose Run Stream corridor will consider stormwater in the design. Need implementation of Greenway Corridor Study at Rose Run 1, Rose Run 2, Regional stormwater basins, etc. | City Managers Designee |
| Develop and implement public education to increase public awareness and understanding of flooding hazards associated with ditches, streams, and waterways and their need for maintenance. (15,000 / 1 year) | City Managers Designee | In Progress | Yes | Can be broadened to include hazard events as a whole. | Communications Team |
| Seek funding to purchase 3 additional Outdoor Siren Warning Systems in New Albany. To provide adequate public emergency alerts (Tornado, Flooding, etc.) | City Managers Designee | In Progress | Yes | To provide adequate public emergency alerts (Tornado, Flooding, etc.) to all areas within New | Public Service |



| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|------------------------|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| to all areas within New Albany it is necessary to install additional outdoor sirens in the south, west and north locations of the community. (3 units/ \$66,000) | | | | Albany it is necessary to install additional outdoor sirens. Adding 2 sirens in 2023 | |
| Seek funding for a two way radio system for utilization by the public service department. Communication with maintenance staff on the road and in the field is critical to City operations when responding to severe storm events such as snow/ice, rain and wind. (Implementation cost is \$85,000) | City Managers Designee | Complete. The service department has a dependable two way radio system in place. | No | - | - |
| To eradicate the infestation of the EAB in New Albany the City proposes to develop a management plan for the removal and disposal of Ash trees on City property and within the right-of-way and replace them with a better tree variety that is disease and insect resistant. (Estimated cost \$200,000) | City Managers Designee | In Progress. The City has replaced all impacted Ash street trees and continues treatment of remaining ash trees. | Yes | Infestation of the EAB | City Forester, Public Service Department |
| To alleviate the drainage problems the City proposes to install a public storm sewer system and direct the excess water flow to a nearby City owned wetland park. Additionally, the rear yards would be re-graded to achieve positive drainage to newly installed storm structures. (Estimated cost \$250,000) | City Managers Designee | In Progress | Yes | Needed to alleviate flooding risk | City Managers Designee |
| There are six (6) privately owned properties with structures that encompass the Rose Run Stream corridor which are subject to damage when stream waters reach flooding stages. The City proposes | City Managers Designee | In Progress. Part A has not happened. Part B is in progress. | Yes | There are six (6) privately owned properties with structures that encompass the Rose Run Stream corridor which are subject | City Managers Designee |

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|------------------------|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| to separate this project into two parts. Part A would include the purchase of the private properties and removal of their structures threatened by flooding. Part B is the construction work to increase the streams capacity, stabilize the banks and restore vegetation within the stream corridor. (Part A \$4,250,000) (Part B \$350,000) | | | | to damage when stream waters reach flooding stages. Part A has not happened. Part B is ongoing. | |
| There are two (2) privately owned properties with structures that encompass the Head Waters of the Rose Run Stream corridor which are subject to damage when stream waters reach flooding stages. The City proposes to separate this project into two parts. Part A would include the purchase of two (2) private properties and removal of one (1) structure threatened by flooding. Part B is the construction work to increase the head water capacity, stabilize the banks and restore vegetation within the stream corridor. (Part A \$200,000) (Part B \$250,000) | City Managers Designee | In Progress | Yes | There are two (2) privately owned properties with structures that encompass the Head Waters of the Rose Run Stream corridor which are subject to damage when stream waters reach flooding stages | City Managers Designee |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of New Albany identified the following mitigation efforts completed since the last HMP:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of New Albany participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.25-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | X | - | X | X | X | X | - | - | X |
| Disease Outbreak | X | X | - | X | X | - | X | - | - | X |
| Drought | X | X | - | X | X | - | X | - | - | X |
| Earthquake | X | X | - | X | X | - | X | - | - | X |
| Extreme Temp | X | X | - | X | X | - | X | - | - | X |
| Flood | X | X | X | X | X | X | X | X | X | X |
| Geologic | X | X | X | X | X | - | X | X | - | X |
| Invasive Species | X | | X | X | X | - | X | X | - | - |
| Severe Summer Weather | X | X | X | X | X | X | X | X | X | X |
| Severe Winter Weather | X | X | X | X | X | X | X | X | X | X |
| Tornado | X | X | - | X | X | - | X | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.25-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of New Albany will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.25-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------------------|--|---|-------------------------|---|-----------|--------------------|---------------------------|------------------------------|---|-----------------|----------|---------------------|--------------|
| 2023-City of New Albany-001 | Rose Run 2 Regional Stormwater Basins | Problem: The Engage New Albany Strategic Plan recommended the city provide safe and efficient collection of stormwater and continue to maintain and improve water quality of New Albany's tributaries. Solution: The improvements along the Rose Run Stream corridor will consider stormwater in the design. | New and Existing | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Within 5 years | Public Service | BRIC, PDM, HMGP, City budget | Reduction in stormwater flooding, improved water quality | \$200,000 | High | SIP | SP |
| 2023-City of New Albany-002 | Regional Stormwater Basins – Market Street Extension | Problem: The Engage New Albany Strategic Plan identified the Market Street Extension project as an opportunity to create a public green space featuring regional stormwater retention ponds. Solution: The City will create a public green | New and Existing | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Within 5 years | Public Service | BRIC, PDM, HMGP, City budget | This will help alleviate current drainage issues while also preparing for additional stormwater retention needs from future | High | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------------------|--|---|-------------------------|---|-----------|--------------------|---|------------------------------------|---|------------------------------------|----------|---------------------|--------------|
| | | space at the Markey Street Extension featuring regional stormwater retention ponds. | | | | | | | development in the area. | | | | |
| 2023-City of New Albany-003 | Taylor Farm | <p>Problem: The City is in process of developing Taylor Farm Park, an approximately 100-acre property that was farmed until recently and will be converted to a community park with ~3 miles of leisure trail, playground, community gardens, native landscaping, and other community amenities. Located along Rocky Fork.</p> <p>Solution: Project includes restoration of wetlands, invasive species removal, and native landscaping to minimize stormwater runoff.</p> | | Flood, Severe Summer Weather, Severe Winter Weather, Invasive Species | 3 | Within 5 Years | Administration Services, Public Service | BRIC, HMGP, CDBG, City Budget | The City will have restored wetlands that help with stormwater management and enhance native species. | > \$500,000 | High | NSP | NR |
| 2023-City of New Albany-004 | Rose Run Headwater Stream Corridor Buyouts | <p>Problem: There are two (2) privately owned properties with structures that encompass the Head Waters of the Rose Run Stream corridor which are subject to damage when stream waters reach flooding stages.</p> | Existing | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Within 5 Years | City Managers Designee | FMA, BRIC, HMGP, CDBG, City Budget | The properties would experience reduced flooding. | Part A \$200,000, Part B \$250,000 | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------------------|-----------------------------|---|-------------------------|--|-----------|--------------------|--|-------------------------------|--|-----------------|----------|---------------------|--------------|
| | | <p>Solution: The City proposes to separate this project into two parts. Part A would include the purchase of two (2) private properties and removal of one (1) structure threatened by flooding. Part B is the construction work to increase the head water capacity, stabilize the banks and restore vegetation within the stream corridor.</p> | | | | | | | | | | | |
| 2023-City of New Albany-005 | Emergency Sirens | <p>Problem: The City does not have adequate emergency sirens to provide adequate public emergency alerts (Tornado, Flooding, etc.) to all areas within New Albany.</p> <p>Solution: The City will purchase and install two additional sirens in 2023.</p> | Existing | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado | 5 | 1 year | Public Service | FMA, HMGP, BRIC, CDBG, NGWSGP | Improved emergency alert system | High | High | SIP | ES |
| 2023-City of New Albany-006 | Emerald Ash Borer Treatment | <p>Problem: To eradicate the infestation of the EAB in New Albany the City has developed a management plan for the</p> | N/A | Invasive Species | 3 | Within 5 years | City Forester, Public Service Department | HMGP, City Budget | Protection of trees, reduction of dead and falling trees | \$100,000 | High | NSP | NR |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------------------|----------------------------|---|-------------------------|---|-----------|--------------------|---------------------------|------------------------------------|---|-----------------|----------|---------------------|--------------|
| | | <p>removal and disposal of Ash trees on City property and within the right-of-way and replace them with a better tree variety that is disease and insect resistant. The City has replaced all impacted Ash street trees.</p> <p>Solution: The City will continue treatment of remaining ash trees.</p> | | | | | | | | | | | |
| 2023-City of New Albany-007 | Drainage Corrections* | <p>Problem: The City experiences drainage problems that contribute to flooding due to regional growth.</p> <p>Solution: The City will conduct a study to determine the most cost-effective method to install a public storm sewer system that directs the excess water flow to a nearby City owned wetland park. The City will ensure the sewer system will allow for growth and has the capacity to handle runoff from new development. Additionally, the rear yards would be re-graded to achieve</p> | Existing | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Within 5 years | City Managers Designee | FMA, BRIC, HMGP, CDBG, City Budget | Reduction in flooding and drainage issues | \$250,000 | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------------------|----------------------------------|--|-------------------------|--|-----------|--------------------|---------------------------|---------------------------|--|--------------------------------------|----------|---------------------|--------------|
| | | positive drainage to newly installed storm structures. | | | | | | | | | | | |
| 2023-City of New Albany-008 | Rose Run Stream Corridor Buyouts | <p>Problem: There are six (6) privately owned properties with structures that encompass the Rose Run Stream corridor which are subject to damage when stream waters reach flooding stages.</p> <p>Solution: The City proposes to separate this project into two parts. Part A would include the purchase of the private properties and removal of their structures threatened by flooding. Part B is the construction work to increase the streams capacity, stabilize the banks and restore vegetation within the stream corridor. Part B is underway at this time.</p> | Existing | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Within 5 years | City Managers Designee | BRIC, HMGP, FMA, PDM | Reduction in flood damage to homes, restoration of natural stream passage | Part A \$4,250,000, Part B \$350,000 | High | SIP, NSP | PP, NR |
| 2023-City of New Albany-009 | Code and Regulation Education* | <p>Problem: The City Administration and the public are unaware of codes and regulations that have been updated and designed to protect from the hazards of concern.</p> | Existing | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, | 1 | 2 Years | Administration | City Budget | The City residents will be more knowledgeable of updated codes and regulations and the | \$5,000 | High | LPR | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------------------|---|---|-------------------------|---|-----------|--------------------|------------------------------|---------------------------|--|-----------------|----------|---------------------|--------------|
| | | <p>Solution: The City will continue to update codes and regulations and post updated information of the hazards of concern on their website so that everyone is aware of any new regulations or codes. Additionally, the City will post hazard information on social media platforms and will share information with residents who are signed up to these platforms.</p> | | Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | | | | | hazards of concern. | | | | |
| 2023-City of New Albany-010 | Limit use of fill within the Floodplain | <p>Problem: The City of New Albany contains two private dams. With any dam, failure can place additional storage requirements downstream.</p> <p>Solution: The City will continue to preserve floodplain storage capacity by limiting the use of fill within the floodplain which will help to mitigate flooding associated with a potential dam failure.</p> | Existing | Dam/Levee, Flood | 3, 6 | Ongoing | Administration | City Budget | Risk reduction associated with maintaining or increasing floodplain storage capacity. Avoid losses associated with flooding. | Staff time | High | LPR | PP |
| 2023-City of New | Partnership Formation | <p>Problem: The City has experienced issues with disease outbreak,</p> | Both | Disease Outbreak, | 1 | Ongoing | City Administration, City of | City Budget | The City will have stronger partnerships | None | High | EAP | PI |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------------------|--|---|-------------------------|---------------------------|-----------|--------------------|------------------------------|---------------------------|--|-----------------|----------|---------------------|--------------|
| Albany-011 | | <p>extreme temperatures, and droughts.</p> <p>Solution: The City will continue to reach out and form partnerships with local health agencies, the City of Columbus and MORPC to monitor droughts, disease outbreak and effects of extreme temperatures.</p> | | Drought, Extreme Temp | | | Columbus, MORPC | | that will help residents with disease outbreak, drought and extreme temperature. | | | | |
| 2023-City of New Albany-012 | Construct a Regional stormwater control facility | <p>Problem: The City is currently experiencing growth - both in residential and commercial areas. The need for regional stormwater solutions is important to allow for this growth while also mitigation potential for flooding from increased stormwater runoff associated with new development.</p> <p>Solution: The City will create a regional stormwater compensation area near the soon to be developed Rose Run Park - Phase II, would enable this area and larger portions of</p> | New | Flood | 6 | Less than 5 Years | Public Works, Administration | FMA, HMGP, BRIC, CDBG | Benefits include reducing risk from flooding and increasing capacity for growth. | >\$1 Million | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------------------|-----------------------------------|--|-------------------------|----------------------------|-----------|--------------------|---------------------------|------------------------------|---|-----------------|----------|---------------------|--------------|
| | | Village Center to develop. In recent studies, an area just to the east of Village Hall has been identified as an ideal location for stormwater management. | | | | | | | | | | | |
| 2023-City of New Albany-013 | Replace/Restore Native vegetation | <p>Problem: Slope areas along stream corridors such as Rose Run and along Rocky Fork are especially susceptible to geologic hazards such as erosion. These areas are often overrun with invasive species that can also cause ecological, environmental, and potentially economic damage.</p> <p>Solution: The City will continue to identify opportunities to replace invasive species, especially along stream corridors, with native or sustainable alternatives will enhance the city's natural spaces and prevent damage associated with invasives. Planting native vegetation along steep slope areas prevents erosion.</p> | Existing | Geologic, Invasive Species | 3 | Less than 5 Years | Administration | FMA, BRIC, HMGP, City Budget | Benefits include reducing potential for geologic issues and damaged stream health or infrastructure; reducing reliance on fertilizers and pesticides; reducing need for water; preventing erosion; reducing air pollution; provide shelter for food and wildlife (such as essential pollinators). | \$20,000 | High | NSP | NR |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-----------------------------|--|--|-------------------------|--|-----------|--------------------|-------------------------------|---------------------------|---|-----------------|----------|---------------------|--------------|
| 2023-City of New Albany-014 | Integrate Hazard Mitigation into Local Planning Efforts* | <p>Problem: The City updates its strategic plan every 5 years and currently does not address the current hazards of concern. This provides a good opportunity to integrate projects that can reduce risks to hazards.</p> <p>Solution: The City will integrate hazard mitigation planning into its next strategic plan update.</p> | Existing | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 1 | Less than 5 Years | Administration, Mayors Office | City Budget | Benefits include enhanced public awareness, reduced risk of loss of life, reduced risk to infrastructure. | Staff Time | High | LPR, EAP | PR |
| 2023-City of New Albany-015 | Public Education and Outreach | <p>Problem: The City does not have a public education and outreach problem in place to inform the public on the risks of hazards which may occur in the City.</p> <p>Solution: Develop and implement public education to increase public awareness and understanding of hazard risks and how to mitigate those risks.</p> | New | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 5 | 2 years | Administration, Mayors Office | City Budget | Benefits include the public becoming information on the risks of hazards within the City. | Low | High | EAP | PI |



*Mitigation initiative is related to a critical facility and/or community lifeline
Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.25-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-----------------------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-City of New Albany-001 | Rose Run 2 Regional Stormwater Basins | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 11 | High |
| 2023-City of New Albany-002 | Regional Stormwater Basins – Market Street Extension | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 12 | High |
| 2023-City of New Albany-003 | Taylor Farm | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-City of New Albany-004 | Rose Run Headwater Stream Corridor Buyouts | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 11 | High |
| 2023-City of New Albany-005 | Emergency Sirens | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 11 | High |
| 2023-City of New Albany-006 | Emerald Ash Borer Treatment | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 13 | High |
| 2023-City of New Albany-007 | Drainage Corrections* | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-City of New Albany-008 | Rose Run Stream Corridor Buyouts | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 11 | High |
| 2023-City of New Albany-009 | Code and Regulation Education* | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-City of New Albany-010 | Limit use of fill within the Floodplain | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 12 | High |
| 2023-City of New Albany-011 | Partnership Formation | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 | High |
| 2023-City of New Albany-012 | Construct a Regional stormwater control facility | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-City of New Albany-013 | Replace/Restore Native vegetation | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-City of New Albany-014 | Integrate Hazard Mitigation into Local Planning Efforts* | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 | High |



| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-----------------------------|-------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-City of New Albany-015 | Public Education and Outreach | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 10 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.26 TOWNSHIP OF NORWICH

This section presents the jurisdictional annex for the Township of Norwich that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Township of Norwich participated in the planning process, an assessment of the Township of Norwich’s risk and vulnerability, the different capabilities used in the Township of Norwich, and an action plan that will be implemented to achieve a more resilient community.

9.26.1 Hazard Mitigation Planning Team

The Township of Norwich identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.26-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|-------------------------------------|
| Name/Title: | Jamie Fisher / Township Administrator | Name/Title: | Robbie Thomas / Road Superintendent |
| Address: | 5181 Northwest Parkway, Hilliard, Ohio 43026 | Address: | 3225 Dublin Rd, Hilliard, OH 43026 |
| Phone Number: | (614) 876-3328 | Phone Number: | (614) 876-2236 |
| Email: | jamie_fisher@norwichtownship.org | Email: | robbie_thomas@norwichtownship.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Matt Brown, Planning and Floodplain Administrator | | |
| Address: | 150 S. Front St., FSL, Suite 10, Columbus, OH 43215 | | |
| Phone Number: | (614) 525-5647 | | |
| Email: | mybrown@franklincountyohio.gov | | |
| Additional Contributors | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.26.2 Municipal Profile

The Township of Norwich is in the northwest area of Franklin County and is bordered by Washington Township to the north, Perry Township to the east, Brown Township to the west and Prairie and Franklin Townships to the South. The Township is composed of several small “islands” which are separated due to annexations, most of the annexations being by the City of Columbus.

According to the American Community Survey, the 2021 population for the Township of Norwich was 37,356, a 17.45 percent increase from the 2010 Census population of 31,807. Data from the 2021 American Community Survey indicates that 6 percent of the population is 5 years of age or younger and 11.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.26.3 Jurisdictional Capability Assessment and Integration

The Township of Norwich performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Township of Norwich to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

It should be noted that the City of Hilliard and Franklin County provides a majority of services to the Township of Norwich. For details on the City’s capabilities, refer to Section 9.15, and for the County’s capabilities refer to Section 9.1 and Section 5 (Capability Assessment). The following section provides capabilities within the Township of Norwich.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Township of Norwich and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.26-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | 2019 Residential Code of Ohio | Franklin County | Franklin County Economic Development and Planning Department |
| <i>How does this reduce risk?</i> Provides restrictions and requirements on how buildings must be constructed. | | | | |
| Zoning/Land Use Code | Yes | Franklin County Zoning Resolution – October 11, 2022 | Franklin County | Franklin County Zoning Officer |
| <i>How does this reduce risk?</i> Specifies the allowable uses of land within each district, the regulations pertaining to the development and use of the land, and buildings are uniform for each class or kind of building. Structures are not permitted to be built in the floodplain. | | | | |
| Subdivision Ordinance | Yes | Franklin County Subdivision Regulations – March 27, 2012 | Franklin County | Franklin County Economic Development and Planning Department |
| <i>How does this reduce risk?</i> Manage growth and development in accordance with plans, policies, and resolutions of the FCPC, county and townships and surrounding area plans. Provide for adequate and convenient open spaces for traffic, utilities, fire and maintenance forces, recreation, light and air. Provide for the preservation of natural resources, sensitive natural areas, and natural features. Provide safety from fire, flood, and other danger. Address public requirements and facilities, traffic circulation, stormwater management, water and sanitary services, open space, airport noise and hazard areas. | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | Yes | Franklin County Stormwater Drainage Manual – March 13, 2012 | Franklin County | Franklin County Economic Development and Planning Department |
| <i>How does this reduce risk?</i> To help improve/ensure proper drainage and to protect natural water ways. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|--|---|--|
| Flood Damage Prevention Ordinance | Yes | Franklin County's Flood Damage Reduction Regulation – September 19, 2007 | Franklin County | Franklin County Floodplain Administrator |
| <i>How does this reduce risk?</i> Regulations designed to promote the public health, safety, and general welfare and to minimize public and private loss due to flooding. | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | Yes | Franklin County Stormwater Management Plan – December 19, 2016 | Franklin County | Stormwater Executive Committee |
| <i>How does this reduce risk?</i> The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. Polluted stormwater runoff is often transported through municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. To address this reality, federal and state regulations require the establishment of MS4 stormwater management programs to improve the nation's waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events. The MS4 Stormwater Permit outlines six minimum measures (MCMs) that a SWMP must address. These minimum measures are: <ol style="list-style-type: none"> 1) public education and outreach, 2) public participation / involvement, 3) illicit discharge detection and elimination (IDDE), 4) construction site runoff control, 5) post-construction runoff control and 6) pollution prevention / good housekeeping for municipal operations. | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Economic Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Shoreline Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of the Township of Norwich to oversee and track development.

Table 9.26-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? • If yes, what department is responsible? | No | Residential permits are issued by the Franklin County Economic Development & Planning Department; commercial permits are issued by the State of Ohio. Zoning complaints are dealt with through the Franklin County Zoning Division. |
| If you do not issue development permits, what is your process for tracking new development? | N/A | Coordinate with the Franklin County Building Department. |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | The Township of Norwich does not track permits; it coordinates with the Franklin County Building Department to maintain its list. |
| Do you have a buildable land inventory? • If yes, please describe | No | The Township does not have a buildable land inventory. However, the County stores information at the Auditor's Office. Some information can be found online utilizing the Auditor's Office County webpage. |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Norwich and their current responsibilities that contribute to hazard mitigation.

Table 9.26-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|---------------------|---|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | No | - |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | Yes | The Norwich Township Road Department is responsible for maintaining 13.7 miles of roadways within the unincorporated areas of Norwich Township. Maintaining roadways involves snow removal, roadway and drainage repairs, street sweeping, road sign management, and services maintained within the public right of ways, such as removal of dead animals, tree removal, and sidewalk repairs. The Norwich Township Road Department consists of a Road Superintendent and 3 full-time Road Laborers. |
| Construction/Building/Code Enforcement Department | No | Zoning complaints are dealt with through the Franklin County Zoning Division. |
| Emergency Management/Public Safety Department | Yes | The Norwich Township Fire Department provides fire prevention, suppression, Emergency Medical Services, and fire |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|--|
| | | safety/prevention education programs for the residents of Norwich Township. The Norwich Township Fire Department consists of 91 full-time firefighters at three stations, which includes an administrative staff of five who manage Prevention Programs and Services, Training, and Emergency Medical Services. The department's three stations are strategically located within the Township to facilitate quick response time on emergency calls to any part of the Township. |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Franklin County's warning system |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | The Norwich Township Road Department is responsible for snow removal, roadway and drainage repairs, street sweeping, road sign management, and services maintained within the public right of ways, such as removal of dead animals, tree removal, and sidewalk repairs. |
| Mutual aid agreements | No | - |
| Human Resources Manual | Yes | Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? No. |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | - | - |
| Engineers or professionals trained in building or infrastructure construction practices | - | - |
| Planners or engineers with an understanding of natural hazards | - | - |
| Staff with expertise or training in benefit/cost analysis | - | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | | Consider the following: Are data and maps from the HMP used to support documentation in grant applications? |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |
| How do your administrative/technical capabilities contribute to risk reduction in your community? | | |

Fiscal Capability

The table below summarizes financial resources available to the Township of Norwich.

Table 9.26-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | - |
| Capital improvements project funding | - |
| Authority to levy taxes for specific purposes | - |
| User fees for water, sewer, gas, or electric service | - |
| Impact fees for homebuyers or developers of new development/homes | - |
| Stormwater utility fee | - |
| Incur debt through general obligation bonds | - |
| Incur debt through special tax bonds | - |
| Incur debt through private activity bonds | - |
| Withhold public expenditures in hazard-prone areas | - |
| Other federal or state Funding Programs | - |
| Open Space Acquisition funding programs | - |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | - |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Township of Norwich.

Table 9.26-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|---|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | No | - |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | Yes | Facebook Twitter, Instagram, and YouTube |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Franklin County's Warning System |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | Yes | The Township utilizes their social media accounts to perform public outreach for the described purposes. There are also programs through Focus Hilliard which concentrate on Fire Safety Education. |

Community Classifications

The table below summarizes classifications for community programs available to the Township of Norwich.

Table 9.26-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|--|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | - | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.26-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee Failure | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temperatures | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornadoes | Moderate |

9.26.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Township of Norwich.

Table 9.26-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|---------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Norwich (Twp) | NR | NR | NR | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Township of Norwich.

Table 9.26-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | No |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | Evaluate the cost of repairs vs the pre-damaged value of structure. No substantial damage determinations made recently. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | Unknown |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | Yes |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Franklin County Economic Development & Planning Department (EDP) |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | Unsure |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability) | Franklin County EDP provides permit review, response to resident enquiries about floodplains, enforcement |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Franklin County EDP will evaluate cost of improvements and current value of structure |

| NFIP Topic | Comments |
|--|--|
| What are the barriers to running an effective NFIP program in the community, if any? | N/A |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | 2017 Special Resolution National Flood Insurance Program Regulation |
| Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? | 2007 |
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Yes, freeboard requirement |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.26.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.26-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | - | - | - | - | - | - | - | - | - |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | - | - | - | - | - | - | - | - | - | - |

Table 9.26-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g., Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|--------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

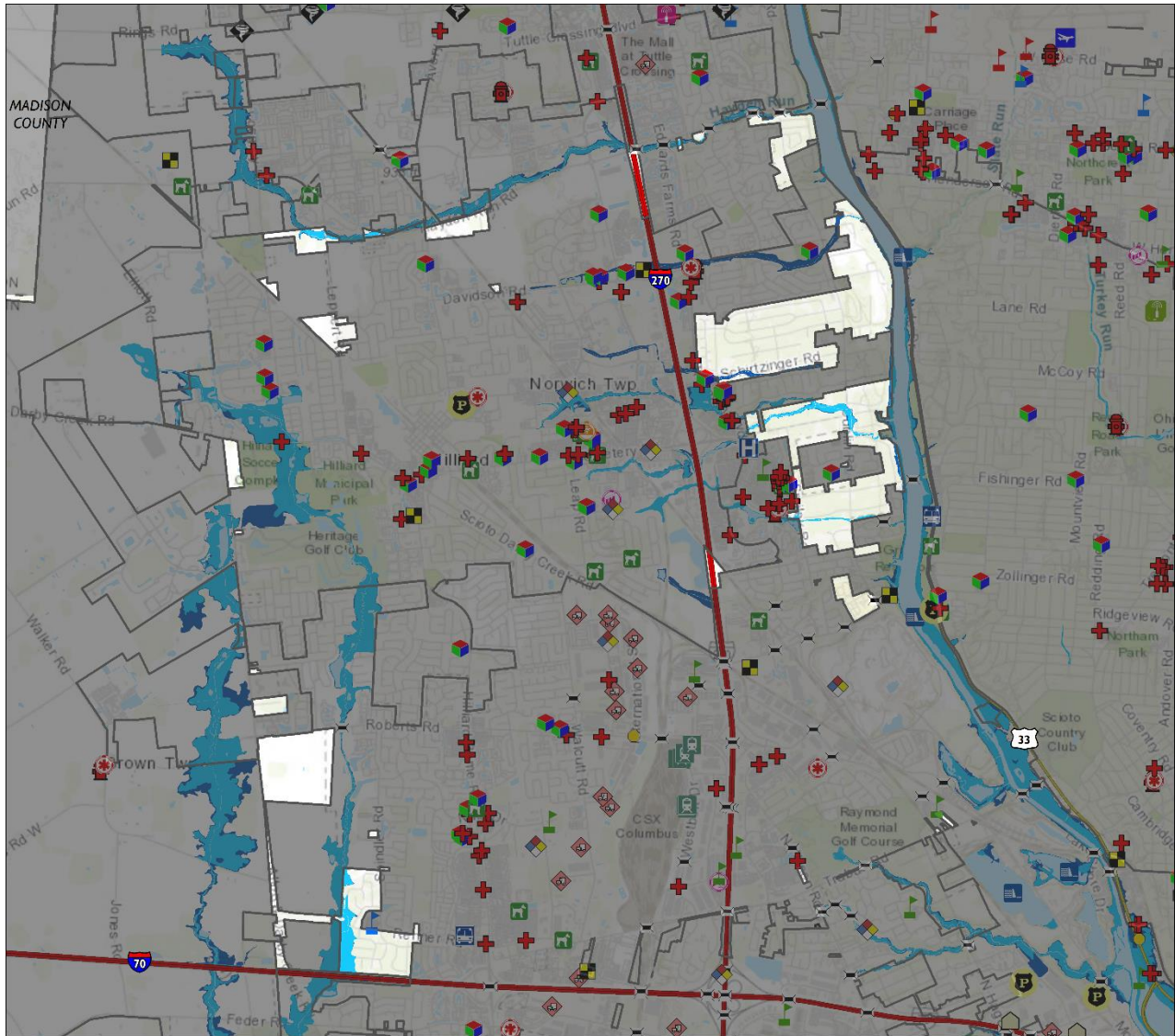
Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.26.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Township of Norwich's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Township of Norwich has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.26-1. Township of Norwich Hazard Area Extent and Location Map - Flood



Norwich (T)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | FEMA Flood Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | 1-Percent Annual Chance |
| Dam | Intermodal Facility | Research/Development Facility | 0.2-Percent Annual Chance |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | <i>The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.</i> |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | |
| EOC | Medical Supply Chain Facility | Veterinary Services | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021 |
| Electric Substation | Park and Ride | Wastewater Systems | Notes: City (C), Township (T), Village (V) |
| Emergency Medical Service | | | |

Figure 9.26-2. Township of Norwich Hazard Area Extent and Location Map – Land Subsidence

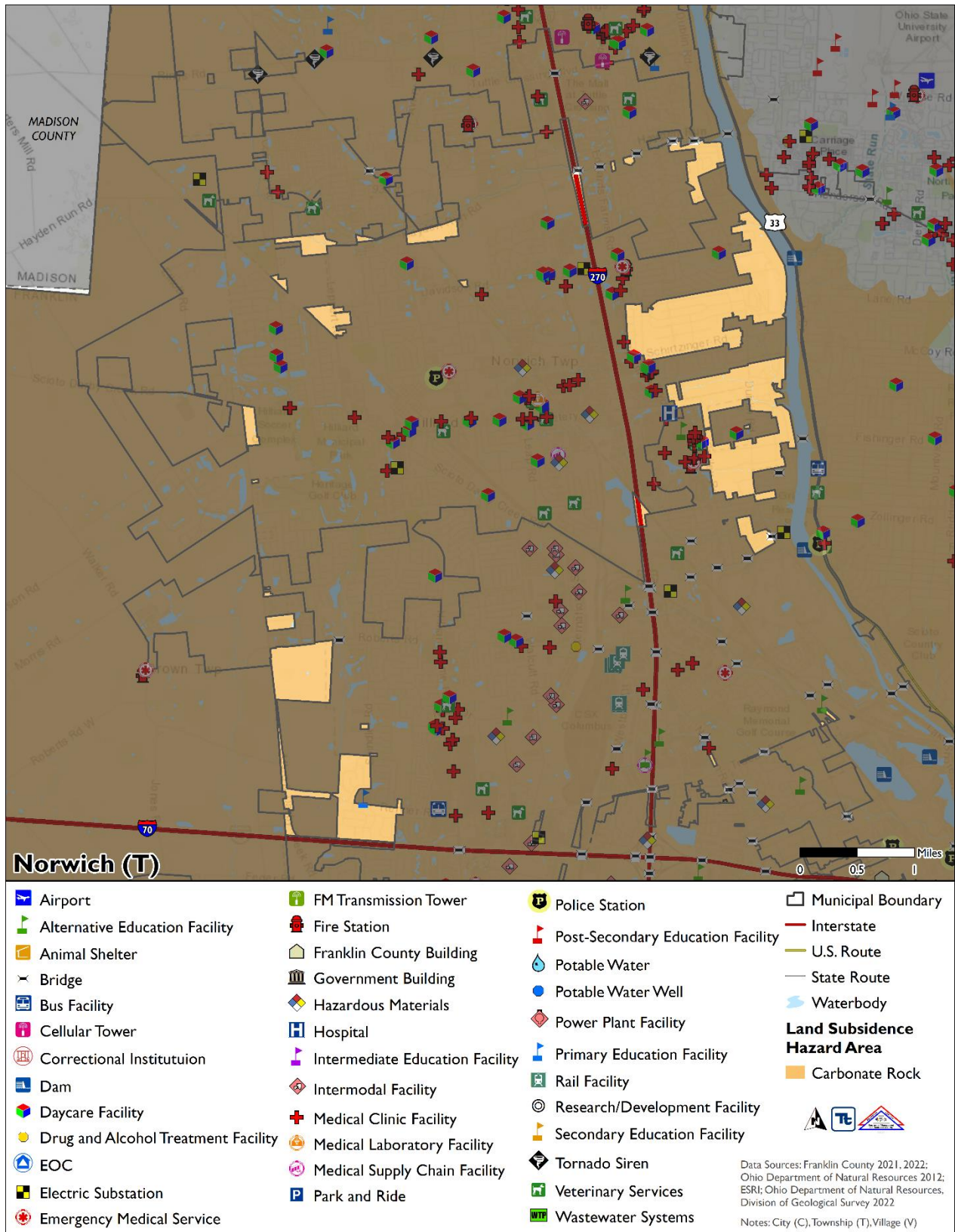
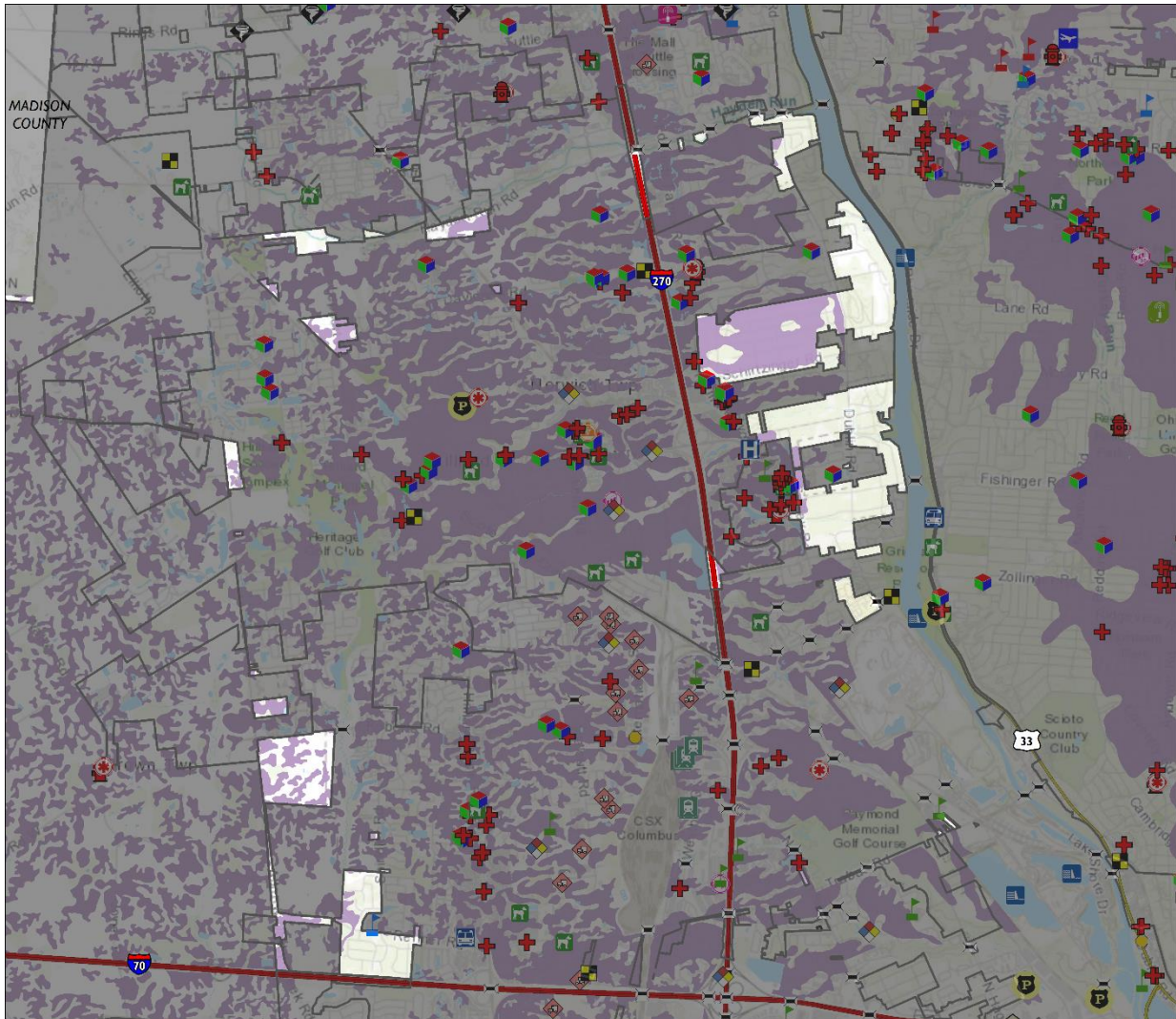


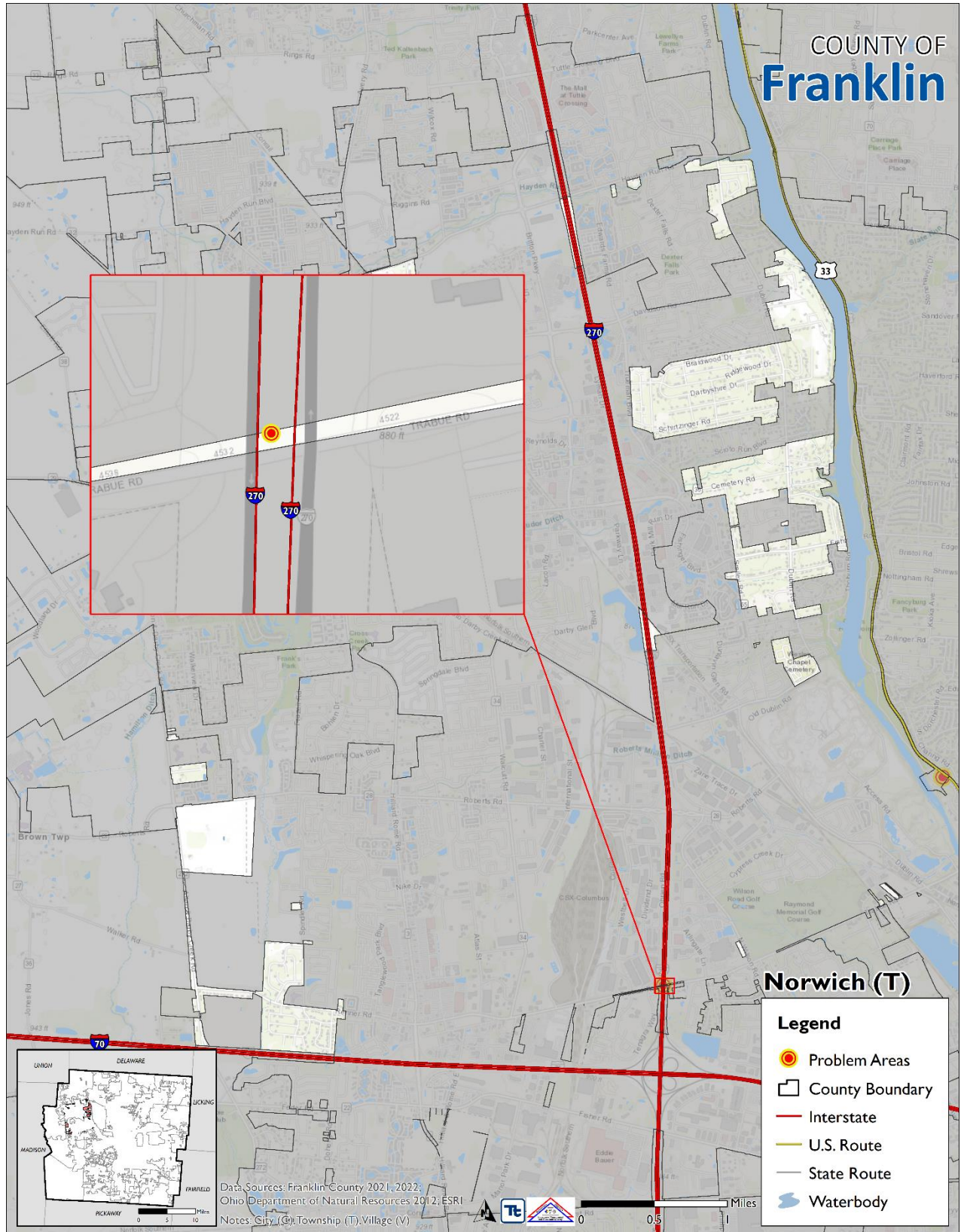
Figure 9.26-3. Township of Norwich Hazard Area Extent and Location Map – Inland Erosion



Norwich (T)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|---|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Hazardous Materials | Potable Water Well | State Route |
| Bus Facility | Hospital | Power Plant Facility | Waterbody |
| Cellular Tower | Intermediate Education Facility | Primary Education Facility | Inland Erosion Hazard Area |
| Correctional Institution | Intermodal Facility | Rail Facility | K-Factor: ≥ 0.49 |
| Dam | Medical Clinic Facility | Research/Development Facility | 0 0.5 1 Miles |
| Daycare Facility | Medical Laboratory Facility | Secondary Education Facility | |
| Drug and Alcohol Treatment Facility | Medical Supply Chain Facility | Tornado Siren | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; United States Department of Agriculture, Natural Resources Conservation Service 2022. |
| EOC | Park and Ride | Wastewater Systems | Notes: City (C), Township (T), Village (V) |
| Electric Substation | | | |
| Emergency Medical Service | | | |

Figure 9.26-4. Township of Norwich Hazard Area Extent and Location Map – Problem Areas



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Norwich Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage Norwich Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.26-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Township of Norwich experienced no damages or losses from this event. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Township of Norwich experienced no damages or losses from this event. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Township did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdiction all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Township of

Norwich. The Township of Norwich reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.26-14. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee Failure | Low |
| Disease Outbreak | Low |
| Drought | Low |
| Earthquake | Low |
| Extreme Temperatures | Low |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Low |
| Tornadoes | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.26-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Norwich Township

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 2 | 2 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Norwich Township identified the following vulnerabilities within its community:

- Critical facilities in the Township do not have back-up power.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.26.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the ‘Capability Assessment’ earlier in this annex.

Table 9.26-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|---------------------------|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Mitigate Power failure through the purchase of Generators | Township Trustee's Office | No Progress | Yes | No critical facilities in the Township currently have back-up power. | Township Trustee's Office |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Township of Norwich identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County's first HMP, the Township of Norwich has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Township of Norwich participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.26-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee Failure | - | X | - | X | - | X | X | - | - | X |
| Disease Outbreak | - | X | - | X | - | X | X | - | - | X |
| Drought | - | X | - | X | - | X | X | - | - | X |
| Earthquake | - | X | - | X | - | X | X | - | - | X |
| Extreme Temperatures | - | X | - | X | - | X | X | - | - | X |
| Flood | - | X | - | X | - | X | X | - | - | X |
| Geologic | - | X | - | X | - | X | X | - | - | X |
| Invasive Species | - | X | - | X | - | X | X | - | - | X |
| Severe Summer Weather | - | X | - | X | - | X | X | - | - | X |
| Severe Winter Weather | - | X | - | X | - | X | X | - | - | X |
| Tornadoes | - | X | - | X | - | X | X | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.26-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions that Norwich Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.26-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------|-------------------------------------|--|--|-----------|--------------------|---|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-Norwich-001 | Critical facility Back-Up Generator | Problem: No critical facilities in the Township currently have back-up power. Solution: Install a back-up/emergency generator and transfer switch to the identified critical facility(ies). | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 6 | 3 years | Township Trustee's Office | BRIC, HMGP | Medium | Medium | Medium | SIP | PP, ES |
| 2023-Norwich-002 | All-Hazards Education | Problem: Residents may not be informed or educated on how to protect themselves and their property from the various hazards which may impact the Township. Solution: Work with Franklin County EM&HS to provide residents with the necessary information to understand the threats of | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, | 2, 4, 5 | 2 years | Franklin County EM&HS and Township Trustee's Office | HMGP, Local Funds | High | Low | High | EAP | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------|---------------------------------|---|---------------------------|-----------|--------------------|---|---|--|--------------------------|----------|---------------------|--------------|
| | | all hazards and protect themselves and their property. | Tornadoes | | | | | | | | | |
| 2023-Norwich-003 | Repetitive Loss Area Mitigation | <p>Problem: Portions of the Township experienced repetitive flooding.</p> <p>Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity.</p> | Flood | 6 | 4 years | Township Trustee's Office, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.26-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|------------------|-------------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Norwich-001 | Critical facility Back-Up Generator | 1 | 1 | 1 | 1 | 1 | 1 | 0 | -1 | 0 | 1 | 1 | 1 | 0 | 0 | 8 | Medium |
| 2023-Norwich-002 | All-Hazards Education | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 11 | High |
| 2023-Norwich-003 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.27 CITY OF OBETZ

This section presents the jurisdictional annex for the City of Obetz that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Obetz participated in the planning process, an assessment of the City of Obetz’s risk and vulnerability, the different capabilities used in the City of Obetz, and an action plan that will be implemented to achieve a more resilient community.

9.27.1 Hazard Mitigation Planning Team

The City of Obetz identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from representatives from many City of Obetz departments, including Deputy Safety Director, City Administrator and the Director of Community Services.

The Director of Community Planning and the Deputy Security Director represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team, meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.27-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|--|
| Name/Title: | Stacey Boumis, AICP, Director of Community Services | Name/Title: | Jess Griffith, Deputy Safety Director |
| Address: | 4175 Alum Creek Drive, Obetz, Ohio 43207 | Address: | 4175 Alum Creek Drive, Obetz, Ohio 43207 |
| Phone Number: | 614.491.1080 | Phone Number: | 614.491.1080 |
| Email: | mailto:sboumis@obetz.oh.us | Email: | jgriffith@obetz.oh.us |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Michael Corbitt, PE, Deputy Administrator/City Engineer | | |
| Address: | 4175 Alum Creek Drive, Obetz, Ohio 43207 | | |
| Phone Number: | 614.491.1080 | | |
| Email: | mcorbitt@obetz.oh.us | | |

9.27.2 Municipal Profile

The City of Obetz is in the southern area of Franklin County and is bordered by Madison Township and the City of Groveport to the east. Parts of Hamilton Township border Obetz City to the west and south and Columbus borders the City to the north. Big Walnut Creek cuts through Obetz east to west.

According to the 2020 Census, the City's population was 5,489, a 21.1-percent increase from the 2010 Census population of 4,532. Data from the 2021 American Community Survey indicates that 4.9 percent of the population is 5 years of age or younger and 10.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.27.3 Jurisdictional Capability Assessment and Integration

The City of Obetz performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Obetz to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Obetz and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.27-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Part Thirteen of the Obetz Codified Ordinances | Local | Building Department |
| <i>How does this reduce risk?</i> The City of Obetz has its own building department and follows the State building codes. The Building Code ensures buildings are safe as it incorporates the latest safety standards to address known hazards to the community. Any updates promulgated by the State of Ohio are automatically enforced in the City of Obetz. As stated above, the City follows all required building codes in the State of Ohio. | | | | |
| Zoning/Land Use Code | Yes | Part Eleven, Title Three, Planning and Zoning Code of the Obetz Codified Ordinances; original zoning code adopted in 1982 | Local | Planner; Engineer; Code Enforcement; Building Dept |
| <i>How does this reduce risk?</i> During development plan review, wetlands, floodways, and floodplains are identified and preserved. Also, a hazard analysis is conducted to ensure consistent and compatible land use. The zoning code also contains tree preservation requirements to limit the removal of trees. The City's Zoning Code has not been updated since the 2018 HMP to allow for Plan integration, but as indicated above the City has previously integrated regulations and design criteria in the Ordinance that preserves and protects existing trees and vegetation, floodplains, stream corridors, and other areas of environmental significance from adverse impacts of development. | | | | |
| Subdivision Ordinance | Yes | Part Eleven, Title One of the Obetz Codified Ordinances; original subdivision regulations adopted in 1982 | Local | Engineer |
| <i>How does this reduce risk?</i> Ensures responsible development after zoning approval. The location of natural hazard areas are identified during the zoning process and then the subdivision process is an additional check to ensure those areas are preserved. The City's Subdivision Regulations have not been updated since the 2018 HMP but the City's review process and design criteria works to preserve and protect existing trees and vegetation, floodplains, stream corridors, and other areas of environmental significance from adverse impacts of development by protecting natural areas. | | | | |
| Site Plan Ordinance | Yes | Part Eleven, Title One, of the Zoning Code – Chapter 1137 | Local | Planner; Engineer |
| <i>How does this reduce risk?</i> During development plan review, wetlands, floodways, and floodplains are identified and preserved. Also, a hazard analysis is conducted to ensure consistent and compatible land use. | | | | |
| Stormwater Management Ordinance | Yes | Part Eleven, Title One of the Zoning Code – Chapter 1137 | Local | Planner; Engineer |
| <i>How does this reduce risk?</i> The City's Stormwater Management Ordinance reduces risk by managing stormwater runoff and mitigating the potential effects of flooding, erosion, and water pollution. It also protections water quality and infrastructure by managing the volume and rate of stormwater runoff. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|--|---|--|
| Flood Damage Prevention Ordinance | Yes | Flood Damage Reduction Regulations – Part 17 of the Codified Ordinances; adopted in 2006 | Local | Engineering and Planning |
| <i>How does this reduce risk?</i> In addition to the required regulations, it contains additional protections including the riparian buffer zone on the Big Walnut Creek (1704.13) and the compensatory storage for fill requirement (1704.10(d)). This protects land downstream. | | | | |
| Wellhead Protection | Yes | Wellhead Protection Plan created in 1995 | Local | Engineering, Planning, and Utilities |
| <i>How does this reduce risk?</i> Provides guidance on appropriate land uses in the wellhead protection area. It also identifies a wellhead protection zone. | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | 1. Southwest Area Plan – 2022 2. Rickenbacker Area Study – 2018 3. Insight 2050 – 2015 4. Insight 2050 Corridor Concepts (studied Groveport Road and Alum Creek Drive) – 2019 5. Central Ohio Regional Housing Strategy – 2020 6. Walnut Creek Retail Center Plan – 2015 7. Triangle Area Land Use Plan - 2002 | Local | Engineering and Planning |
| <i>How does this reduce risk?</i> Guides development to areas with infrastructure; preserves open space; discourages development in natural hazard areas. | | | | |
| Capital Improvement Plan | Yes | Updated yearly as a part of the budgeting process | Local | Engineering; Administration |
| <i>How does this reduce risk?</i> Targets investment in infrastructure. | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | Yes | 1. Big Walnut Watershed Planning Partnership Balanced Growth Plan – 2012 2. Rapid 5 – 2021 These documents are exclusive of each other | Local | Planning |
| <i>How does this reduce risk?</i> Identifies drinking water protection zones; priority preservation areas; and priority development areas | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|--|---|--|
| Stormwater Management Plan | Yes | 2021-2025 Stormwater Management Program Plan submitted in 2021 to OEPA Obetz also follows the Ohio EPA's Rainwater and Land Development Manual | Local | Engineering |
| <i>How does this reduce risk?</i> Ensures management of stormwater to avoid flooding; reduces contamination of stormwater; IDDE activities help prevent/eliminate pollution of surface water | | | | |
| Open Space Plan | Yes | Component of Multiple Planning Documents | Local | Planning |
| <i>How does this reduce risk?</i> Identifies priority preservation areas; responsible development of land; minimize flooding through floodplain preservation | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | Yes | 1. Component of Multiple Planning Documents adopted at various times 2. Columbus Region Comprehensive Economic Development Strategy - 2021 | Local | Planning/Development |
| <i>How does this reduce risk?</i> Guides development to areas with infrastructure. | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | Yes | 2022 – Urban Tree Canopy Project Zoning code limits removal of trees as well | Local | Planning, Grounds, and Engineering |
| <i>How does this reduce risk?</i> Identifies tree preservation areas | | | | |
| Transportation Plan | Yes | 1. Mid-Ohio Regional Planning Commission's (MORPC) 2016 Active Transportation Plan 2. MORPC 2020-2050 Metropolitan Transportation Plan (effective 7/2020; amended 9/21 and 9/22) 3. Transportation components in land use, watershed, and area plans | County | Central Ohio's regional council |
| <i>How does this reduce risk?</i> Targets transportation improvements to developed areas; minimizes improvements in preservation areas; takes a regional look at the transportation system | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Continuity of Operations Plan | Yes | 2020 | Local | City Administration |
| <i>How does this reduce risk?</i> Maintains essential functions of the operation | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | No | - | - | - |
| <i>How does this reduce risk?</i> Obetz contracts with Franklin County Public Health for all health services. The City follows along with the County. | | | | |
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the City of Obetz to oversee and track development.

Table 9.27-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|--|--------|----------|
| Do you issue development permits? If yes, what department is responsible? | Yes | Planning |

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--|
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | Floodplain development permits are tracked separately but otherwise, permits are not tracked by hazard area. |
| Do you have a buildable land inventory? If yes, please describe | Yes | Planning documents are used as a visual guide. |
| Describe the level of build-out in your jurisdiction. | N/A | 85% built out or under construction |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Obetz and their current responsibilities that contribute to hazard mitigation.

Table 9.27-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|---------------------|---|
| Administrative Capability | | |
| Planning Board | Yes | Enforcement of zoning code including review of site plans; creation of plans and land use policies |
| Zoning Board of Adjustment | Yes | The Planning and Zoning Commission serves as the BZA |
| Planning Department | Yes | Enforcement of zoning code; creation of plans and land use policies |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | Yes | While not a formally created Board/Commission, the Planning and Zoning Commission creates policies and plans that guide the preservation of open space within the community and preserve the environmental resources. |
| Open Space Board/Committee | Yes | While not a formally created Board/Commission, the Planning and Zoning Commission creates policies and plans that guide the preservation of open space within the community. |
| Economic Development Commission/Committee | Yes | While not a formally created Board or Commission, the Planning and Zoning Commission creates policies and plans that guide economic development. |
| Public Works/Highway Department | Yes | Utilities Dept. – 6 FT Street Dept. – 6 FT; 4 PT Grounds Dept. – 2 FT |
| Construction/Building/Code Enforcement Department | Yes | In-house building dept. and code enforcement – 4 people in house plus on-going contract with consulting firm |
| Emergency Management/Public Safety Department | Yes | Obetz Police Dept. |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Lighting detection system at splashpad and in Memorial Park where the stadium and outdoor sports fields are located; 3 tornado sirens |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Yearly maintenance of storm system; street tree maintenance program |
| Mutual aid agreements | Yes | Both police dept. and fire dept. (Obetz is split between Hamilton Township FD and Madison Township FD) |
| Human Resources Manual | Yes | FT Human Resources Director; Deputy Safety Director position |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | City Planner and Two FT City Engineers |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|--|
| Engineers or professionals trained in building or infrastructure construction practices | Yes | City Engineer; Chief Building Official; Code Enforcement Officer; Utilities Engineer |
| Planners or engineers with an understanding of natural hazards | Yes | City Engineer; City Planner; Utilities Engineer; Chief Building Official |
| Staff with expertise or training in benefit/cost analysis | Yes | Finance Director; City Manager; Economic Development Director |
| Professionals trained in conducting damage assessments | Yes | Chief Building Official; Code Enforcement Officer; City Engineer; Utilities Engineer |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | City Engineer; Utilities Engineer |
| Environmental scientist familiar with natural hazards | Yes | Not on staff; Obetz has an on-going contract with Franklin County Soil and Water Conservation District |
| Surveyor(s) | Yes | Not on staff but Obetz has a contract with an engineering/surveying company |
| Emergency Manager | Yes | City Manager; Deputy City Manager |
| Grant writer(s) | Yes | All Directors are skilled grant writers |
| Resilience Officer | Yes | Deputy Safety Director |
| Other (this could include stormwater engineer, environmental specialist, etc.) | Yes | City Planner who has a background in environmental science |

Fiscal Capability

The table below summarizes financial resources available to the City of Obetz.

Table 9.27-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes – limited to a small part of the City only |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | Yes |
| Stormwater utility fee | Yes – eligible to use but don't have |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | Yes |
| Withhold public expenditures in hazard-prone areas | Yes |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | Yes |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | Yes – Obetz is a charter municipality |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Obetz.

Table 9.27-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|--|
| Public information officer or communications office | Yes | FT staff member - has access to website and all social media platforms |

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|--|
| | | 2 additional staff members have access to websites and social media platforms as a backup |
| Personnel skilled or trained in website development | Yes | 2 FT staff members; can post to multiple city owned sites |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | No | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Lightning detection system with siren to warn people and tornado sirens |
| Natural disaster/safety programs in place for schools | Yes | Obetz is split between the Hamilton Local School District and Groveport Madison School District. Both districts have natural disaster/safety programs. |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | Yes | Obetz can post information on its website and social media platforms as necessary |

Community Classifications

The table below summarizes classifications for community programs available to the City of Obetz.

Table 9.27-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|---|------------------------------------|
| Community Rating System (CRS) | No | no structures in the floodplain | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | Obetz has its own building department that enforces the Ohio Building Codes | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | Madison Township = 3 Hamilton Township = 3 | Obetz is served by two FD |
| Storm Ready Certification | Yes | Franklin County is a Storm Ready County | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.

- Weak: Capacity does not exist or could use substantial improvement.

Table 9.27-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Medium |
| Disease Outbreak | Medium |
| Drought | Medium |
| Earthquake | Medium |
| Extreme Temperature | Medium |
| Flood | Medium |
| Geologic | Medium |
| Invasive Species | Medium |
| Severe Summer Weather | Moderate |
| Winter Storm | High |
| Tornado | High |

9.27.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Obetz.

Table 9.27-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|--------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Obetz (C) | 1 | 0 | \$0.00 | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Obetz.

Table 9.27-10. NFIP Summary

| NFIP Topic | Comments |
|---|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> • Do you maintain a list of properties that have been damaged by flooding? | <p>No areas prone to flooding</p> <p>No known properties that have been damaged by flooding</p> |

| NFIP Topic | Comments |
|--|---|
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | <p>No. No homeowners/businesses interested in mitigation</p> |
| <p>Are any RiskMAP projects currently underway in your jurisdiction?</p> <ul style="list-style-type: none"> If so, state what projects are underway. | <p>No</p> |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | <p>SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director.</p> |
| <p>How many properties have been mitigated (elevation or acquisition) in your jurisdiction?</p> <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | <p>None</p> |
| <p>Do your flood hazard maps adequately address the flood risk within your jurisdiction?</p> <ul style="list-style-type: none"> If not, state why. | <p>Yes</p> |
| <p>NFIP Compliance</p> | |
| <p>What local department is responsible for floodplain management?</p> | <p>Engineering</p> |
| <p>Are any certified floodplain managers on staff in your jurisdiction?</p> | <p>No</p> |
| <p>Do you have access to resources to determine possible future flooding conditions from climate change?</p> | <p>No</p> |
| <p>Does your floodplain management staff need any assistance or training to support its floodplain management program?</p> <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | <p>Yes; continued education of any new requirements</p> |
| <p>Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)</p> | <p>Permit; GIS; Engineering review</p> |
| <p>How do you determine if proposed development on an existing structure would qualify as a substantial improvement?</p> | <p>If a building permit is required</p> |
| <p>What are the barriers to running an effective NFIP program in the community, if any?</p> | <p>None</p> |
| <p>Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed?</p> <ul style="list-style-type: none"> If so, state the violations. | <p>No</p> |
| <p>When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?</p> | <p>Unknown</p> |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | <p>Part 17 of the Obetz Codified Ordinances last amended on 5/8/2006</p> |
| <p>Does your floodplain management program meet or exceed minimum requirements?</p> <ul style="list-style-type: none"> If exceeds, in what ways? | <p>Exceeds; refer to Part 17 of the Codified Ordinances Compensatory fill requirement and buffer on Big Walnut Creek</p> |
| <p>Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?</p> | <p>Site plan review required Planning and Zoning Commission, City Engineer, and City Planner all consider efforts to reduce flood risk when reviewing site plans/variances</p> |
| <p>Does your community plan to join the CRS program or is your community interested in improving your CRS classification?</p> | <p>No</p> |



9.27.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.27-11. Number of Building Permits for New Construction Since the Previous HMP

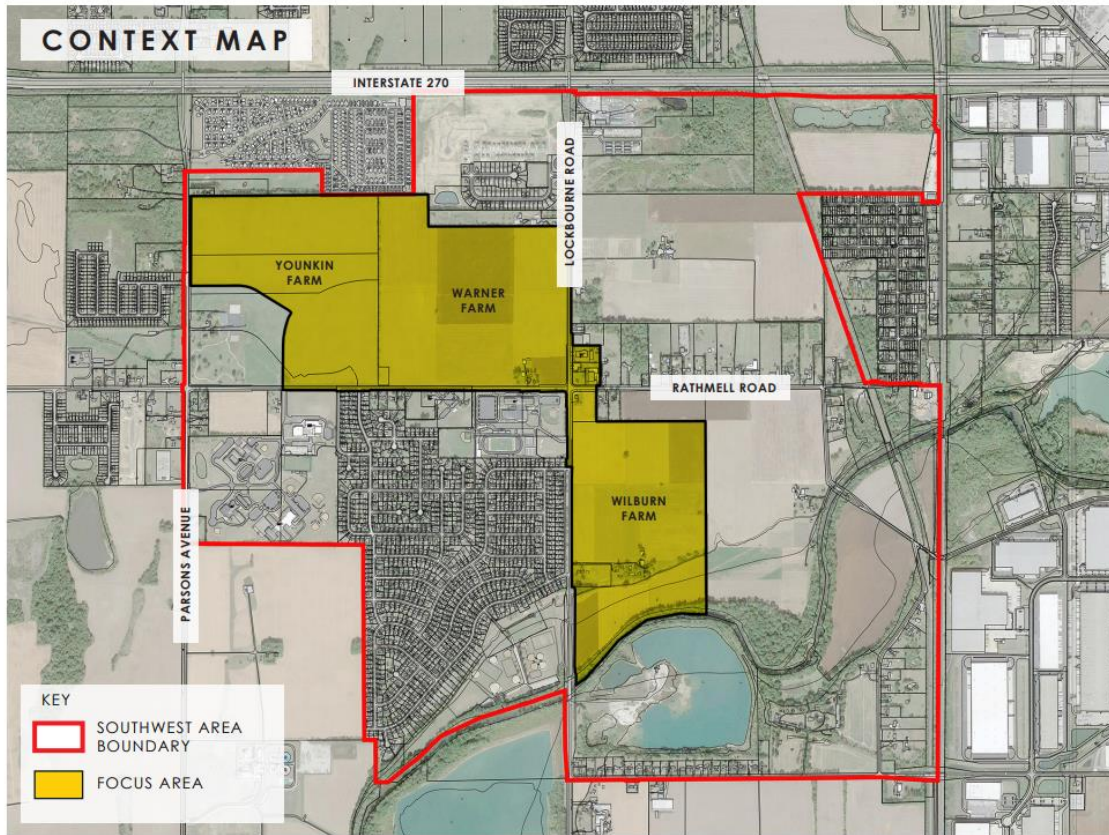
| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-----------|-------------|-----------|-------------|------------|-------------|------------|-------------|------------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 41 | 0 | 74 | 0 | 134 | 0 | 116 | 0 | 98 | 0 |
| Multi-Family | 0 | 0 | 0 | 0 | 0 | 0 | 145 | 0 | 308 | 0 |
| Other (commercial, mixed-use, etc.) | 4 | 0 | 3 | 0 | 5 | 0 | 4 | 0 | 0 | 0 |
| Total Permits Issued | 45 | 0 | 77 | 0 | 139 | 0 | 265 | 0 | 406 | 0 |

Table 9.27-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|--|----------------------|---|
| Recent Major Development from 2018 to Present | | | | | |
| Fortress Obetz | Public | N/A | 2015 Recreation Trail | No | Stadium; Completed |
| Big Walnut Run | SF Residential | 166 | Bixby Road; south of Groveport Road | No | Under construction; 50% completed  |
| Redwood | MF Residential | 165 | 186-002023 | No | Nearing completion |
| Butler Farms | SF Residential | 254 | West side of Lockbourne Road; south of I-270 | No |  95% complete |

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|--|---|---|----------------------|---|
| Buckstone Flats | MF Residential | 288 | 152-002168 | No | Nearing Completion |
| Buckstone Bend | SF Residential | 252 | 152-002170; 152-002161; 152-002169; 152-002162 | No | 8 building permits have been issued; no home completed as of June 2023 |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| Commercial Development Area | Commercial | n/a | Parcel: 152-000851 | None | Not yet approved by the City |
| Commercial Development Area | Commercial | n/a | Parcel 152-001466 | None | In planning phase |
| Walnut Creek Retail and Medical Center | Commercial and Medical | n/a | west side of Alum Creek; from Maureen Blvd N. to Lindsay Road | None | Parts already approved; some parts vacant and in the planning phase; Several sites completed including a freestanding emergency room operated by OhioHealth |
| Buckstone | Mixed use – commercial, office, institutional, SF and MF Residential | Approximately 1000 new residential units anticipated; square footage of other development types unknown | See context map below; Buckstone area shaded in yellow | None | One SF subdivision and one MF project under construction now |

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|------------------------------|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
|------------------------------|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|



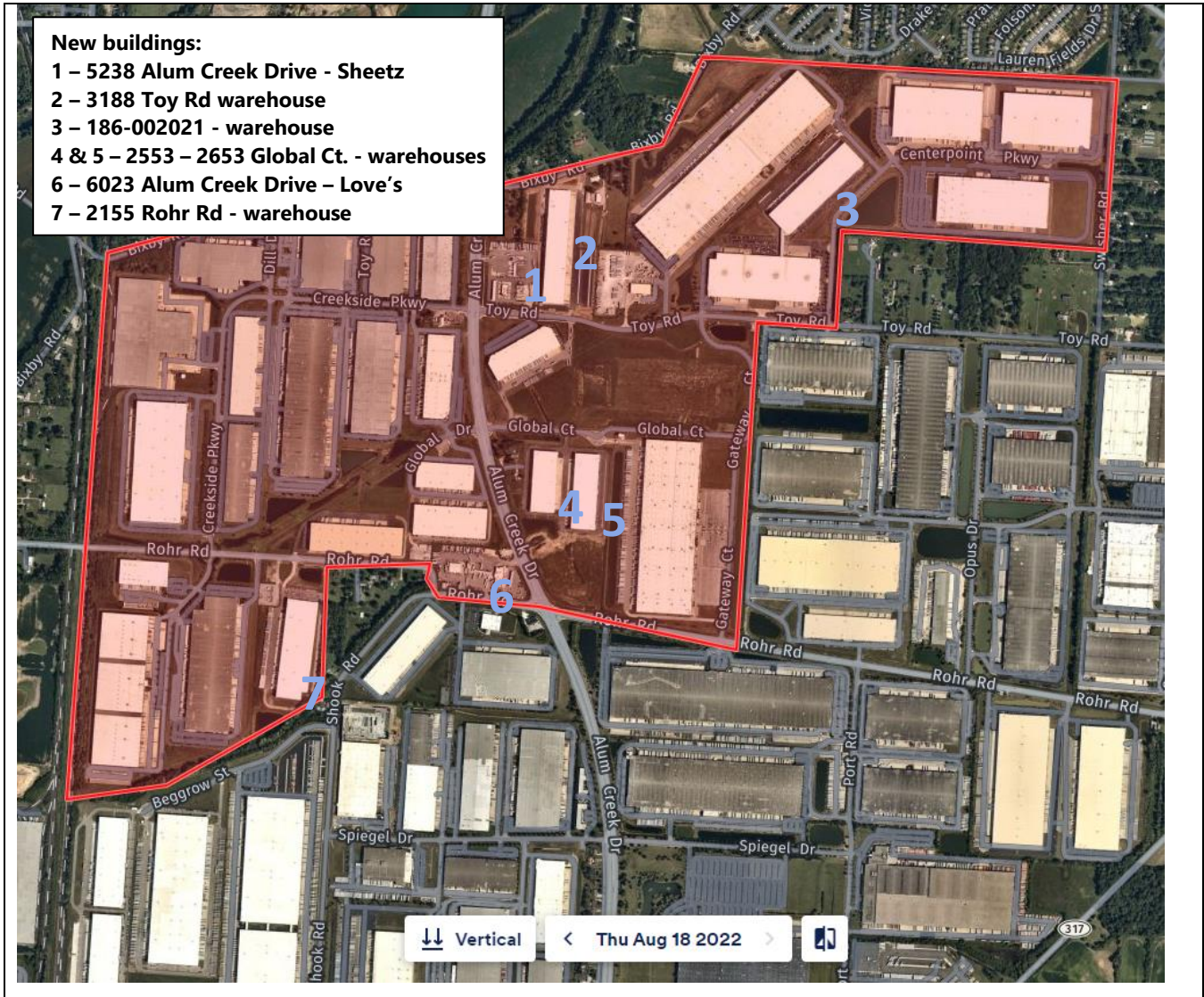
Parcel 150-002713 will be deeded to Obetz as a part of the project. This is all the land within the 100 year floodplain.

Commercial/Mixed Use development planned on the following parcels within the next 5 years:

- 152-000851
- 152-001544
- 152-001466
- 153-000160/153-000168/153-000169/153-000031 – one project – parcel combination has not occurred but planned
- 153-000249
- 153-000034
- 153-000036
- 153-000035
- 153-000020

Industrial/warehouse development planned on the following parcels within the next 5 years:

- 152-001937
- 186-002016
- 153-000673
- 153-000010
- 153-000006
- 186-000408



Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

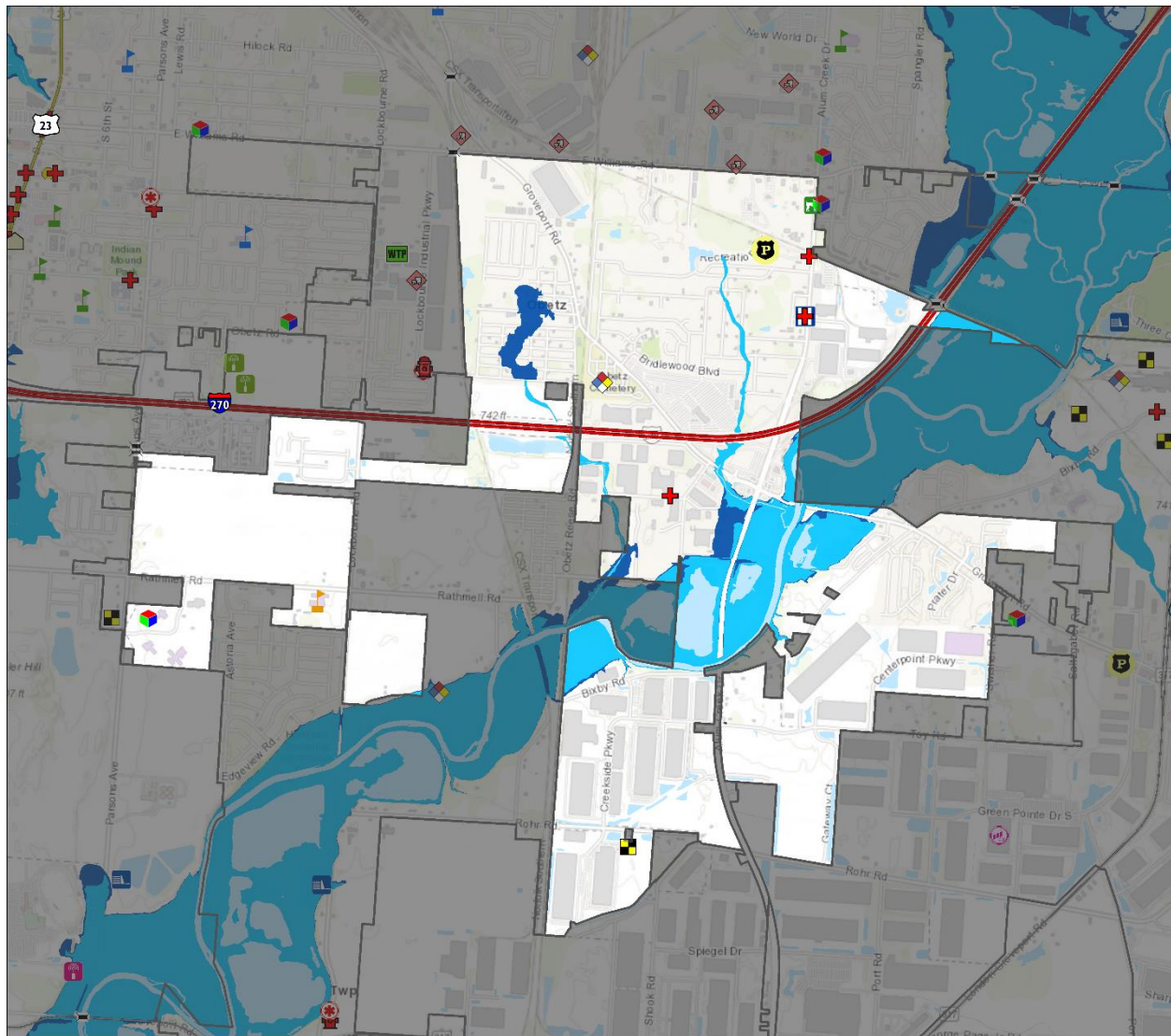
9.27.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Obetz’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be

identified clearly using mapping techniques and technologies and for which the City of Obetz has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.27-1. City of Obetz Hazard Area Extent and Location Map – Flood

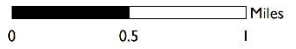


Obetz (C)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service

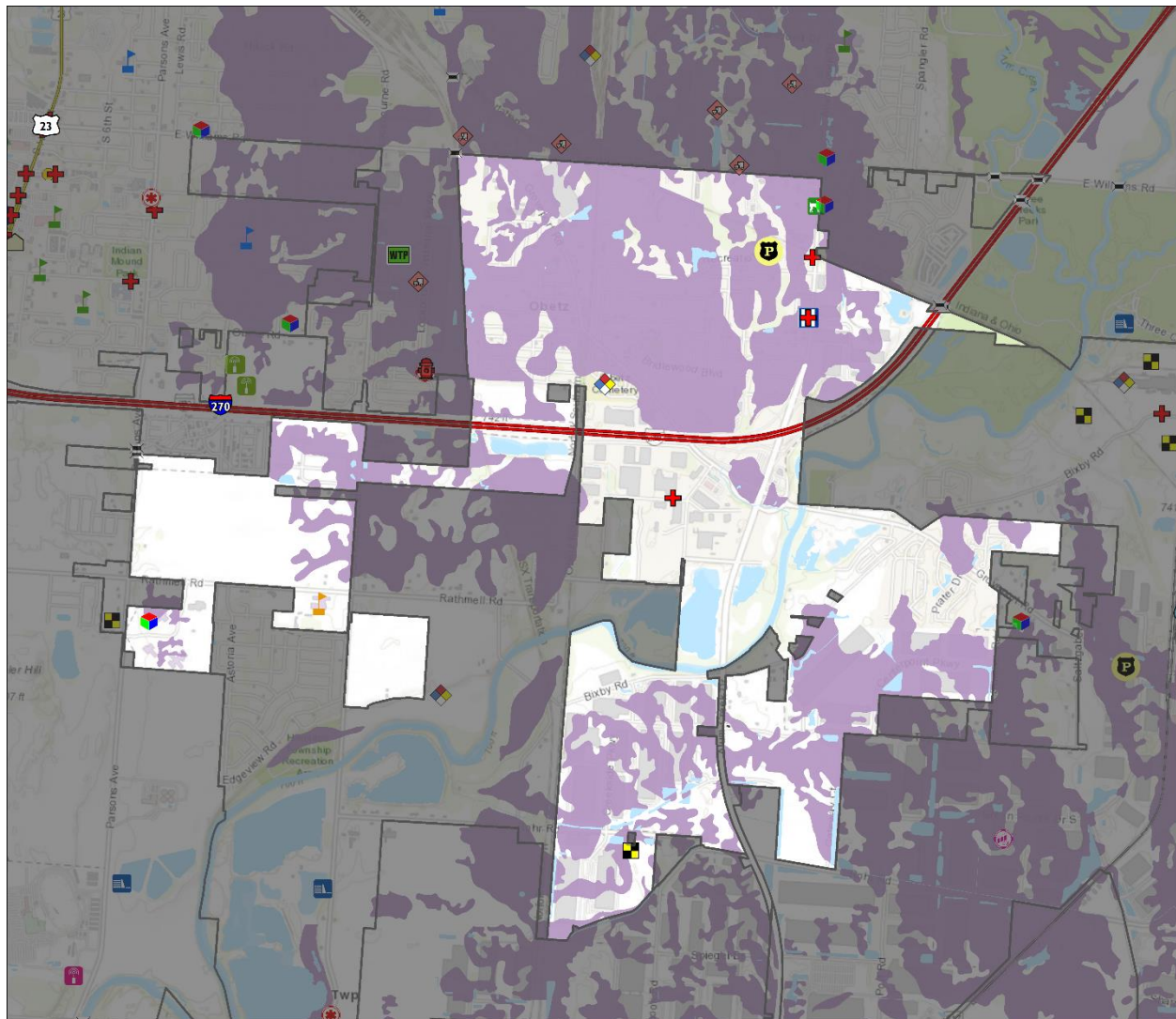
- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems



- Municipal Boundary
 - Interstate
 - U.S. Route
 - State Route
 - Waterbody
- FEMA Flood Hazard Area**
- 1-Percent Annual Chance
 - 0.2-Percent Annual Chance
- The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.*
-
- Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021
Notes: City (C), Township (T), Village (V)

Figure 9.27-2. City of Obetz Hazard Area Extent and Location Map – Inland Erosion



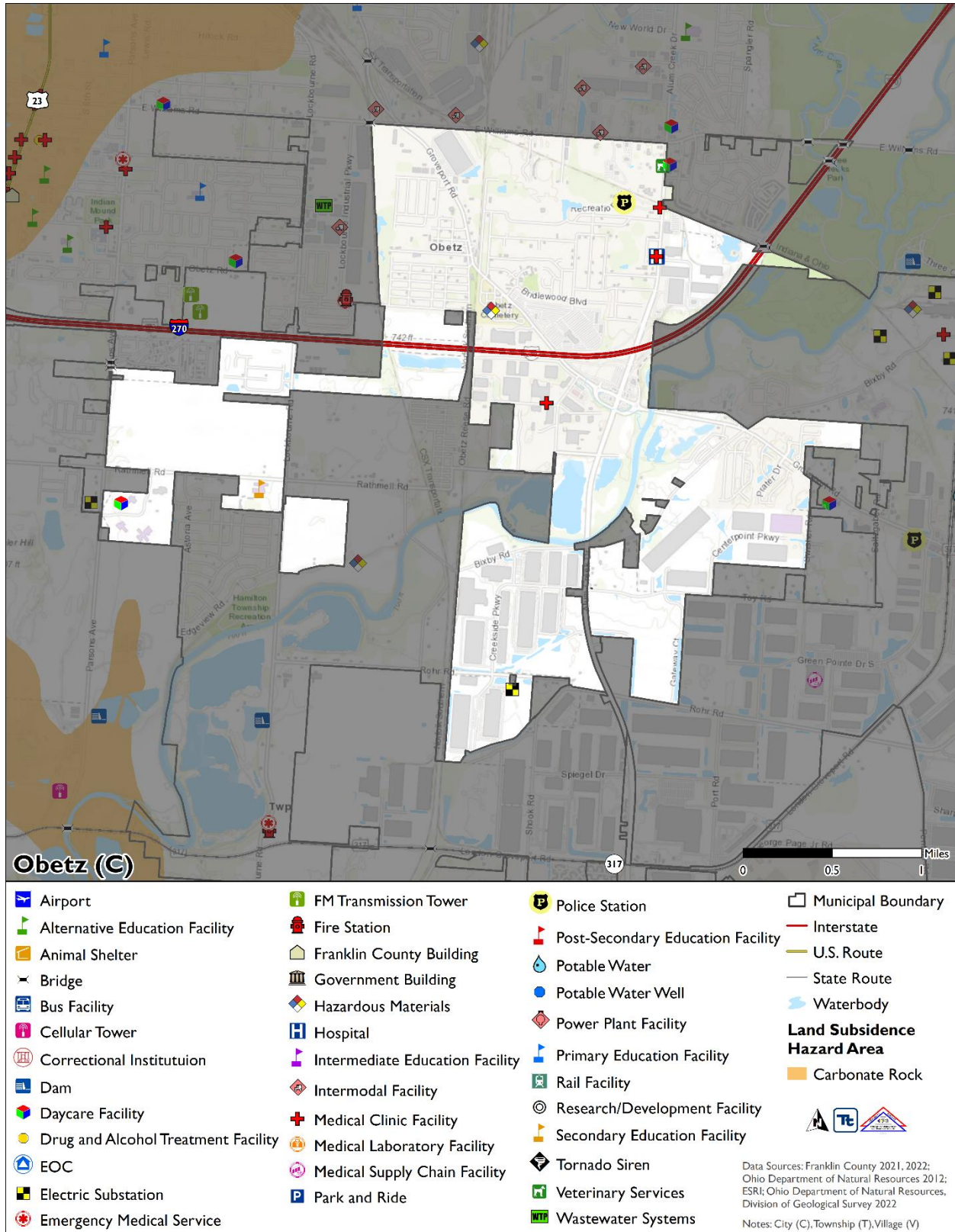
Obetz (C)

0 0.4 0.8 Miles

- | | | | |
|-------------------------------------|---------------------------------|-----------------------------------|-----------------------------------|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Inland Erosion Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | K-Factor: >=0.49 |
| Dam | Intermodal Facility | Research/Development Facility | Tetra Tech |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | |
| EOC | Medical Supply Chain Facility | Veterinary Services | |
| Electric Substation | Park and Ride | Wastewater Systems | |
| Emergency Medical Service | | | |

Data Sources: Franklin County 2021, 2022;
Ohio Department of Natural Resources 2012;
ESRI; United States Department of Agriculture,
Natural Resources Conservation Service 2022
Notes: City (C), Township (T), Village (V)

Figure 9.27-3. City of Obetz Hazard Area Extent and Location Map – Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Obetz’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Obetz experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.27-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|---|---|
| April 3-4, 2018 | EF-1 Tornado | N/A | Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage. | \$24,567.46 for tree removal and overtime hours associated with clean-up of damage |
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | While this event impacted Franklin County, the City did not report any damages as a result of this event. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low- pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | While this event impacted Franklin County, the City did not report any damages as a result of this event. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | See chart below for lost staff time associated with COVID |

Figure 9.27-4. COVID Statistics for the City of Obetz

| Estimated COVID Hours & Costs | | |
|-------------------------------|----------|---------------|
| 2020 | 3795.375 | \$ 95,653.02 |
| 2021 | 5148.167 | \$ 129,361.41 |
| 2022 | 755.75 | \$ 19,432.18 |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Obetz. The City of Obetz reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Obetz indicated the following:

- Obetz has reduced the Flood Hazard Ranking from Medium to Low. This change is appropriate as the City's flood damage reduction regulations are stricter than required by OEPA; there are no structures in the 100 year floodplain; the City has a separate (not combined) storm sewer system; and flooding has never been an issue.

Table 9.27-14. Hazard Ranking Input

| Hazard | Draft 2023 Ranking Based on RA Results |
|-----------------------|--|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temperature | Medium |
| Flood | Low |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |

| Hazard | Draft 2023 Ranking Based on RA Results |
|-----------------------|--|
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.27-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Obetz

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | - |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | 5 | 4 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | 1 | 1 |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Obetz identified the following vulnerabilities within its community:

- The City's police department (4175 Alum Creek Drive) does not have backup power. In the event of a power outage, the department cannot perform continuity of operations nor respond to emergencies.
- The City of Obetz has aging infrastructure that is vulnerable to hazard events, primarily the storm sewer system. This could also affect continuity of operations for numerous agencies and inhibit emergency responders from being able to help residents in a timely fashion.
- The City's residents are not knowledgeable about heatwaves and need to be educated on health information and preventative measures in order to stay safe.
- The City experiences unknown diseases and rapidly spreading diseases in populated areas of the City.
- The City has numerous mobile home locations that are particularly vulnerable to some hazard events and there are no known public storm shelters near Obetz.
- Obetz has numerous parks that do not have any warning systems when a severe storm is coming.
- The City struggles with snow and ice conditions and needs guidance on the removal and deployment of road clearing coordination.
- The City does not have a backup power source for traffic lights at key intersections which create issues during any power outage and presents issues regarding evacuation routes.
- The City experiences an increasing number of power outages and damaged power lines during hazard events.

- City Residents are not aware of community resources that are available to them, including preventative information, clinics, shelters, and emergency supplies.
- The City does not have enough native trees in newly developed areas. This leads to increased stormwater runoff/flooding and invasive species.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.27.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.27-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|--|--|---|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (1500 / 1 year) | City Administration and Mayor's office | No Progress | No | - | - |
| Purchase Tornado Sirens through the Franklin County Emergency Management & Homeland Security. (40,000 / 4 months) | City Administration and Mayor's office | Complete – the City used the general fund to complete; \$8370 spent on sirens and proportionate share in 2017. | No | - | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Obetz identified the following mitigation efforts completed since the last HMP:

- The City continues to monitor its storm sewer system and make repairs as needed.

Since the adoption of the County's first HMP, the City of Obetz has made significant mitigation progress in the following areas:

- The City continues to use the regulatory process to limit development in hazard areas.

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Obetz participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.27-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | X | - | X | - | - | X | - | X | X |
| Disease Outbreak | X | X | - | X | - | X | X | - | - | X |
| Drought | X | X | - | X | - | X | X | - | - | X |
| Earthquake | X | X | - | X | X | X | X | - | - | X |
| Extreme Temperature | X | X | X | X | X | X | X | X | - | X |
| Flood | X | X | X | X | - | X | X | X | - | X |
| Geologic | X | X | - | X | - | X | X | - | - | X |
| Invasive Species | - | - | X | X | - | - | X | X | - | - |
| Severe Summer Weather | X | X | - | X | X | X | X | - | - | X |
| Severe Winter Weather | X | X | - | X | X | X | X | - | - | X |
| Tornado | X | X | - | X | X | X | X | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.27-17)

Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Obetz will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.27-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|--------------------------------------|--|---|-----------|--------------------|---|---------------------------|--|-----------------|----------|---------------------|--------------|
| 001-Obetz-2023 | Generator for City Police Department | Problem: The City's police department (4175 Alum Creek Drive) does not have backup power. In the event of a power outage, the department cannot perform continuity of operations nor respond to emergencies. Solution: The Department will purchase and install a generator at the police department to allow for continuity of operations during a power outage and allow the department to provide essential services to the community. | Dam/Levee, Drought, Earthquake, Extreme Temperature, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, and Tornado | 6 | Within 5 years | City Administration and Police Department | FEMA HMGP and BRIC | The Department will be able to perform continuity of operations. | \$50,000+ | High | SIP | PP |
| 002-Obetz-2023 | Storm Sewer System Analysis | Problem: The City of Obetz has aging infrastructure that is vulnerable to hazard | Extreme Temperature, Flood, Severe Summer Weather, | 1 | Medium Term | City Engineer and Utilities | Obetz General Fund | The City will experience reduced urban | \$25,000 | Medium | LPR | PR |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|-----------------------------|--|--------------------------------|-----------|--------------------|--|---------------------------|--|-----------------|----------|---------------------|--------------|
| | | <p>events, primarily the storm sewer system. This could also affect continuity of operations for numerous agencies and inhibit emergency responders from being able to help residents in a timely fashion.</p> <p>Solution: The City will conduct an engineer study to undertake an analysis of the City's aging infrastructure, including the storm sewer system to ensure it is functioning properly. Once the City identifies needed improvements, they will implement the most cost-effective solution.</p> | Severe Winter Weather, Tornado | | | | | flooding and will ensure that all infrastructure is up to code. | | | | |
| 003-Obetz-2023 | Heatwave Awareness Campaign | <p>Problem: The City's residents are not knowledgeable about heatwaves and need to be educated on health information and preventative</p> | Extreme Temperature, Drought | 1 | Ongoing | Community Services Director and PR Dept. | Obetz General Fund | The City will experience reduced health issues related to extreme temperatures | N/A | Medium | EAP | ES |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|----------------------------|---|---------------------------|-----------|--------------------|--|---------------------------|--|-----------------|----------|---------------------|--------------|
| | | measures in order to stay safe. Solution: The City will conduct a heatwave awareness campaign to educate residents about the risks of extreme heat and provide information on preventative measures. Share information from other local and regional partners regarding available programs. | | | | | | | | | | |
| 004-Obetz-2023 | Disease Outbreak Education | Problem: The City experiences unknown diseases and rapidly spreading diseases in populated areas of the City. Solution: The City will add links to City website for local health agencies such as Franklin County Public Health and Columbus Public Health in order to educate residents on disease outbreaks. The City will also provide links to | Disease Outbreak | 1 | Within 5 years | Community Services Director and PR Dept. | Obetz General Fund | The City residents will have a greater awareness of community resources. | N/A | Medium | EAP | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|--|---|--|-----------|--------------------|---------------------------|---------------------------|---|-----------------|----------|---------------------|--------------|
| | | locations of vaccination and testing clinics. | | | | | | | | | | |
| 005-Obetz-2023 | Community Storm Shelter Identification | <p>Problem: The City has numerous mobile home locations that are particularly vulnerable to some hazard events and there are no known public storm shelters near Obetz.</p> <p>Solution: The City will identify community storm shelters and will determine if existing government owned facilities could be retrofitted as a storm shelter or safe room.</p> | Dam Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornados | 1 | Long Term | City Administration | Grants | Identification of storm shelters and community assets | \$15,000 | Low | LPR | ES |
| 006-Obetz-2023 | Lightning Detection System | <p>Problem: Obetz has numerous parks that do not have any warning systems when a severe storm is coming.</p> <p>Solution: The City will seek funding for the installation of lightning detection systems in parks and install in parks when funding is available. The City will use the</p> | Severe Summer Weather | 1 | Ongoing | Parks and Recreation | Grants | Improved safety for City and park users | \$50,000+ | High | SIP | PP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|----------------------------|---|--|-----------|--------------------|--------------------------------|---------------------------|---|-----------------|----------|---------------------|--------------|
| | | detection systems to notify the City of incoming storm systems. | | | | | | | | | | |
| 007-Obetz-2023 | Winter Weather Plan | <p>Problem: The City struggles with snow and ice conditions and needs guidance on the removal and deployment of road clearing coordination.</p> <p>Solution: The City will develop a comprehensive plan for snow and ice removal operations, including efficient deployment of snowplows, prioritization of road clearing, and coordination with other relevant agencies.</p> | Severe Winter Weather | 1 | Within 5 years | City Engineer and Street Dept. | Obetz General Fund | Improved severe winter weather response | \$10,000 | Medium | LPR | PR |
| 008-Obetz-2023 | Portable Generator | <p>Problem: The City does not have a backup power source for traffic lights at key intersections which create issues during any power outage and presents issues regarding evacuation routes.</p> | Earthquake Extreme Temperature, Drought Flood Geologic Hazards, Severe Summer Weather Severe Winter Weather Tornado | 6 | Within 5 years | City Engineer | FEMA HMGP and BRIC | Continuity of operations | \$50,000+ | High | SIP | PP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|----------------------------|--|--|-----------|--------------------|---------------------------------|---------------------------|---|-----------------|----------|---------------------|--------------|
| | | Solution: The City will seek funding for backup generators for intersections utilized as evacuation routes. | | | | | | | | | | |
| 009-Obetz-2023 | Power Line Burial | Problem: The City experiences an increasing number of power outages and damaged power lines during hazard events. Solution: The City will look into burying electric utility lines by conducting a feasible study and implementing in locations that would be cost effective. | Severe Winter Weather; Tornadoes; Severe Summer Weather | 3 | Long Term | City Engineer | HMGP and Local Funds | Improved public safety and continuity of operations | Millions | High | SIP | PP |
| 010-Obetz-2023 | Public Awareness Campaign | Problem: City Residents are not aware of community resources that are available to them, including preventative information, clinics, shelters, and emergency supplies. Solution: The City will undertake a public awareness campaign to promote Franklin County's mass notification system | Dam/Levee, Disease Outbreak Drought Earthquake Extreme Temperature Flood Geologic Hazards, Invasive Species Severe Summer Weather Severe Winter Weather Tornado | 6 | Within 2 years | Community Services and PR Dept. | Local Funds | Improved community awareness of resources | N/A | High | EAP | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|---------------------------------|---|--|-----------|--------------------|---|---|--|--------------------------|----------|---------------------|--------------|
| | | and other community resources available. | | | | | | | | | | |
| 011-Obetz-2023 | Urban Tree Canopy | <p>Problem: The City does not have enough native trees in newly developed areas. This leads to increased stormwater runoff/flooding and invasive species.</p> <p>Solution: The City will plant more native trees to reduce stormwater runoff and stabilize soil. The City will ensure trees being planted are ones that will enhance native populations and are treated to discourage invasive species.</p> | Geologic Hazards; Flooding, Invasive Species | 2 | Ongoing | Community Services Dept. | Grants and Local Funds | Reduced stormwater runoff and invasive species | \$500,000 | High | NSP | NR |
| 012-Obetz-2023 | Repetitive Loss Area Mitigation | <p>Problem: Portions of the City experienced repetitive flooding.</p> <p>Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity.</p> | Flood | 6 | 4 years | City Administration, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, City budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

| | |
|------|-------------------------------------|
| CRS | Community Rating System |
| FEMA | Federal Emergency Management Agency |
| HMA | Hazard Mitigation Assistance |
| N/A | Not applicable |
| NFIP | National Flood Insurance Program |

Potential FEMA HMA Funding Sources:

| | |
|------|---|
| FMA | Flood Mitigation Assistance Grant Program |
| HMGP | Hazard Mitigation Grant Program |
| BRIC | Building Resilient Infrastructure and Communities Program |

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- *Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.27-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-----------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 001-Obetz-2023 | Generator for City Police Department | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 9 | High |
| 002-Obetz-2023 | Storm Sewer System Analysis | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 6 | Medium |
| 003-Obetz-2023 | Heatwave Awareness Campaign | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 6 | Medium |
| 004-Obetz-2023 | Disease Outbreak Education | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 6 | Medium |
| 005-Obetz-2023 | Community Storm Shelter Identification | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 5 | Medium |
| 006-Obetz-2023 | Lightning Detection System | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 4 | Low |
| 007-Obetz-2023 | Winter Weather Plan | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | Medium |
| 008-Obetz-2023 | Portable Generator | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 4 | Low |
| 009-Obetz-2023 | Power Line Burial | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 8 | Medium |
| 0010-Obetz-2023 | Public Awareness Campaign | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 8 | Medium |
| 011-Obetz-2023 | Urban Tree Canopy | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 7 | Medium |
| 012-Obetz-2023 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.28 TOWNSHIP OF PERRY

This section presents the jurisdictional annex for the Township of Perry that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Township of Perry participated in the planning process, an assessment of the Township of Perry’s risk and vulnerability, the different capabilities used in the Township of Perry, and an action plan that will be implemented to achieve a more resilient community.

9.28.1 Hazard Mitigation Planning Team

The Township of Perry identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Township of Perry departments, including the Township Administrator. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.28-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|-------------------------------------|----------------------------|------------------------------------|
| Name/Title: | Beth Beatty, Township Administrator | Name/Title: | Ian Warren, Road Superintendent |
| Address: | 7125 Sawmill Road Dublin, OH 43016 | Address: | 7125 Sawmill Road Dublin, OH 43016 |
| Phone Number: | 614-889-2669 | Phone Number: | 614-889-8781 |
| Email: | bbeatty@perrytwp.org | Email: | iwarren@perrytwp.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Ian Warren, Road Superintendent | | |
| Address: | 7125 Sawmill Road Dublin, OH 43016 | | |
| Phone Number: | 614-889-8781 | | |
| Email: | iwarren@perrytwp.org | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.28.2 Municipal Profile

The Township of Perry is in the southwest area of Franklin County. Today, the Township is composed of small "islands," which are surrounded by the city of Columbus, except for three: the farthest south "island", which borders Upper Arlington to the south; the largest "island" in the center of the original township, which borders Worthington to the east; and the most northerly "island", borders Delaware County to the north and Sharon Township to the east. Columbus Ohio is located roughly 12.5 miles away from the Township.

According to the American Community Survey, the 2021 population for the Township of Perry was 3,888, a 6.9 percent increase from the 2010 Census Population of 3,637. Data from the 2021 American Community Survey indicates that 7.5 percent of the population is 5 years of age or younger and 15.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.28.3 Jurisdictional Capability Assessment and Integration

The Township of Perry performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Township of Perry to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Township of Perry and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.28-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|--|---|---|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Ohio Building Code & Residential Code of Ohio | Franklin County | Economic Development and Planning |
| <i>How does this reduce risk?</i> Franklin County has adopted 2019 Residential Code of Ohio, which regulates 1, 2, and 3 family dwellings/residential homes. Section 307.37 (April 6, 2007) allows for freedom of adoption when it comes to counties building codes. The 2019 Residential Code of Ohio requires the approval and inspection of all electrical, gas, Mechanical and Planning uses. The Residential code gives builders a pre identified checklist prior to construction leading to safer actions to accomplish goals. | | | | |
| Zoning/Land Use Code | Yes | Zoning Resolution, 1982. | Local | Zoning |
| <i>How does this reduce risk?</i> Zoning codes have been enacted within Perry Township and are administered in order to provide orderly development and preserve the character of neighborhoods. | | | | |
| Subdivision Ordinance | Yes | Chapter 711 of the Ohio Revised Code; Franklin County Subdivision Regulations Original adoption 1948, amended March 27, 2012 | Franklin County | Authority for adopting is Franklin County Planning Commission. Administered by Economic Development & Planning Department |
| <i>How does this reduce risk?</i> Includes stream setback provisions. Requires stormwater controls. Recognizes limitations of poorly drained soils and highly erodible land. Ensures adequate roadways for emergency vehicles. Requires building areas, wells and wastewater treatment systems to avoid floodplain areas. Allows for conservation/cluster subdivisions. | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | Yes | Ohio Administrative Code Rule 901:10-3-11 Storm Water Permits and individual | Franklin County | Ohio department of natural resources, division of soil and water conservation |
| <i>How does this reduce risk?</i> Shows best management practices for stormwaters and gives the steps for members to receive their permit requirements and construction requirements. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Flood Damage Prevention Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Wellhead Protection <i>How does this reduce risk?</i> | No | - | - | - |
| Emergency Management Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Change Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Capital Improvement Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Disaster Debris Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Floodplain Management or Watershed Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Stormwater Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Open Space Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Urban Water Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Habitat Conservation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Economic Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Shoreline Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of the Township of Perry to oversee and track development.

Table 9.28-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|--|--------|----------|
| Do you issue development permits? • If yes, what department is responsible? | No | - |

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--|
| If you do not issue development permits, what is your process for tracking new development? | N/A | Franklin County Economic Development and Planning issue and track permits. |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | - |
| Do you have a buildable land inventory? • If yes, please describe | Yes | Floodplain |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Perry and their current responsibilities that contribute to hazard mitigation.

Table 9.28-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|------------------------|---|
| Administrative Capability | | |
| Planning Board | Yes | The Zoning Commission is a resident composed board that hears proposals for amendments to the Zoning Resolution, development plans, and rezonings. The ZC decides whether or not to recommend proposed amendments to the Perry Township Board of Trustees. |
| Zoning Board of Adjustment | Yes | The Board of Zoning Appeals is resident composed board that hears, deliberates, and reaches decisions upon requests for variances and conditional uses. The BZA also hears zoning appeals made for any decision by Township in enforcing the Zoning Resolution. |
| Planning Department | No | Franklin County would assist the Township. |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | Yes | The Perry Township Road Department is responsible for road maintenance, snow plowing, monitoring and maintaining the storm drainage systems, mosquito monitoring and treatment in the summer months, and leaf collection. |
| Construction/Building/Code Enforcement Department | Yes | In Perry Township the Township Zoning Inspector oversees all zoning activity and property maintenance. The Zoning Inspector handles all permits for residential and commercial properties. It is also the responsibility of the Zoning Inspector to ensure that the exterior property maintenance code is being followed. |
| Emergency Management/Public Safety Department | Yes | Perry Township Police Department Fire and emergency medical protection are provided through an agreement with the City of Worthington Division of Fire and the City of Upper Arlington Division of Fire. |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Perry Township communicates with its residents via email through our E-Blast system. These address safety, road and emergency situations and community events that our residents need to be informed of quickly and/or timely. |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Perry Township Road Department cleans and maintains the township's storm sewer and ditches to minimize flood risk. |
| Mutual aid agreements | Yes | Fire and emergency medical protection are provided through an agreement with the City of Worthington Division of Fire and the City of Upper Arlington Division of Fire. |
| Human Resources Manual | Yes | The road superintendent's job description includes identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? |
| Other | Yes | The Civilian Advisory Committee provides resident input, perspectives, and recommendations to the Board of Trustees concerning matters pertinent to Perry Township. |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | - |
| Engineers or professionals trained in building or infrastructure construction practices | No | - |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | Currently in the process of looking for a grant writer. Are data and maps from the HMP used to support documentation in grant applications? |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | The township would seek help from the Franklin County Drainage Engineer. |
| How do your administrative/technical capabilities contribute to risk reduction in your community? | | |

Fiscal Capability

The table below summarizes financial resources available to the Township of Perry.

Table 9.28-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | No |
| Capital improvements project funding | No |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | No |
| Incur debt through special tax bonds | No |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | No |
| Open Space Acquisition funding programs | No |

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|---|
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Township of Perry.

Table 9.28-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|--|
| Public information officer or communications office | Yes | Perry Township communicates with its residents via email through our E-Blast system. |
| Personnel skilled or trained in website development | No | - |
| Hazard mitigation information available on your website | Yes | Stormwater information is available on the municipal website. |
| Social media for hazard mitigation education and outreach | Yes | Perry Township Facebook is used for outreach and education. |
| Citizen boards or commissions that address issues related to hazard mitigation | Yes | The Civilian Advisory Committee provides resident input, perspectives, and recommendations to the Board of Trustees concerning matters pertinent to Perry Township. |
| Warning systems for hazard events | Yes | Perry Township communicates with its residents via email through our E-Blast system. These address safety, road and emergency situations and community events that our residents need to be informed of quickly and/or timely. |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | Yes | The Quarterly Newsletter is quarterly publication for Perry Township residents. The Newsletter provides residents with Perry Township news, events, information, and more. |

Community Classifications

The table below summarizes classifications for community programs available to the Township of Perry.

Table 9.28-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future

hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.28-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.28.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Township of Perry.

Table 9.28-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|--------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Perry (Twp) | NR | NR | NR | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA’s HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Township of Perry.

Table 9.28-10. NFIP Summary

| NFIP Topic | Comments |
|--|--|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | No areas and the Township does not maintain a list. |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | Franklin County does this |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | Franklin County does this |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Franklin County does this |
| Are any certified floodplain managers on staff in your jurisdiction? | Franklin County does this |
| Do you have access to resources to determine possible future flooding conditions from climate change? | Franklin County does this |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | No, Franklin County handles this |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | Franklin County does this |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Franklin County does this |
| What are the barriers to running an effective NFIP program in the community, if any? | None, Franklin County does this |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | N/A |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | Franklin County Special Resolution NFIP Regulation, original adoption September 26, 1978, amended and readopted September 19, 2007 |
| Does your floodplain management program meet or exceed minimum requirements? | Meets |

| NFIP Topic | Comments |
|---|----------|
| <ul style="list-style-type: none"> If exceeds, in what ways? | |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | No |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.28.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.28-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|--------------------------------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | Franklin County Issues Permits | | | | | | | | | |
| Multi-Family | | | | | | | | | | |
| Other (commercial, mixed-use, etc.) | | | | | | | | | | |
| Total Permits Issued | | | | | | | | | | |

Table 9.28-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

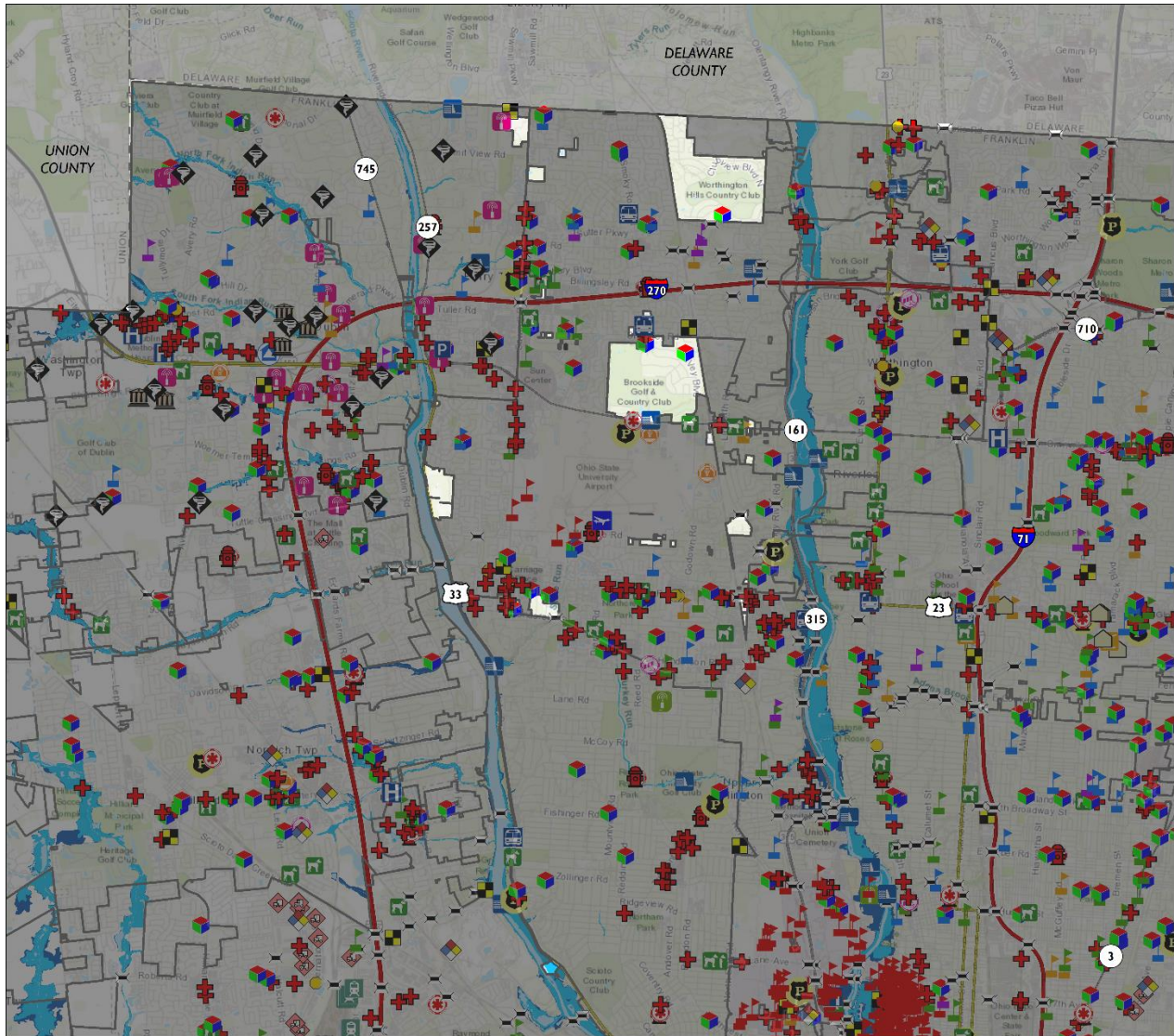
9.28.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Township of Perry’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be

identified clearly using mapping techniques and technologies and for which the Township of Perry has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.28-1. Township of Perry Hazard Area Extent and Location Map- Flood



Perry (T)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service

- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems



- Municipal Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody

FEMA Flood Hazard Area

- 1-Percent Annual Chance
- 0.2-Percent Annual Chance

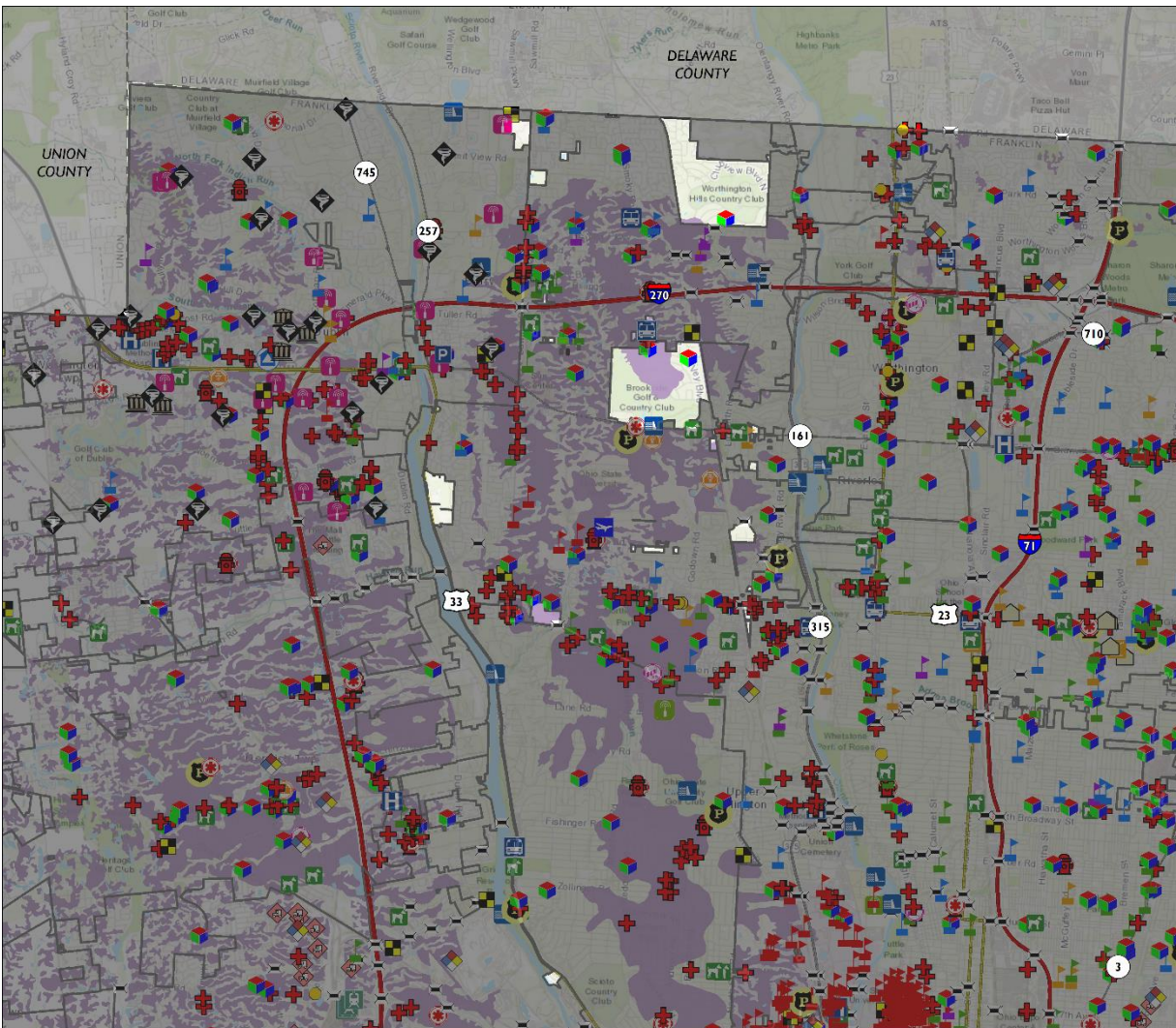
The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.



Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021

Notes: City (C), Township (T), Village (V)

Figure 9.28-2. Township of Perry Hazard Area Extent and Location Map-Inland Erosion

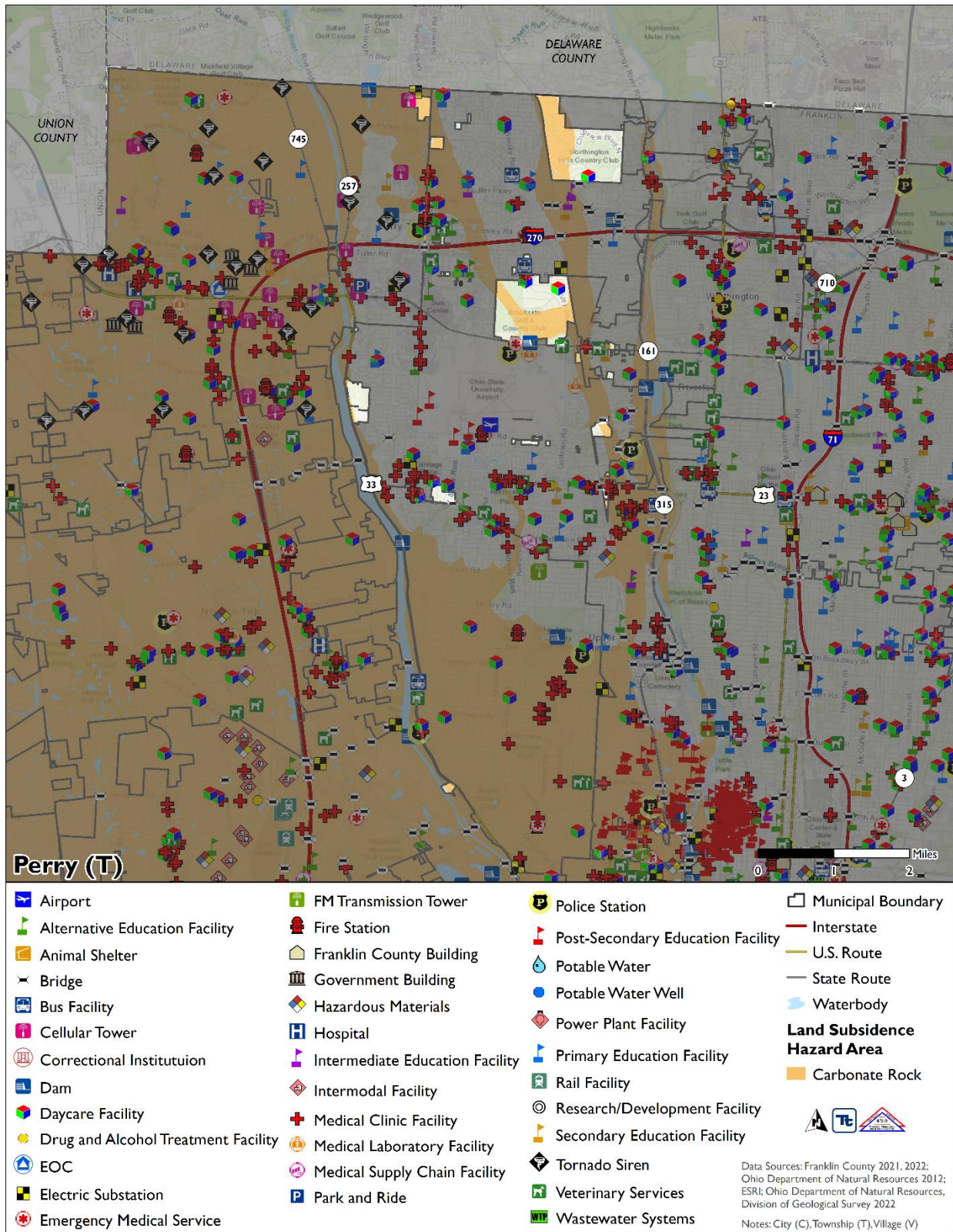


Perry (T)

0 1 2 Miles

- | | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Hospital | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Inland Erosion Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | K-Factor: ≥ 0.49 |
| Dam | Intermodal Facility | Research/Development Facility | |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; United States Department of Agriculture, Natural Resources Conservation Service 2022 |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | Notes: City (C), Township (T), Village (V) |
| EOC | Medical Supply Chain Facility | Veterinary Services | |
| Electric Substation | Park and Ride | Wastewater Systems | |
| Emergency Medical Service | | | |

Figure 9.28-3. Township of Perry Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Perry Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Perry Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.28-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Township did not incur additional damages. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Township did not incur additional damages. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Township did not incur additional damages. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Township of Perry.

The Township of Perry reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.28-14. Hazard Ranking Input

| Hazard | Ranking |
|----------------------------|---------|
| Dam/Levee | Low |
| Disease Outbreak | Low |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Low |
| Flood | Medium |
| Geologic (Erosion) | Low |
| Geologic (Land Subsidence) | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.28-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Perry Township

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 3 | 3 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

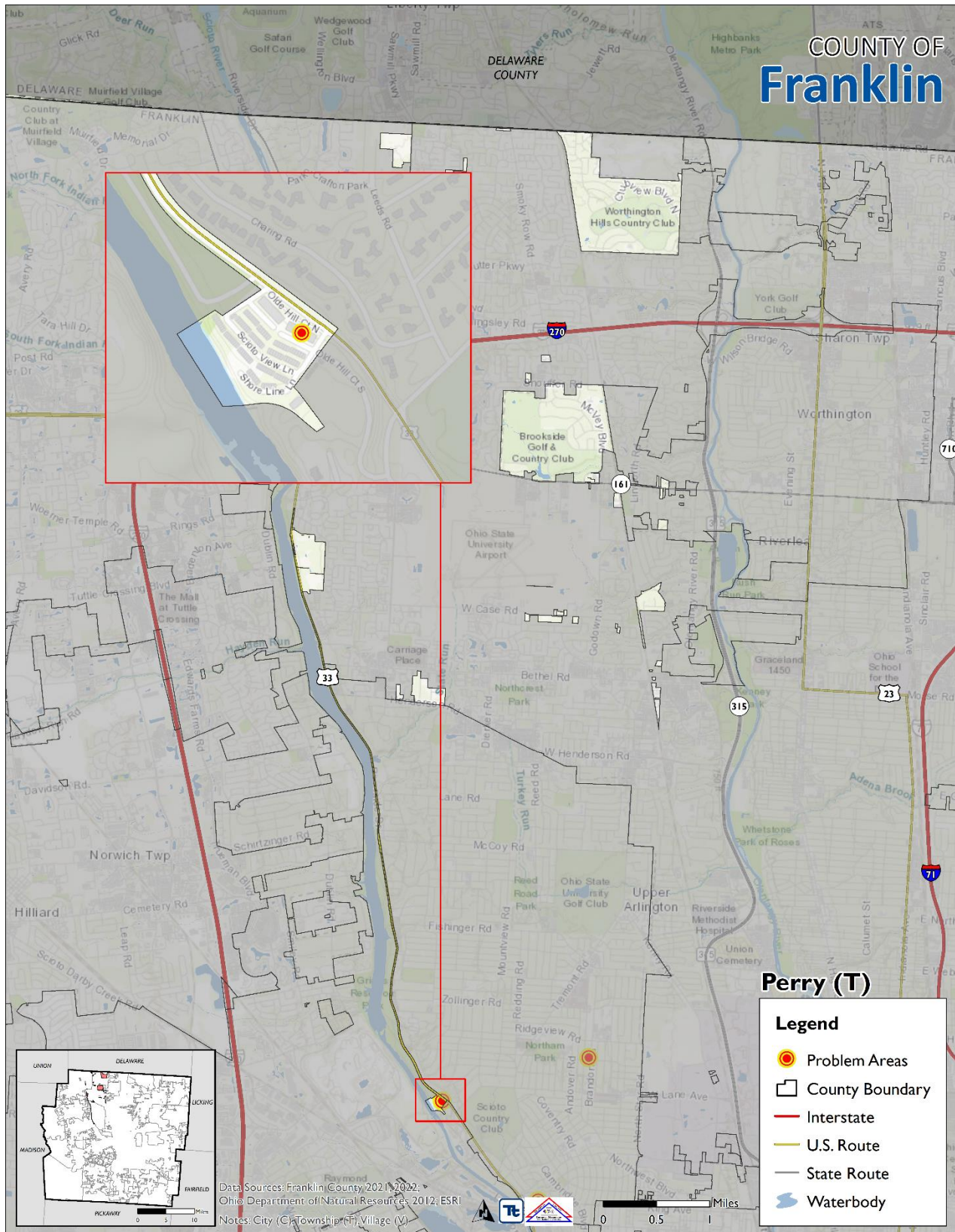
In addition to the risk assessment, Perry Township identified the following vulnerabilities within its community:

- The Township experiences power outages during hazard events due to trees knocking down powerlines, stopping power.
- The Township experiences routine power outages due to aging infrastructure and untrimmed trees.
- Storm Sewers in Worthington Hills along Candlewood Drive and Clubview Blvd South have a couple storm sewer pipes that have reached full capacity in heavy rains and caused storm water to threaten residential homes in the area.

- The Township residents have limited knowledge of the hazards of concern and do not know how to implement proper mitigation measures to their own properties.
- The Township does not have a Comprehensive Plan developed that integrates the hazards of concern from the HMP.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

Figure 9.28-4. Township of Perry Problem Area Map



9.28.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.28-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|--------------------------|--|---|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Replace existing culvert and reinforce existing stonewall along dam discharge area. | Franklin County Engineer | Completed | No | - | - |
| Seek funding for public information including outreach projects and technical assistance to property owners. (5,000 / 1 year) | Township Trustees Office | Completed | No | - | - |
| Work with Franklin County Emergency Management and Homeland Security to develop public outreach regarding all natural hazards, and the county's susceptibility to those hazards, and make available on website. (2,500 / 1 year) | Township Trustees Office | Ongoing | Yes | Lack of public knowledge | Police Department, Police Chief |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Township of Perry identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, the Township of Perry has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Township of Perry participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.28-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|----------------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | - | - | X | X | - | X | - | - | - |
| Disease Outbreak | X | - | - | X | X | - | X | - | - | - |
| Drought | X | - | - | X | X | - | X | - | - | - |
| Earthquake | X | X | - | X | X | - | X | - | X | - |
| Extreme Temp | X | - | - | X | X | - | X | - | - | - |
| Flood | X | X | - | X | X | - | X | - | X | - |
| Geologic (Erosion) | X | X | - | X | X | - | X | - | X | - |
| Geologic (Land Subsidence) | X | - | - | X | X | - | X | - | - | - |
| Invasive Species | X | X | - | X | X | - | X | - | X | - |
| Severe Summer Weather | X | X | - | X | X | - | X | - | X | - |
| Severe Winter Weather | X | X | - | X | X | - | X | - | X | - |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.28-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Perry Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.28-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|-------------------------------------|--|---|-----------|--------------------|-----------------------------------|---------------------------|---|------------------------|----------|---------------------|--------------|
| 2023-Perry Township-001 | Routine Tree and Bush Maintenance | Problem: The Township experiences power outages during hazard events due to trees knocking down powerlines, stopping power. Solution: The Township will implement a routine monthly tree maintenance program to remove dead trees and trim overgrown trees to reduce power outages. | Earthquake, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado | 6 | Ongoing | Administration, Public Works | HMGP, Township Budget | The Township should experience reduced power outages. | \$20,000/year | High | LPR | PR |
| 2023-Perry Township-002 | Electrical infrastructure inventory | Problem: The Township experiences routine power outages due to aging AEP infrastructure and untrimmed trees. Solution: The Township will | Earthquake, Geologic, Severe Summer Weather, Severe Winter Weather, Tornado | 6 | 3 Years | Administration, Public Works, AEP | Township Budget | The Township should experience reduced power outages. | <\$5,000 for the Study | High | SIP | SP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|-------------------------------|--|---|-----------|--------------------|------------------------------|--|---|-----------------|----------|---------------------|--------------|
| | | conduct an electrical infrastructure inventory with AEP to evaluate what infrastructure needs to be upgraded or replaced to reduce power outages. AEP will then implement the most cost effective way of upgrading aging infrastructure. | | | | | | | | | | |
| 2023-Perry Township-003 | Worthington Hills Storm Sewer | <p>Problem: Storm Sewers in Worthington Hills along Candlewood Drive and Clubview Blvd South have a couple storm sewer pipes that have reached full capacity in heavy rains and caused storm water to threaten residential homes in the area.</p> <p>Solution: The initial analysis of the storm sewer and storm events, showed that two</p> | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Less than 5 years | Administration, Public Works | FMA, BRIC, HMGP, CDBG, Township Budget | The Township should experience less flooding. | >\$300,000 | High | SIP | SP |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|--|--|--|-----------|--------------------|---------------------------------------|---------------------------|---|-----------------|----------|---------------------|--------------|
| | | storms were near 50-year storm events and put the sewer pipes at full capacity. The Townships will conduct a study to evaluate the options to add additional piping or retention to the areas. The Township will then implement the most cost-effective project. | | | | | | | | | | |
| 2023-Perry Township-004 | Public Outreach/Mitigation Information | <p>Problem: The Township residents have limited knowledge of the hazards of concern and do not know how to implement proper mitigation measures to their own properties.</p> <p>Solution: The Township will conduct monthly mitigation workshops to focus on the hazards of concern and provide suggestions on</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 1 | Ongoing | Township Administration, Public Works | HMGP, Township Budget | The Residents in the Township become more knowledgeable | \$2,500/year | High | EAP | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|---------------------------------|--|--|-----------|--------------------|---|---|---|--------------------------|----------|---------------------|--------------|
| | | how property owners can mitigate their own homes. | | | | | | | | | | |
| 2023-Perry Township-005 | Develop a Comprehensive Plan | <p>Problem: The Township does not have a Comprehensive Plan developed that integrates the hazards of concern from the HMP.</p> <p>Solution: The Township will develop a Comprehensive Plan and integrate information relating to the hazards of concern.</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 1 | 2 years | Township Administration | HMGP, Township Budget | The Township will have guided development relating to hazard areas. | Staff Time | High | LPR | PR |
| 2023-Perry Township-006 | Repetitive Loss Area Mitigation | <p>Problem: Portions of the Township experienced repetitive flooding.</p> <p>Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity.</p> | Flood | 6 | 4 years | Township Administration, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

| | |
|------|-------------------------------------|
| CRS | Community Rating System |
| FEMA | Federal Emergency Management Agency |
| HMA | Hazard Mitigation Assistance |
| N/A | Not applicable |
| NFIP | National Flood Insurance Program |

Potential FEMA HMA Funding Sources:

| | |
|------|---|
| FMA | Flood Mitigation Assistance Grant Program |
| HMGP | Hazard Mitigation Grant Program |
| BRIC | Building Resilient Infrastructure and Communities Program |

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- *Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.28-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-------------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Perry Township-001 | Routine Tree and Bush Maintenance | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-Perry Township-002 | Electrical infrastructure inventory | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-Perry Township-003 | Worthington Hills Storm Sewer | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 12 | High |
| 2023-Perry Township-004 | Public Outreach/ Mitigation Information | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 | High |
| 2023-Perry Township-005 | Develop a Comprehensive Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-Perry Township-006 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.29 TOWNSHIP OF PLAIN

This section presents the jurisdictional annex for the Township of Plain that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Township of Plain participated in the planning process, an assessment of the Township of Plain’s risk and vulnerability, the different capabilities used in the Township of Plain, and an action plan that will be implemented to achieve a more resilient community.

9.29.1 Hazard Mitigation Planning Team

The Township of Plain identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Township of Plain departments. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.29-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|--------------------------------------|
| Name/Title: | Ben Collins, Township Administrator | Name/Title: | Mary Fee, Administrative Coordinator |
| Address: | PO Box 273, New Albany, OH 43054 | Address: | PO Box 273, New Albany, OH 43054 |
| Phone Number: | 614-855-2085 | Phone Number: | 614-855-2085 |
| Email: | bcollins@plaintownship.org | Email: | mfee@plaintownship.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Matt Brown, Franklin County Planning Administrator | | |
| Address: | 150 South Front Street, FSL Suite 10, Columbus OH 43215 | | |
| Phone Number: | 614-525-5244 | | |
| Email: | mybrown@franklincountyohio.gov | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.29.2 Municipal Profile

The Township of Plain is located in the northeastern corner of Franklin County and is bordered by Blendon Township to the west, Jefferson Township to the south and Mifflin Township to the southwest. Plain Township is located roughly 8.5 miles from Columbus Ohio. The northern part of Plain Township is situated in the headwaters of the Rocky Fork Creek, a tributary of the Big Walnut Creek. From north to south, the Fancher Run, Schleppe Run, Bevelheimer Run, and Sugar Run of the Rocky Fork Creek wind through Plain. Blacklick Creek runs from the northeast part of Plain, south through New Albany, and on to the southeast section of the Township.

According to the American Community Survey, the 2021 population for the Township of Plain was 12,469, a 26.86 percent increase from the 2010 Census population of 9,826. Data from the 2020 U.S. Census indicate that 5.8 percent of the population is 5 years of age or younger and 10.2 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.29.3 Jurisdictional Capability Assessment and Integration

The Township of Plain performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Township of Plain to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Township of Plain and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.29-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | 2019 Residential Code of Ohio | Franklin County | Franklin County Economic Development and Planning Department |
| <i>How does this reduce risk?</i> Provides restrictions and requirements on how buildings must be constructed. | | | | |
| Zoning/Land Use Code | Yes | Updated March 6, 2020 | Local | Township Administrator |
| <i>How does this reduce risk?</i> The Township reviews the FEMA Flood Map for proposed construction near waterways. The zoning resolution discourages development in floodways, floodplains, and wetlands. The zoning resolution requires developers to mitigate wetland disturbance. The zoning resolution has a density limit of 1 unit per 2.5 acres, which helps reduce the risk to flooding. | | | | |
| Subdivision Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------------|---|---|---|
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Land Use Plan 2012 Update | Local | |
| <i>How does this reduce risk?</i> The Land Use Plan promotes orderly development that limits impact to creeks and streams and identifies flood zones. The Land Use Plan discourages development within natural hazard areas. | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of the Township of Plain to oversee and track development.

Table 9.29-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? • If yes, what department is responsible? | Yes | Zoning department |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | SFHA |
| Do you have a buildable land inventory? • If yes, please describe | No | - |
| Describe the level of build-out in your jurisdiction. | N/A | Substantial. Metro Parks owns >1,000 acres and there is limited developable land remaining. |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Plain and their current responsibilities that contribute to hazard mitigation.

Table 9.29-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|--|
| Administrative Capability | | |
| Planning Board | Yes | Zoning Commission |
| Zoning Board of Adjustment | Yes | Board of Zoning Appeals |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | Yes | Road Maintenance |
| Construction/Building/Code Enforcement Department | No | - |
| Emergency Management/Public Safety Department | Yes | Fire Department |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Plain Township provides warning signals covering the entire Township. ALERT Franklin County. |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Road Maintenance |
| Mutual aid agreements | Yes | Fire & EMS |
| Human Resources Manual | Yes | - |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | - |
| Engineers or professionals trained in building or infrastructure construction practices | No | The Township relies on County engineering. |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | Yes | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | Yes | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to the Township of Plain.

Table 9.29-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|--|--|
| Community development Block Grants (CDBG, CDBG-DR) | No |
| Capital improvements project funding | Yes |

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|---|
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | Yes |
| Other federal or state Funding Programs | No |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Township of Plain.

Table 9.29-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|--|
| Public information officer or communications office | Yes | Township newsletter, CodeRed and County emergency communication system |
| Personnel skilled or trained in website development | Yes | - |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | Yes | Facebook, Twitter, YouTube |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Sirens, CodeRed and County emergency communication |
| Natural disaster/safety programs in place for schools | N/A | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | No | - |

Community Classifications

The table below summarizes classifications for community programs available to the Township of Plain.

Table 9.29-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | 2 | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.29-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee Failure | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temperatures | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornadoes | Moderate |

9.29.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Township of Plain.

Table 9.29-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|--------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Plain (Twp) | 0 | 1 | \$279.00 | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfpiservices.floodsmart.gov/reports-flood-insurance-data>)
^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA’s HUDEX Report.

NR Not reported
RL Repetitive Loss
SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Township of Plain.

Table 9.29-10. NFIP Summary

| NFIP Topic | Comments |
|--|--|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | There are over 150 properties abutting a creek or stream in unincorporated Plain Township. |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | Yes |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | Unknown |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | No. The Township has homes with flood hazard risk attributable to stormwater systems, i.e. ditches |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Franklin County Economic Development & Planning Department (EDP) |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability) | Franklin County EDP provides permit review, response to resident enquiries about floodplains, enforcement |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Franklin County EDP will evaluate cost of improvements and current value of structure |
| What are the barriers to running an effective NFIP program in the community, if any? | N/A |

| NFIP Topic | Comments |
|--|--|
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | 2017 |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | Special Resolution National Flood Insurance Program Regulation |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | 2007 |
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Yes, freeboard requirement |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.29.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.29-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 2 | 0 | 4 | 0 | 2 | 0 | 2 | 0 | 3 | 0 |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | 2 | 0 | 4 | 0 | 2 | 0 | 2 | 0 | 3 | 0 |

Table 9.29-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g., Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|--------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None anticipated | | | | | |

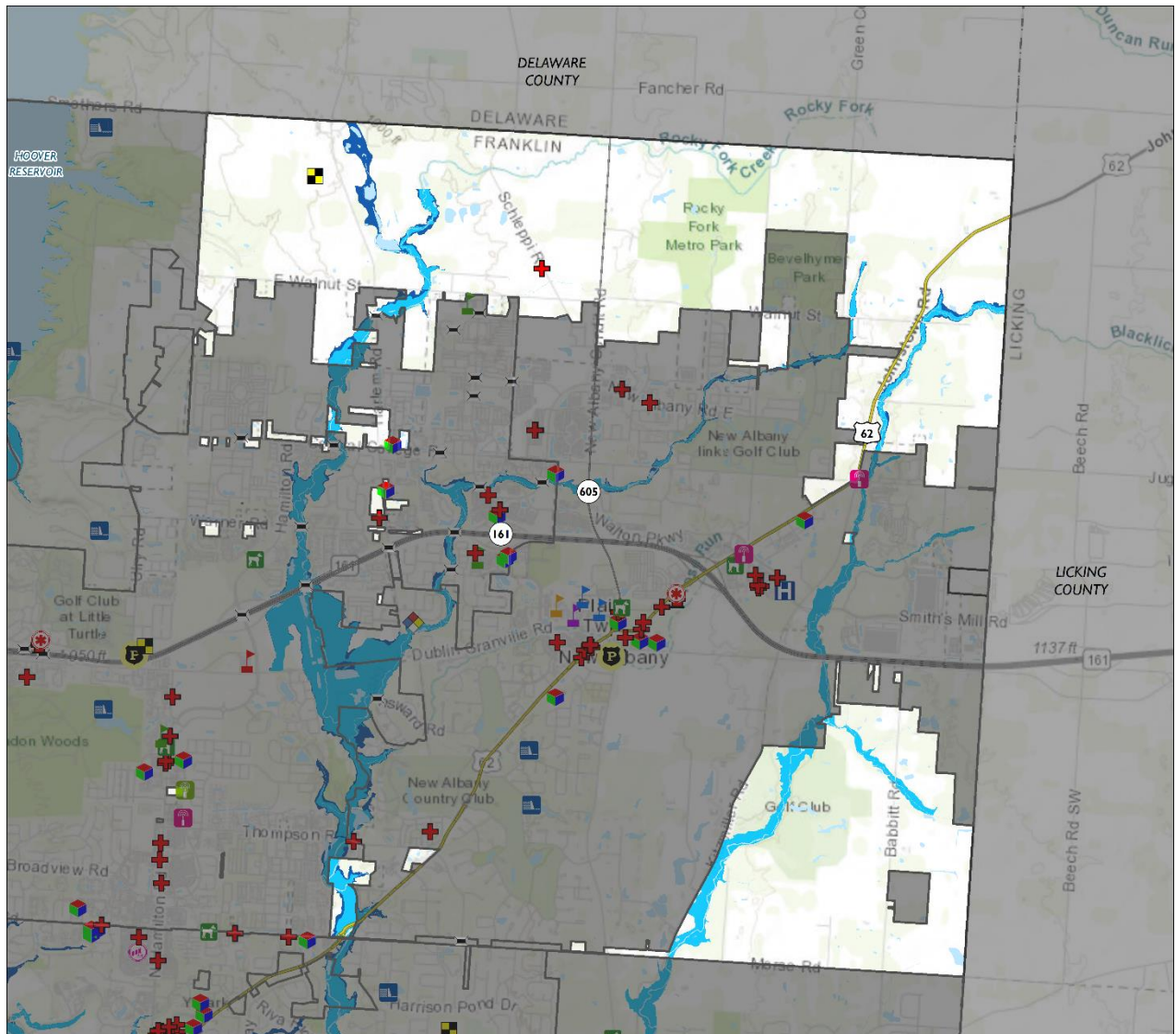
Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.29.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Township of Plain's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Township of Plain has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.29-1. Township of Plain Hazard Area Extent and Location Map – Flood



Plain (T)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | FEMA Flood Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | 1-Percent Annual Chance |
| Dam | Intermodal Facility | Secondary Education Facility | 0.2-Percent Annual Chance |
| Daycare Facility | Medical Clinic Facility | Research/Development Facility | <i>The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.</i> |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | |
| EOC | Medical Supply Chain Facility | Veterinary Services | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESR; FEMA 2021 |
| Electric Substation | Park and Ride | Wastewater Systems | Notes: City (C), Township (T), Village (V) |
| Emergency Medical Service | | | |

Figure 9.29-2. Township of Plain Hazard Area Extent and Location Map – Land Subsidence

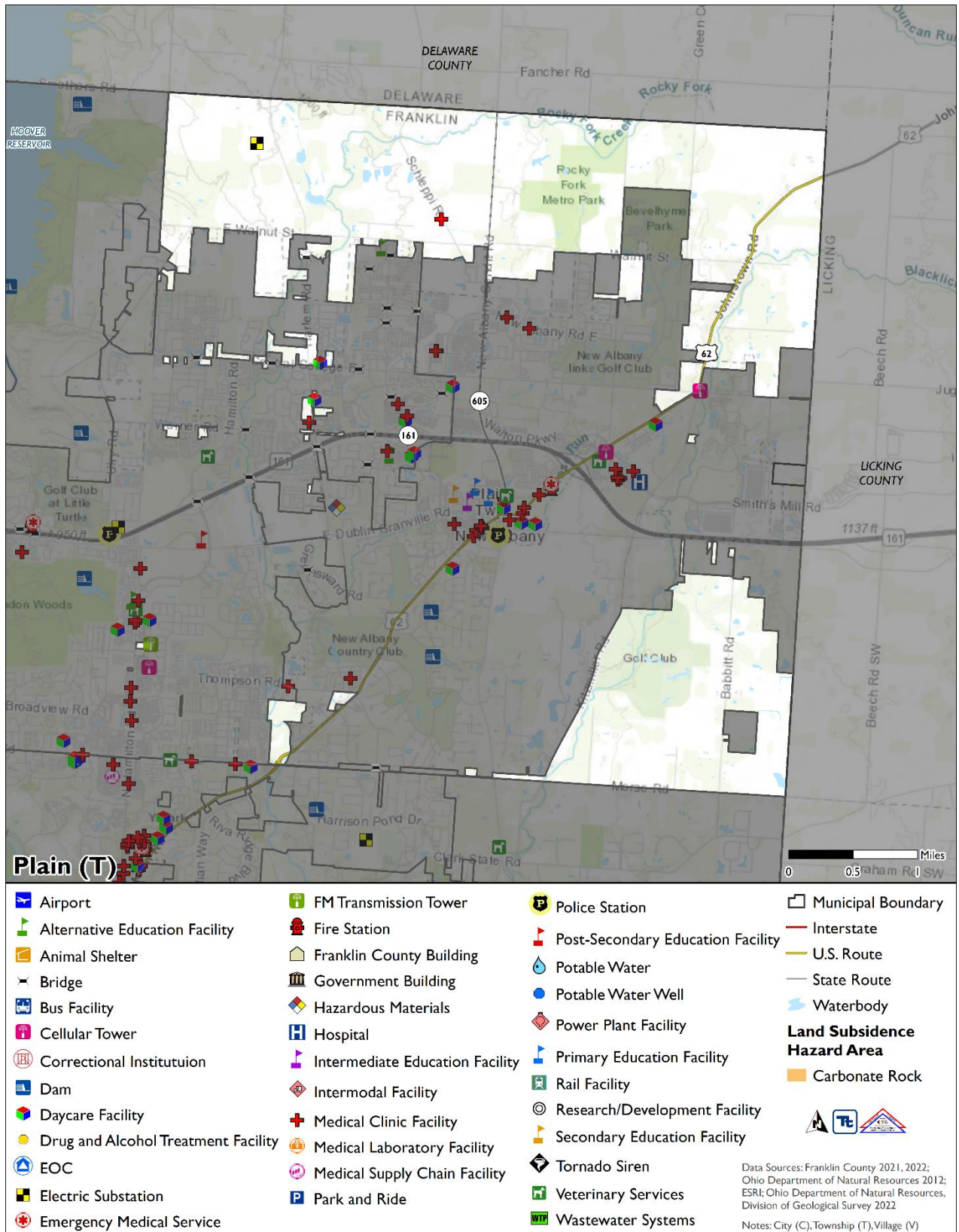
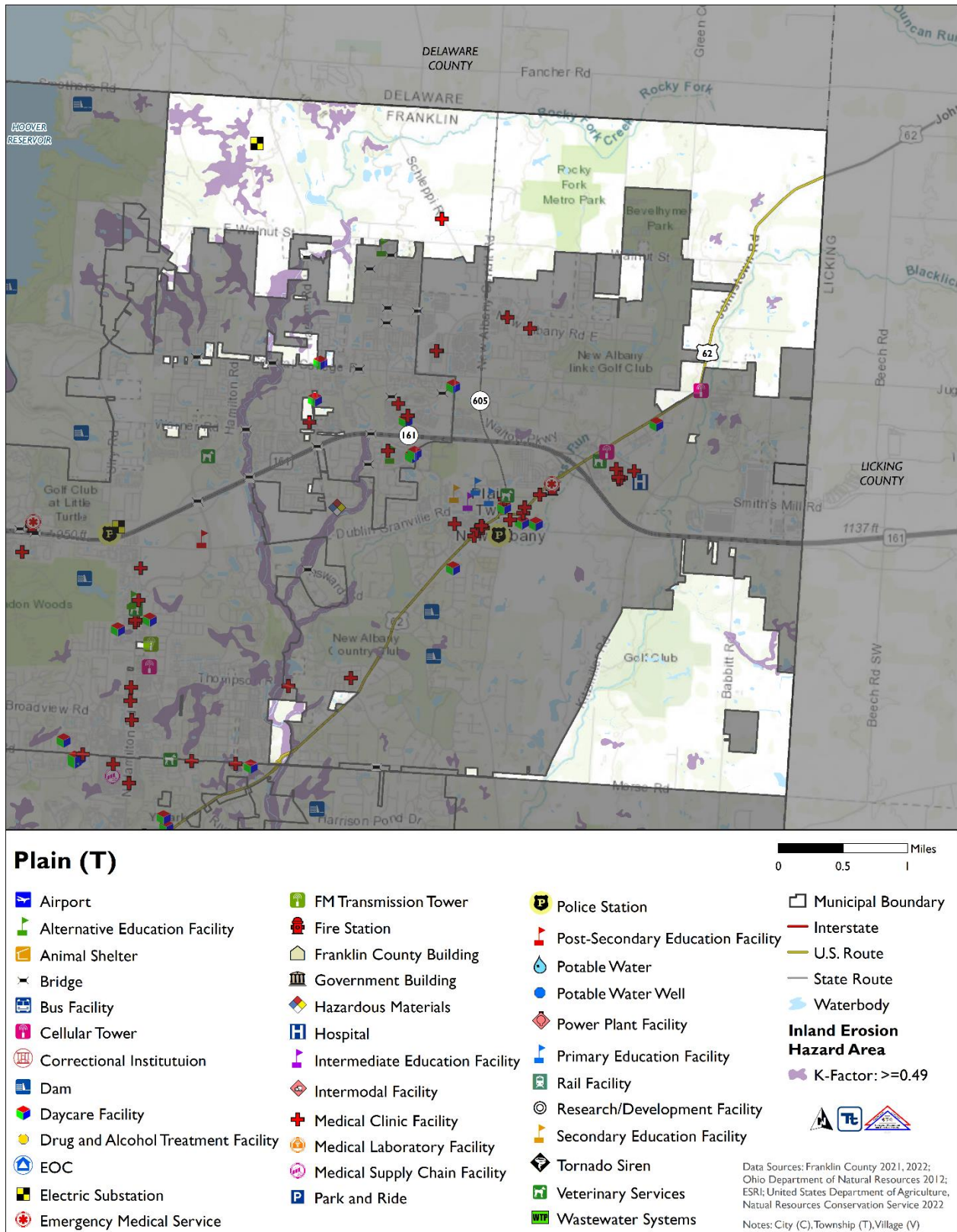


Figure 9.29-3. Township of Plain Hazard Area Extent and Location Map – Inland Erosion



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Plain Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Plain Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.29-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| April 3-4, 2018 | EF-1 Tornado | N/A | Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage. | Although the County was impacted, the Township did not report significant damages. |
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | Although the County was impacted, the Township did not report significant damages. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | Although the County was impacted, the Township did not report significant damages. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Township was subject to closures and masking/social distancing requirements. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Township of Plain. The Township of Plain reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.29-14. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee Failure | Low |
| Disease Outbreak | Low |
| Drought | Low |
| Earthquake | Low |
| Extreme Temperatures | Low |
| Flood | Medium |
| Geologic (Erosion) | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornadoes | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.29-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Plain Township

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | - |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Plain Township identified the following vulnerabilities within its community:

- There are properties in the Township located in the floodplain.
- Stormwater systems are inadequate and contribute the flood risk within the Township.
- Residents are not well-informed about the hazards in the Township.
- The Township does not have access to resources to determine possible future flooding conditions from climate change.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.29.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.29-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|---------------------------|--|---|---|---|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Drainage improvement: Clouse Road stormwater system is inadequate, needs to be replaced (ditches, culvert, and tile), residents report basement flooding. | Township Trustee's office | No Progress | Yes | Minor flooding to basements, erosion of driveways, limits emergency access to homes. | Township Administrator |
| Roadway flooding: Bevelhymmer Road south of Walnut Street and north of Sugar Run frequently floods during rain events. Roadside culvert/drainage needs improvement/restoration. | Township Trustee's office | Complete | No | - | - |
| Road drainage improvement: Bevelhymmer Road south of Sugar Run | Township Trustee's office | Complete | No | - | - |
| Seek funding for public information including outreach projects and technical assistance to property owners. Educate the population about flood hazard risks. (1,000 / 1 year | Township Trustee's office | No Progress | Yes | Public education on hazards and support for private mitigation projects is needed | Township Administrator |
| Mitigate flooding issues for two properties on Johnstown Rd. Creekside property floods. Floodwall to protect existing homes. | Township Trustee's office | No Progress | Yes | 10818 and 10842 Johnstown Road. Homes are within the floodplain. | Township Administrator |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Township of Plain identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County’s first HMP, the Township of Plain has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Township of Plain participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.29-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|------------------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee Failure | - | - | - | X | - | X | X | - | - | - |
| Disease Outbreak | - | - | - | X | - | X | X | - | - | - |
| Drought | - | - | - | X | - | X | X | - | - | - |
| Earthquake | - | - | - | X | - | X | X | - | - | - |
| Extreme Temperatures | - | - | - | X | - | X | X | - | - | - |
| Flood | - | X | - | X | - | X | X | - | X | - |
| Geologic (Erosion) | - | - | - | X | - | X | X | - | - | - |
| Invasive Species | - | - | - | X | - | X | X | - | - | - |
| Severe Summer Weather | - | - | - | X | - | X | X | - | - | - |
| Severe Winter Weather | - | - | - | X | - | X | X | - | - | - |
| Tornadoes | - | - | - | X | - | X | X | - | - | - |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.29-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions Plain Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.29-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------|----------------------------------|--|--|-----------|--------------------|--|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-Township of Plain-001 | Clouse Road Drainage Improvement | <p>Problem: Minor flooding to basements, erosion of driveways, limits emergency access to homes.</p> <p>Solution: Clouse Road stormwater system is inadequate, needs to be replaced (ditches, culvert, and tile), residents report basement flooding.</p> | Flood | 6 | 5 years | Township Administrator | BRIC, HMGP | High | High | High | SIP | SP |
| 2023-Township of Plain-002 | All-Hazards Education Campaign | <p>Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.</p> <p>Solution: Work with Franklin County EM&HS to provide residents with the necessary information to protect themselves and understand the threats of all hazards.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 2, 4, 5 | 2 years | Franklin County EM&HS and Plain Township Administrator | HMGP | High | Low | Medium | EAP | PI |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------|--|--|--|-----------|--------------------|--|---|--|--------------------------|----------|---------------------|--------------|
| 2023-Township of Plain-003 | Johnstown Road Floodwall | Problem: 10818 and 10842 Johnstown Road are within the floodplain. Solution: Mitigate flooding issues for the two properties on Johnstown Rd. by constructing a floodwall. | Flood | 6 | 5 years | Township Administrator | HMGP, Ohio Public Works Commission | High | High | High | SIP | SP |
| 2023-Township of Plain-004 | Residential Technical Assistance for Mitigation Projects | Problem: Residents are not well-informed of support availability for mitigation projects. Solution: Seek funding for educations and technical assistance to property owners regarding various mitigation programs | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 2, 4, 5 | 2 years | Franklin County EM&HS and Plain Township Administrator | HMGP | Medium | Low | Medium | EAP | PI, PP |
| 2023-Township of Plain-005 | Repetitive Loss Area Mitigation | Problem: Portions of the Township experienced repetitive flooding. Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | Flood | 6 | 4 years | Township Administrator, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

| | |
|------|-------------------------------------|
| CRS | Community Rating System |
| FEMA | Federal Emergency Management Agency |
| HMA | Hazard Mitigation Assistance |
| N/A | Not applicable |
| NFIP | National Flood Insurance Program |

Mitigation Category:

- *Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Potential FEMA HMA Funding Sources:

| | |
|------|---|
| FMA | Flood Mitigation Assistance Grant Program |
| HMGP | Hazard Mitigation Grant Program |
| BRIC | Building Resilient Infrastructure and Communities Program |

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.29-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Township of Plain-001 | Clouse Road Drainage Improvement | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 10 | High |
| 2023-Township of Plain-002 | All-Hazards Education Campaign | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 8 | Medium |
| 2023-Township of Plain-003 | Johnstown Road Floodwall | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 10 | High |
| 2023-Township of Plain-004 | Residential Technical Assistance for Mitigation Projects | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 7 | Medium |
| 2023-Township of Plain-005 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.30 Pleasant Township

This section presents the jurisdictional annex for the Pleasant Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Pleasant Township participated in the planning process, an assessment of the Pleasant Township’s risk and vulnerability, the different capabilities used in the Pleasant Township, and an action plan that will be implemented to achieve a more resilient community.

9.30.1 Hazard Mitigation Planning Team

The Pleasant Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Pleasant Township departments, including Department of Emergency Services. The Fire Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.30-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|--|
| Name/Title: | Dan Whiting/Fire Chief | Name/Title: | Paula Wilkins/Fiscal Officer |
| Address: | 5373 Norton Road, Grove City, Ohio 43123 | Address: | 5373 Norton Road, Grove City, Ohio 43123 |
| Phone Number: | 614-877-4375 | Phone Number: | 614-877-4375 |
| Email: | dwhiting@pleasanttownship.com | Email: | pwilkins@pleasanttownship.com |
| NFIP Floodplain Administrator | | | |
| Name/Title: | - | | |
| Address: | - | | |
| Phone Number: | - | | |
| Email: | - | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |

| | |
|--------------------------|--|
| Method of Participation: | |
|--------------------------|--|

9.30.2 Municipal Profile

Pleasant Township is in the southwest corner of Franklin County. Parts of two municipalities are located in Pleasant Township: the city of Columbus, in the northeast; and the village of Harrisburg, in the south. The unincorporated communities of Darbydale and Georgesville lie in the township's south and west.

According to the American Community Survey, the 2021 population for the Township was 6,768, a 1.45 percent increase from the 2010 Census population of 6,671. Data from the 2021 American Community Survey indicates that 3.3 percent of the population is 5 years of age or younger and 20.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.30.3 Jurisdictional Capability Assessment and Integration

The Pleasant Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Pleasant Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Pleasant Township and provides information as to how the capability integrates hazard mitigation and risk reduction.



Table 9.30-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Zoning/Land Use Code | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Subdivision Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Floodplain Management or Watershed Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Stormwater Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Open Space Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Urban Water Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Habitat Conservation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Economic Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Shoreline Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of the Pleasant Township to oversee and track development.

Table 9.30-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|----------|
| Do you issue development permits? • If yes, what department is responsible? | No | - |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | - |
| Do you have a buildable land inventory? • If yes, please describe | No | - |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Pleasant Township and their current responsibilities that contribute to hazard mitigation.

Table 9.30-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|----------------------------------|---------------------|--|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | No | - |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |



| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|--|
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | No | - |
| Construction/Building/Code Enforcement Department | No | - |
| Emergency Management/Public Safety Department | Yes | Pleasant Township Fire Department is responsible for emergency management within the Township. |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | The Township has a tornado siren. |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | No | - |
| Mutual aid agreements | No | - |
| Human Resources Manual | No | - |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | - |
| Engineers or professionals trained in building or infrastructure construction practices | No | - |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | Yes | Professionals are limited and utilized for emergency response. |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |
| How do your administrative/technical capabilities contribute to risk reduction in your community? | | |

Fiscal Capability

The table below summarizes financial resources available to the Pleasant Township.

Table 9.30-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | No |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | No |
| Incur debt through special tax bonds | No |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | No |

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|---|
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Pleasant Township.

Table 9.30-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|---|
| Public information officer or communications office | Yes | Township Fire Department |
| Personnel skilled or trained in website development | Yes | Township utilizes an outside contractor |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | Yes | Limited, Website |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | The Township has a tornado siren |
| Natural disaster/safety programs in place for schools | Yes | The school has an emergency plan |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | Yes | Limited, Facebook |

Community Classifications

The table below summarizes classifications for community programs available to the Pleasant Township.

Table 9.30-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | 4/4Y | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for

each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.30-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic (Erosion) | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Strong |
| Tornado | Moderate |

9.30.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Pleasant Township.

Table 9.30-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|----------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Pleasant (Twp) | NR | NR | NR | NR | NR |

Sources: *a* BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA’s HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Pleasant Township.

Table 9.30-10. NFIP Summary

| NFIP Topic | Comments |
|--|--|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | Darby Creek is an area prone to flooding. The Township does not maintain a list of properties damaged by flooding. |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | There are no properties under the Townships jurisdiction. |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | No |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | The Township is not responsible for floodplain management. |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | N/A |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | N/A |
| What are the barriers to running an effective NFIP program in the community, if any? | The Township lacks the resources for an effective NFIP program. |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | N/A |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | N/A |

| NFIP Topic | Comments |
|---|----------|
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | N/A |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | N/A |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.30.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.30-11. Number of Building Permits for New Construction Since Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|---|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | The Township did not report any new permits for construction. | | | | | | | | | |
| Multi-Family | | | | | | | | | | |
| Other (commercial, mixed-use, etc.) | | | | | | | | | | |
| Total Permits Issued | | | | | | | | | | |

Table 9.30-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|---|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| The Township does not have plans for development and does not handle permits. | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| The Township does not have plans for development and does not handle permits. | | | | | |

9.30.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Pleasant Township’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be



identified clearly using mapping techniques and technologies and for which the Pleasant Township has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.30-1. Pleasant Township Hazard Area Extent and Location Map-Flood

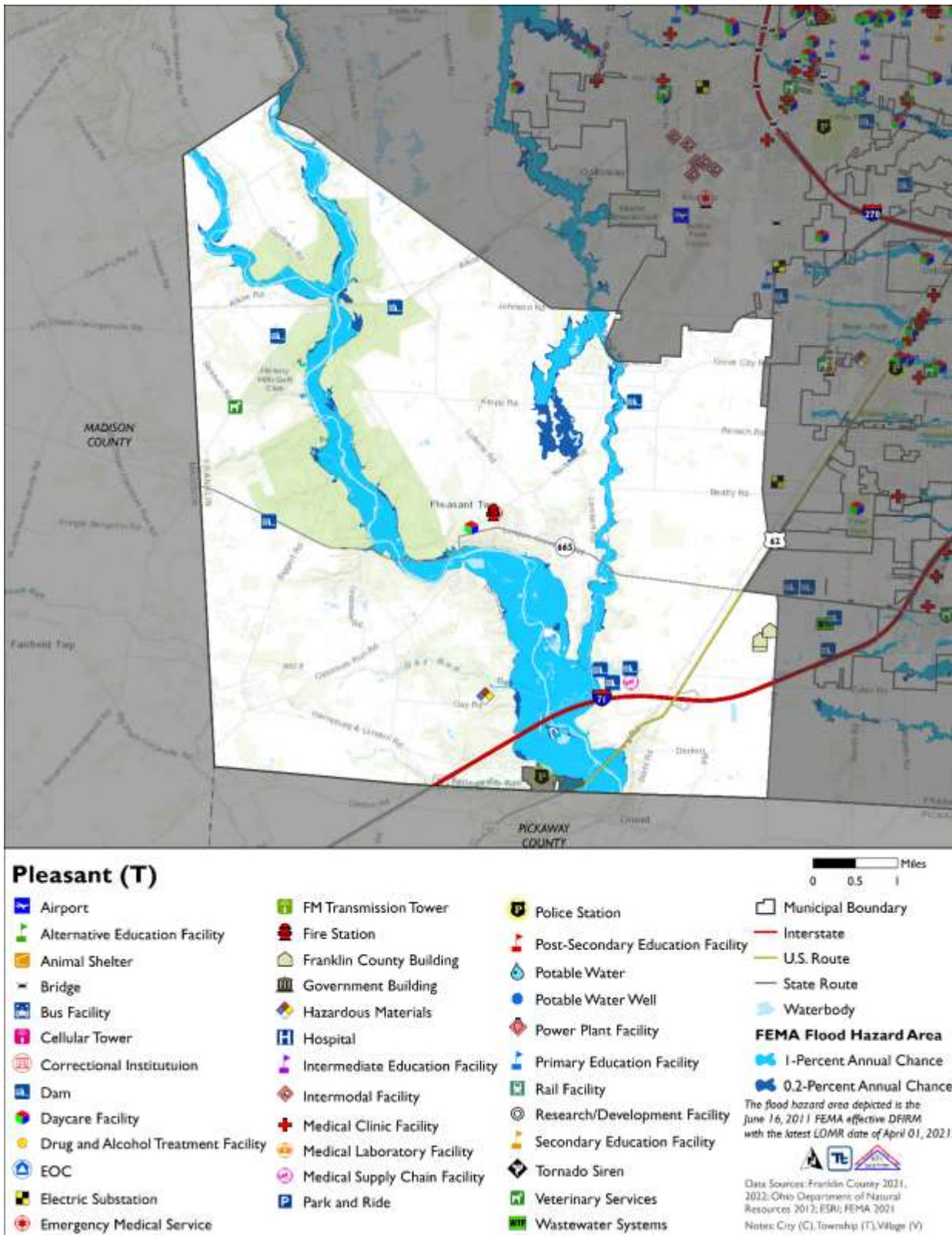


Figure 9.30-2. Pleasant Township Hazard Area Extent and Location Map-Inland Erosion

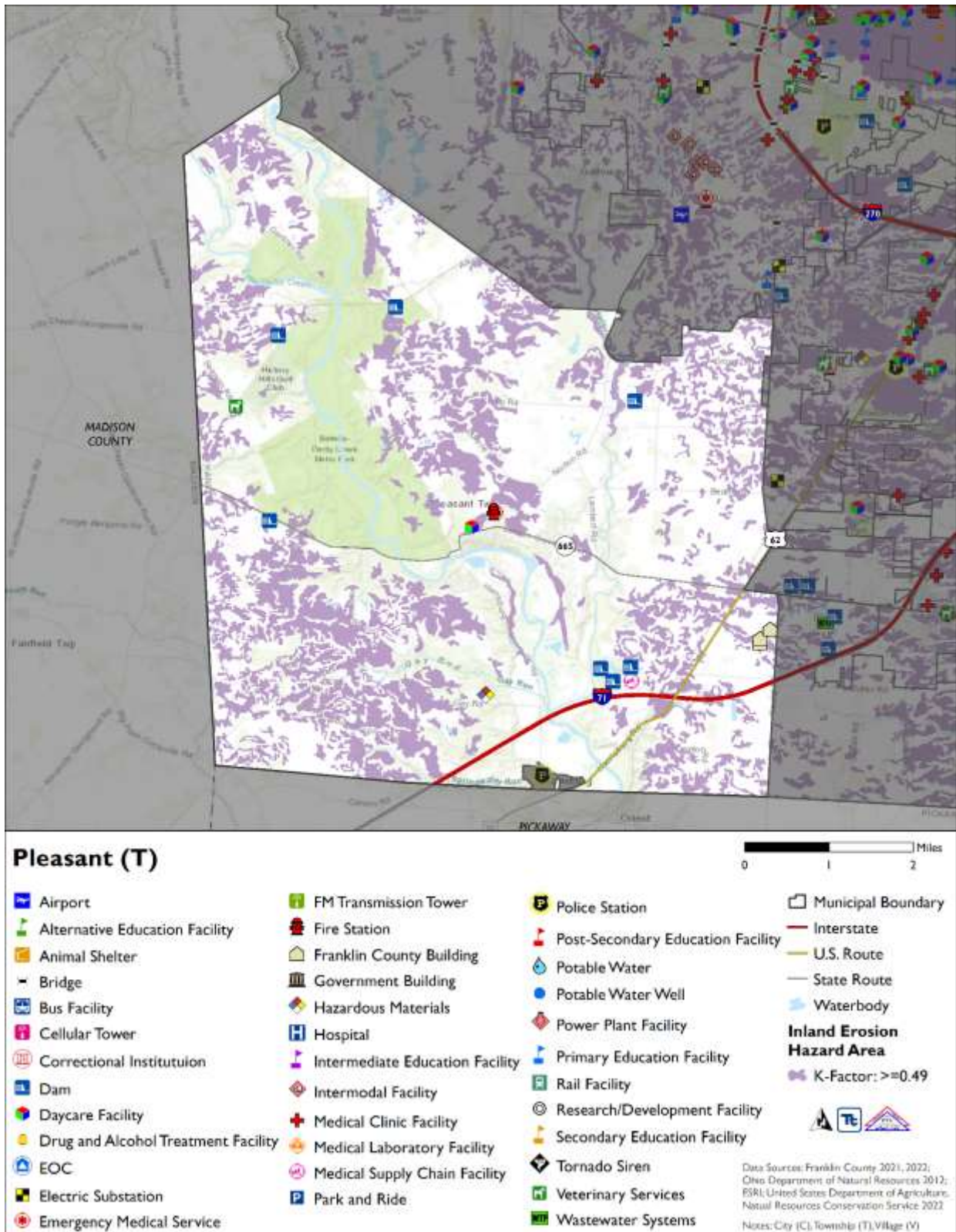


Figure 9.30-3. Pleasant Township Hazard Area Extent and Location Map-Land Subsidence

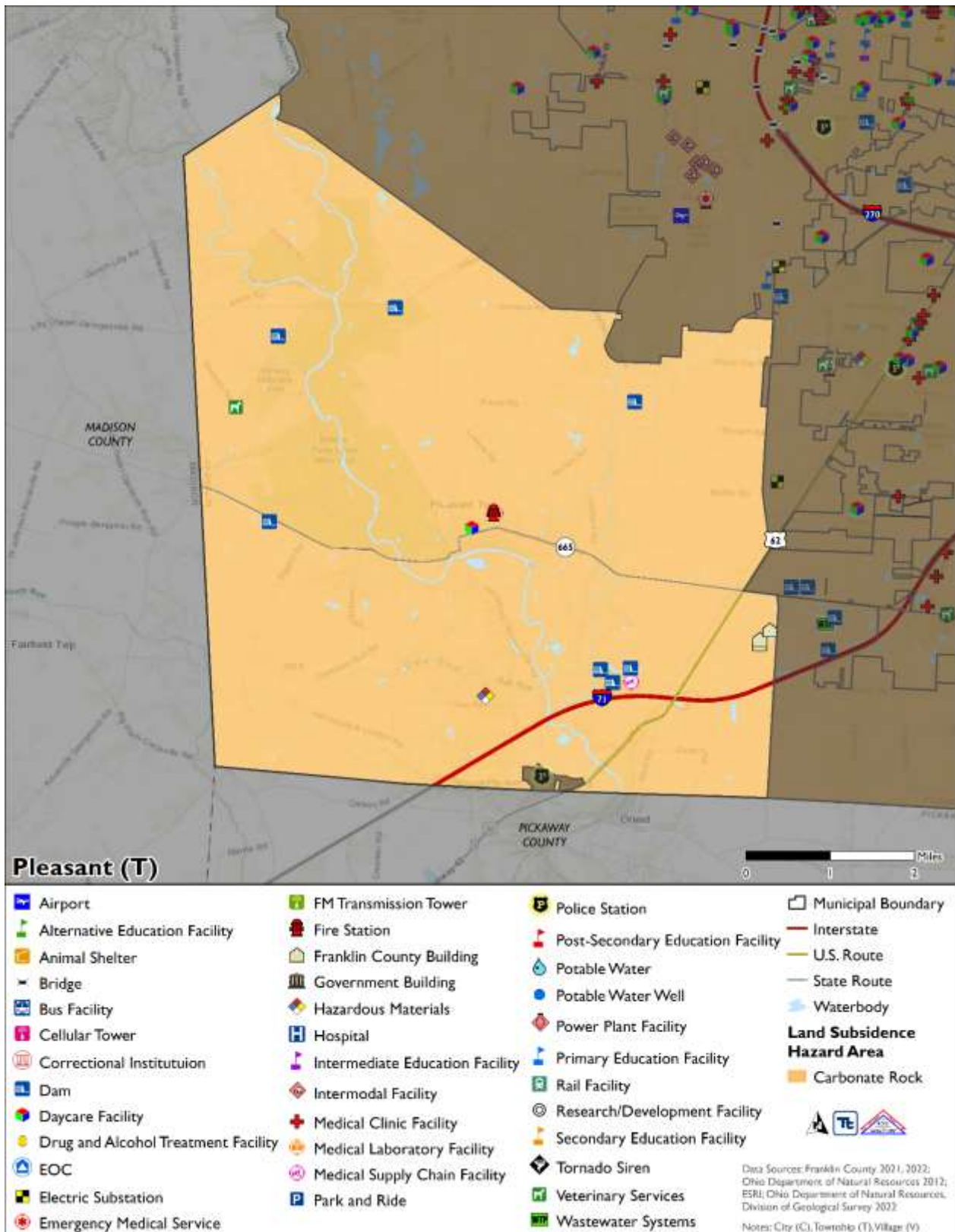
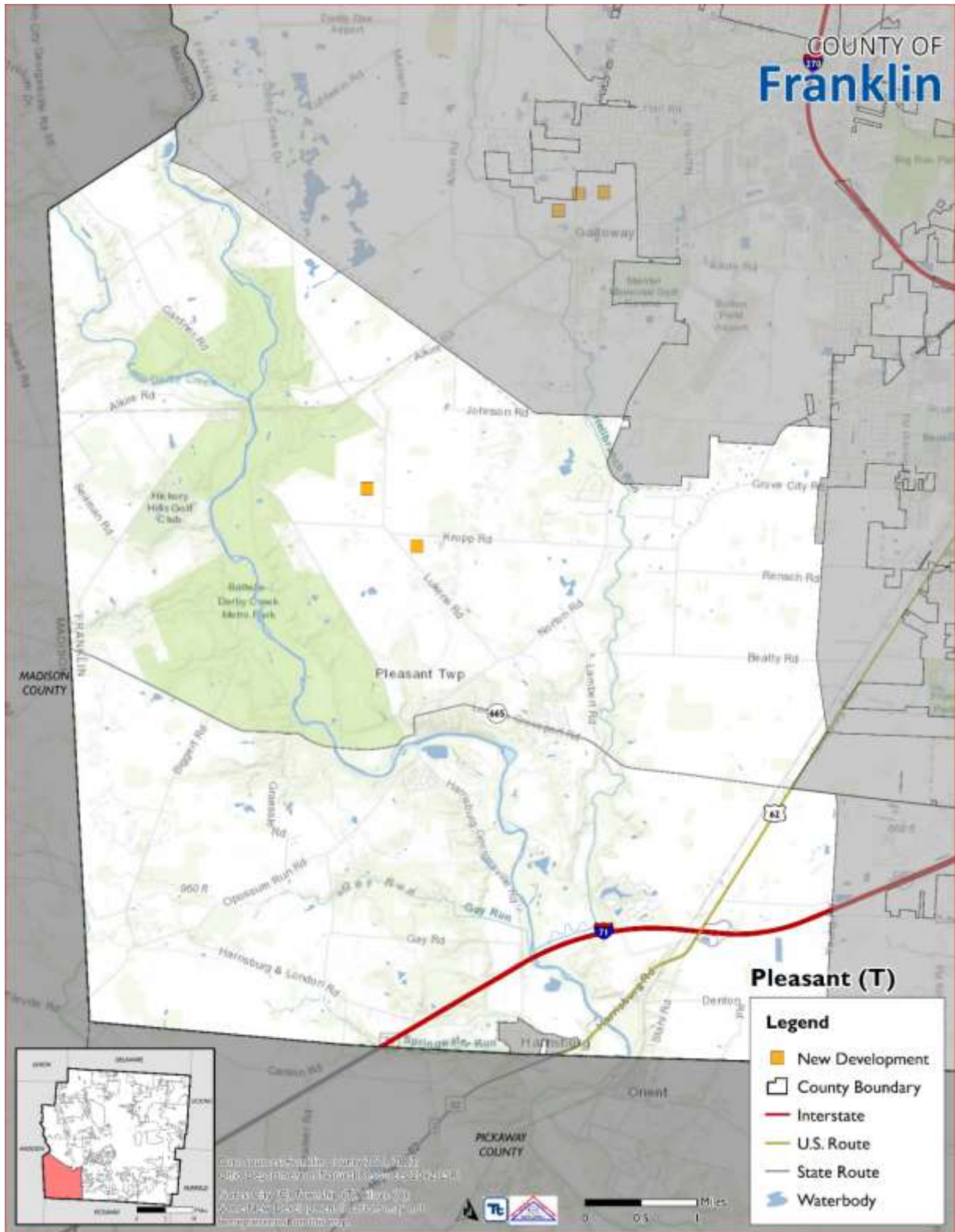


Figure 9.30-4. Pleasant Township New Development Map



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Pleasant Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Pleasant Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.30-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Township did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Township did not experience any notable damages or losses. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Township did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Pleasant Township.

Pleasant Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.30-14. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee | Medium |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic (Erosion) | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.30-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Pleasant Township

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | - |
| Inland Erosion (K-Factor: >= 0.49) Hazard Area | 3 | 2 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 20 | 19 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1 Identified Issues

In addition to the risk assessment, Pleasant Township identified the following vulnerabilities within its community:

- Residents at Zuber Road experience property loss during flood events
- The Township has 1 known property that experiences repetitive loss during flood events
- The Township tornado siren does not reach all incorporated areas
- The Township experiences heavy runoff on Harrisburg-Georgesville Rd and Gay Rd during flood, severe weather and winter weather events
- Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.
- The Township does not have a Comprehensive Plan

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.30.7 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.30-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|--------------------------|---|--|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Study Mitigation Opportunities at Zuber Road (Homeowners' property loss due to flooding) | Franklin County Engineer | No Progress | Yes | Residents at Zuber Road experience property loss during flood events | Pleasant Township Trustees Office, Franklin County Engineer |
| Seek funding for repetitive loss structures to permanently reduce damage to these structures* (1 known property est. at 100,000 /4 years) | Township Trustees office | No Progress | Yes | The Township has 1 known property that experiences repetitive loss during flood events | Pleasant Township Trustees Office |
| Increase coverage of tornado sirens in the township | Township Trustees office | No Progress | Yes | The Township tornado siren does not reach all incorporated areas | Pleasant Township Trustees Office |
| Reduce runoff flooding on Harrisburg-Georgesville Rd. and Gay Rd. | Township Trustees office | No Progress | Yes | The Township experiences heavy runoff on Harrisburg-Georgesville Rd and Gay Rd during flood, severe weather and winter weather events | Pleasant Township Trustees Office |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Pleasant Township identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, the Pleasant Township has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Pleasant Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.30-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | - | - | X | X | - | X | - | - | X |
| Disease Outbreak | X | - | - | X | X | - | X | - | - | X |
| Drought | X | - | - | X | X | - | X | - | - | X |
| Earthquake | X | - | - | X | X | - | X | - | - | X |
| Extreme Temp | X | - | - | X | X | - | X | - | - | X |
| Flood | X | X | - | X | X | X | X | X | - | X |
| Geologic (Erosion) | X | - | - | X | X | - | X | - | - | X |
| Severe Summer Weather | X | - | - | X | X | - | X | - | - | X |
| Severe Winter Weather | X | X | - | X | X | - | X | X | - | X |
| Tornado | X | X | - | X | X | - | X | X | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.30-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions that Pleasant Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.30-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------|-------------------------------------|--|---------------------------|-----------|--------------------|---|------------------------------|--|-----------------|----------|---------------------|--------------|
| 2023-Pleasant Township-001 | Study Mitigation Opportunities | Problem: Residents at Zuber Road experience property loss during flood events Solution: The Township will work the Franklin County Engineer to conduct a study of flood mitigation practices near Zuber Road. | Flood | 1,2 | 1 to 3 years | Pleasant Township, Franklin County Engineer | HMGP, BRC, FMA, Local Budget | Reduce the impacts to property during flood events | High | High | LPR, SIP | PP, |
| 2023-Pleasant Township-002 | Repetitive Loss Structures | Problem: The Township has 1 known property that experiences repetitive loss during flood events Solution: The Township will work with Franklin County to retrofit or elevate repetitive loss structures so that the lowest floor, including the basement is raised above the base flood elevation | Flood | 2,3,6 | Up to 5 years | Pleasant Township, Franklin County Engineer | HMGP, FMA, Local Budget | Reduce impacts to property during flood events | High | High | SIP | PP |
| 2023-Pleasant Township-003 | Increase coverage of Tornado sirens | Problem: The Township tornado siren does not reach all incorporated areas Solution: The Township will work with the National | Tornado | 2,3,5 | 1 to 2 years | Pleasant Township, Franklin County, NWS | Local Budget | Increase warning time for tornado events | Low | High | EAP | ES |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------|--------------------------------|---|--|-----------|--------------------|--|---------------------------|--|-----------------|----------|---------------------|--------------|
| | | Weather Service (NWS) to obtain new or additional tornado sirens to increase coverage | | | | | | | | | | |
| 2023-Pleasant Township-004 | Improve Stormwater Drainage | <p>Problem: The Township experiences heavy runoff on Harrisburg-Georgesville Rd and Gay Rd during flood, severe weather and winter weather events</p> <p>Solution: The Township will work with Franklin County to increase drainage or adsorption capacities with detention and retention basins, spillways and/or drain widening or upsizing culverts</p> | Flood, Severe Summer Weather, Severe Winter Weather | 1 | Up to 5 years | Pleasant Township Trustees Office, Franklin County | HMGP, FMA, Local Budget | Reduce risk of flood overflow on roadways | High | High | SIP | NR |
| 2023-Pleasant Township-005 | All-Hazards Education Campaign | <p>Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.</p> <p>Solution: The Township will Work with Franklin County EM&HS to provide residents of Washington Township with the necessary information to protect themselves and understand the threats of all hazards.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, | 2,4,5 | 1 to 2 years | Franklin County EM&HS, Pleasant Township | Local Budget | Increase awareness of potential hazard risks, reduce loss of life and property | Low | High | EAP | PI, ES |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------|----------------------------|---|--|-----------|--------------------|------------------------------------|---------------------------|--|-----------------|----------|---------------------|--------------|
| | | | Tornadoes | | | | | | | | | |
| 2023-Pleasant Township-006 | Develop Comprehensive Plan | <p>Problem: The Township does not have a Comprehensive Plan</p> <p>Solution: The Township will work with Franklin County to develop a comprehensive plan that will address hazard events and how to prepare for future conditions</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 1,4 | 1 to 2 years | Franklin County, Pleasant Township | Local Budget | Reduce risk of loss of life and property | Low | High | LPR | PR |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.30-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------------------|-------------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Pleasant Township-001 | Study Mitigation Opportunities | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 13 | High |
| 2023-Pleasant Township-002 | Repetitive Loss Structures | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 13 | High |
| 2023-Pleasant Township-003 | Increase coverage of Tornado sirens | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 13 | High |



| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------------------|--------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Pleasant Township-004 | Improve Stormwater Drainage | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 12 | High |
| 2023-Pleasant Township-005 | All-Hazards Education Campaign | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 | High |
| 2023-Pleasant Township-006 | Develop Comprehensive Plan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.31 PRAIRIE TOWNSHIP

This section presents the jurisdictional annex for the Prairie Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Prairie Township participated in the planning process, an assessment of the Prairie Township’s risk and vulnerability, the different capabilities used in the Prairie Township, and an action plan that will be implemented to achieve a more resilient community.

9.31.1 Hazard Mitigation Planning Team

The Prairie Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Prairie Township departments, including the Township Administrator. The Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.31-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|-------------------------------------|
| Name/Title: | Allen Scott/Chief | Name/Title: | James Jewell/Township Administrator |
| Address: | 23 Maple Drive, Columbus, OH 43228 | Address: | 23 Maple Drive, Columbus, OH 43228 |
| Phone Number: | 614-982-2152 | Phone Number: | 614-982-2181 |
| Email: | AScott@Prairietownship.org | Email: | jjewell@prairietownship.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Matt Brown / Franklin County Floodplain Coordinator | | |
| Address: | 150 South Front Street, Columbus, Ohio 43215 | | |
| Phone Number: | 614-525-5647 | | |
| Email: | mybrown@franklincountyohio.gov | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.31.2 Municipal Profile

The Prairie Township is in the western part of Franklin County and is bordered by Pleasant Township to the south, Brown and Norwich Townships to the north, Franklin and Jackson Townships to the east and Madison County to the west. Most of eastern Prairie Township is occupied by the city of Columbus and other parts of the Township have been annexed by other municipalities.

According to the American Community Survey, the 2021 population for the Prairie Township was 17,433, a 5.67 percent increase from the 2010 Census population of 16,498. Data from the 2021 American Community Survey indicates that 6.3 percent of the population is 5 years of age or younger and 12.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.31.3 Jurisdictional Capability Assessment and Integration

The Prairie Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Prairie Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Prairie Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.31-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|--|---|---|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Ohio Building Code & Residential Code of Ohio | Local/County | Building Department |
| <i>How does this reduce risk?</i> Franklin County has adopted 2019 Residential Code of Ohio, which regulates 1, 2, and 3 family dwellings/residential homes. Section 307.37 (April 6, 2007) allows for freedom of adoption when it comes to counties building codes. The 2019 Residential Code of Ohio requires the approval and inspection of all electrical, gas, Mechanical and Planning uses. The Residential code gives builders a pre identified checklist prior to construction leading to safer actions to accomplish goals. | | | | |
| Zoning/Land Use Code | Yes | November 1983 | Local/County | Building Department |
| <i>How does this reduce risk?</i> Helps to ensure appropriate separations and buffering between incompatible land uses. Prohibits development in floodways and requires development in floodway fringe areas to be designed so as to reduce risk. | | | | |
| Subdivision Ordinance | Yes | Chapter 711 of the Ohio Revised Code; Franklin County Subdivision Regulations Original adoption 1948, amended March 27, 2012 | Local/County | Building Department |
| <i>How does this reduce risk?</i> Includes stream setback provisions. Requires stormwater controls. Recognizes limitations of poorly drained soils and highly erodible land. Ensures adequate roadways for emergency vehicles. Requires building areas, wells and wastewater treatment systems to avoid floodplain areas. Allows for conservation/cluster subdivisions. | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | Yes | Franklin Soil and Water Conservation District | Local/County | Franklin Soil and Water Conservation District |
| <i>How does this reduce risk?</i> Shows best management practices for stormwaters and gives the steps for members to receive their permit requirements and construction requirements. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | Yes | Big Darby Accord Advisory Panel | Local/County | Big Darby Accord Advisory Panel |
| <i>How does this reduce risk?</i> Big Darby Accord – controlled growth governed by a multi-jurisdictional board | | | | |
| Environmental Protection Ordinance | Yes | Ohio EPA | State | EPA |
| <i>How does this reduce risk?</i> Open Burning rules and regulations, flood plain, protected wetlands | | | | |
| Flood Damage Prevention Ordinance | Yes | Franklin County Economic Development Dept | Local/County | NFIP Administrator |
| <i>How does this reduce risk?</i> Conditional Use/NFIP | | | | |
| Wellhead Protection | No | - | - | - |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | Yes | Franklin County EMA | Local/County | Emergency Management |
| <i>How does this reduce risk?</i> Franklin County Emergency and Homeland Security | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | - | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Prairie Township Comprehensive Plan Update | Local | Planning Department |
| <i>How does this reduce risk?</i> Controlled growth with an emphasis on density | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> Makes for a more efficient response time for our first responders | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> Ex: Chipping service / internal policy speeds up response time when services are needed | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | Yes | Franklin County Storm Water Manual. March 13th, 2012 | County | Franklin County Drainage Engineer |
| <i>How does this reduce risk?</i> The purpose of the Manual is to protect existing natural stormwater resources, convey and control stormwater in a safe and responsible manner, and meet water quality goals | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | Yes | Big Darby Accord Advisory Panel | Local | Big Darby Accord Advisory Panel |
| <i>How does this reduce risk?</i> Darby Accord – protects our ecosystem and area lands | | | | |
| Economic Development Plan | Yes | Franklin County Economic Development Strategic Plan, Adopted May 2019 | Local | Franklin County Economic Department |
| <i>How does this reduce risk?</i> Includes a goal that Economic development activities and programs should promote and improve environmental sustainability. | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | - | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> Addresses response for all hazards (man-made, technological and natural) This document protects, mitigates, responds, and prevents all disasters. | Yes | Franklin County Emergency Operations Plan 2021 | County | Franklin County EMA |
| Continuity of Operations Plan <i>How does this reduce risk?</i> Chain of command | Yes | Prairie Township | Local | Township Administration |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> Identifies Risk and Threats Throughout the community and scales them allowing for strategic planning based on specific hazards. | Yes | Latest 2021 update | County | Franklin county EMA |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> Intended to be a pre-disaster recovery planning document as well as a guide for post-disaster recovery procedures | Yes | Disaster Recovery Plan May 2017 | County | Franklin county EMA |
| Public Health Plan <i>How does this reduce risk?</i> Franklin County Public Health | Yes | Franklin County Public Health | County | Yes |
| Other <i>How does this reduce risk?</i> | - | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of the Prairie Township to oversee and track development.

Table 9.31-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? • If yes, what department is responsible? | Yes | Commercial Building and Zoning Department |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | County, floodplain |
| Do you have a buildable land inventory? • If yes, please describe | Yes | Land Properties |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Prairie Township and their current responsibilities that contribute to hazard mitigation.

Table 9.31-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|---------------------|--|
| Administrative Capability | | |
| Planning Board | Yes | Board of Zoning Appeals |
| Zoning Board of Adjustment | Yes | Commercial Building and Zoning Department |
| Planning Department | Yes | Commercial Building and Zoning Department |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | Yes | COCIC, |
| Public Works/Highway Department | Yes | Road Department |
| Construction/Building/Code Enforcement Department | Yes | Commercial Building and Zoning Department |
| Emergency Management/Public Safety Department | Yes | Fire Department |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Tornado (County) |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Road Department |
| Mutual aid agreements | Yes | Fire Department |
| Human Resources Manual | Yes | - |
| Other | - | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | Commercial Building and Zoning Department |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | Commercial Building and Zoning Department |
| Planners or engineers with an understanding of natural hazards | Yes | Road Department/Fire Department |
| Staff with expertise or training in benefit/cost analysis | Yes | Administration |
| Professionals trained in conducting damage assessments | Yes | Fire Department |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | Grove City IT Contract – GIS Department |
| Environmental scientist familiar with natural hazards | No | - |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Surveyor(s) | Yes | Franklin County Engineer |
| Emergency Manager | Yes | Franklin County EMA |
| Grant writer(s) | Yes | Consider the following: Are data and maps from the HMP used to support documentation in grant applications? Contracted |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |
| How do your administrative/technical capabilities contribute to risk reduction in your community? Enforcing applicable protocols and safety measures | | |

Fiscal Capability

The table below summarizes financial resources available to the Prairie Township.

Table 9.31-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No – development areas |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | Yes |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Prairie Township.

Table 9.31-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|--|------------------------|----------------------------|
| Public information officer or communications office | Yes | Social Media/Communication |
| Personnel skilled or trained in website development | Yes | Administration |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | No | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Tornado |
| Natural disaster/safety programs in place for schools | Yes | Fire/tornado safety |

| | | |
|---|------------|--------------------------------------|
| <p>Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events?</p> <ul style="list-style-type: none"> If yes, please describe. | <p>Yes</p> | <p>Fire safety in public schools</p> |
|---|------------|--------------------------------------|

Community Classifications

The table below summarizes classifications for community programs available to Prairie Township.

Table 9.31-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|---|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | Yes | Commercial Building Code/ County residential code | 1984 |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | Fire | |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.31-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic (Erosion) | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.31.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for Prairie Township .

Table 9.31-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|---------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Prairie (Twp) | NR | NR | NR | NR | NR |

Sources: *a BureauNet 2022 (https://nfipservices.floodsmart.gov/reports-flood-insurance-data)*
b State of Ohio 2023

Notes: *Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.*

NR Not reported
 RL Repetitive Loss
 SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Prairie Township.

Table 9.31-10. NFIP Summary

| NFIP Topic | Comments |
|--|--|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | Tamara Avenue – no list |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | Assess through building engineers. Tamara Properties - single family homes, 6 properties demolished, total of 3.6 acres |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | Tamara Properties – 6 properties acquired and demolished (FEMA Grant) |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | N/A |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Franklin County |

| NFIP Topic | Comments |
|---|--|
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | N/A |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Outside consulting to determine if substantial improvement needed Fire Department can determine if safety measures are needed |
| What are the barriers to running an effective NFIP program in the community, if any? | N/A |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | N/A |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | Drainage upgrades for properties with flooding issues N/A County |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | N/A |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Yes through recommendations |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.31.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.31-11. Number of Building Permits for New Construction Since the Previous HMP

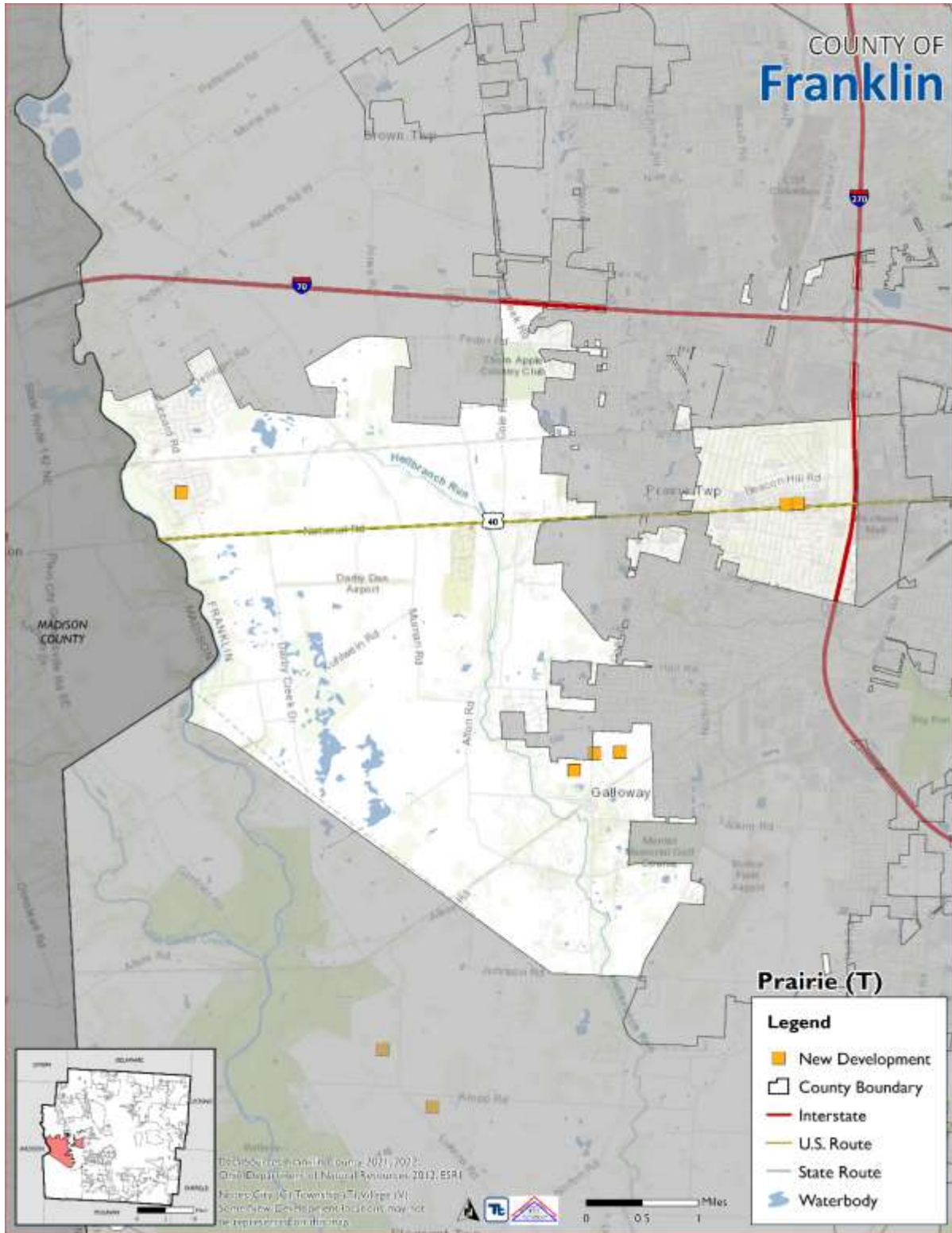
| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|----------|-------------|----------|-------------|----------|-------------|-----------|-------------|-----------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 7 | 0 | 2 | 0 | 9 | 0 | 13 | 0 | 11 | 0 |
| Multi-Family | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Other (commercial, mixed-use, etc.) | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Permits Issued | 7 | 0 | 4 | 0 | 9 | 0 | 14 | 0 | 11 | 0 |

Table 9.31-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|--------------------------|---|-----------------------------------|----------------------|---|
| Recent Major Development from 2018 to Present | | | | | |
| Urgent Care | Commercial | 3 | 4832 W Broad Street 240-006498 | - | Urgent care, AT&T, Taco Nice restaurant - complete |
| Chipotle | Commercial | 1 | 240-006880 | - | Restaurant – complete |
| Dunbury Greene | Residential | 60 | 4478 Westport Road 240-005294 | - | 3 story, 60-unit senior apartments - ongoing |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| Villages at Galloway | Residential | 93 Phase 1 | 240-000112 | - | |
| Galloway East | Commercial + Residential | Single Family, 289 Patio Homes 106 apartments | 1860 Galloway Road 240-000146 | - | Commercial, single-family res, patio homes, multi-family apartments |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

Figure 9.31-1. Prairie Township New Development

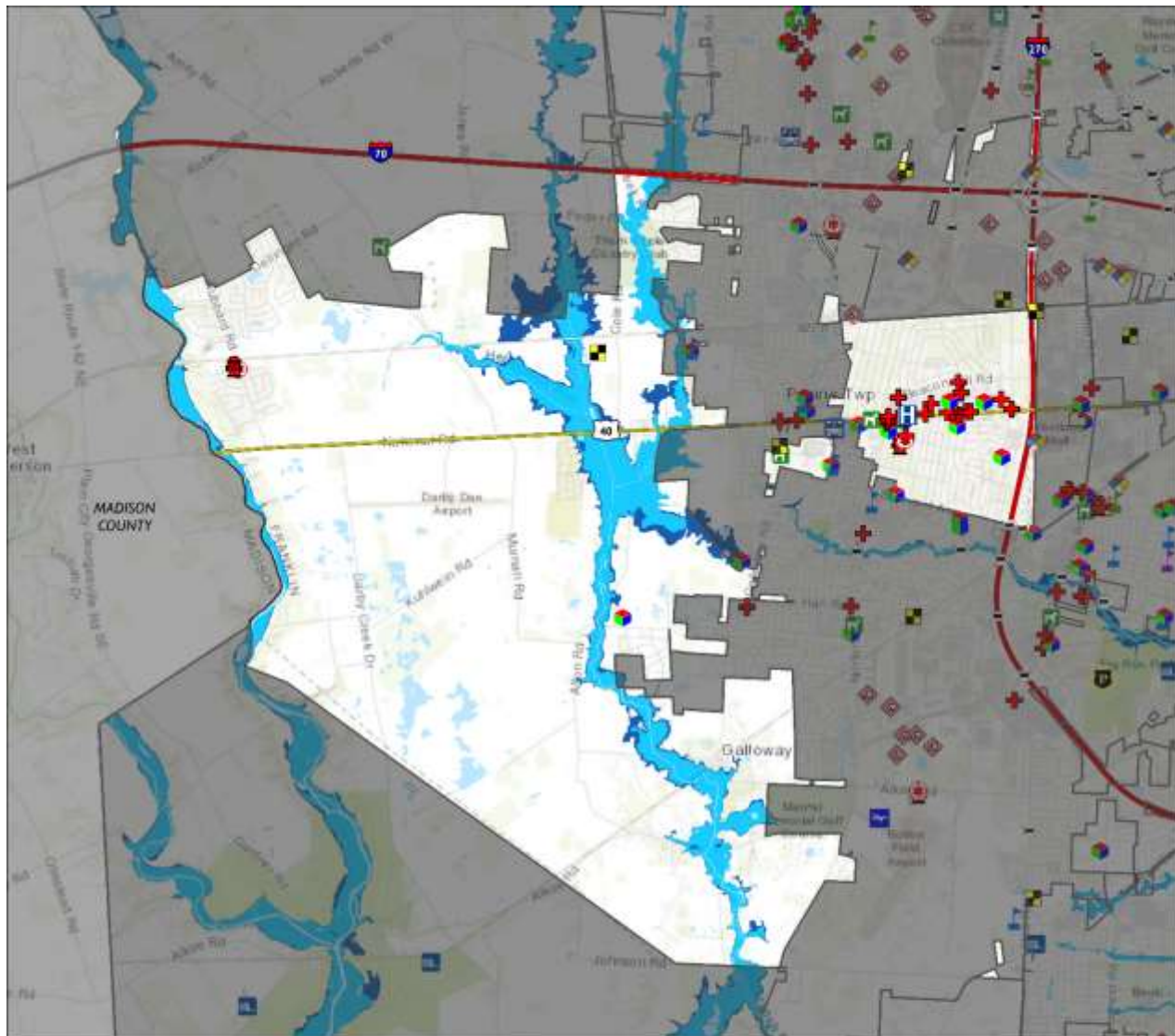


9.31.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Prairie Township's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Prairie Township has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.31-2. Prairie Township Hazard Area Extent and Location Map-Flood

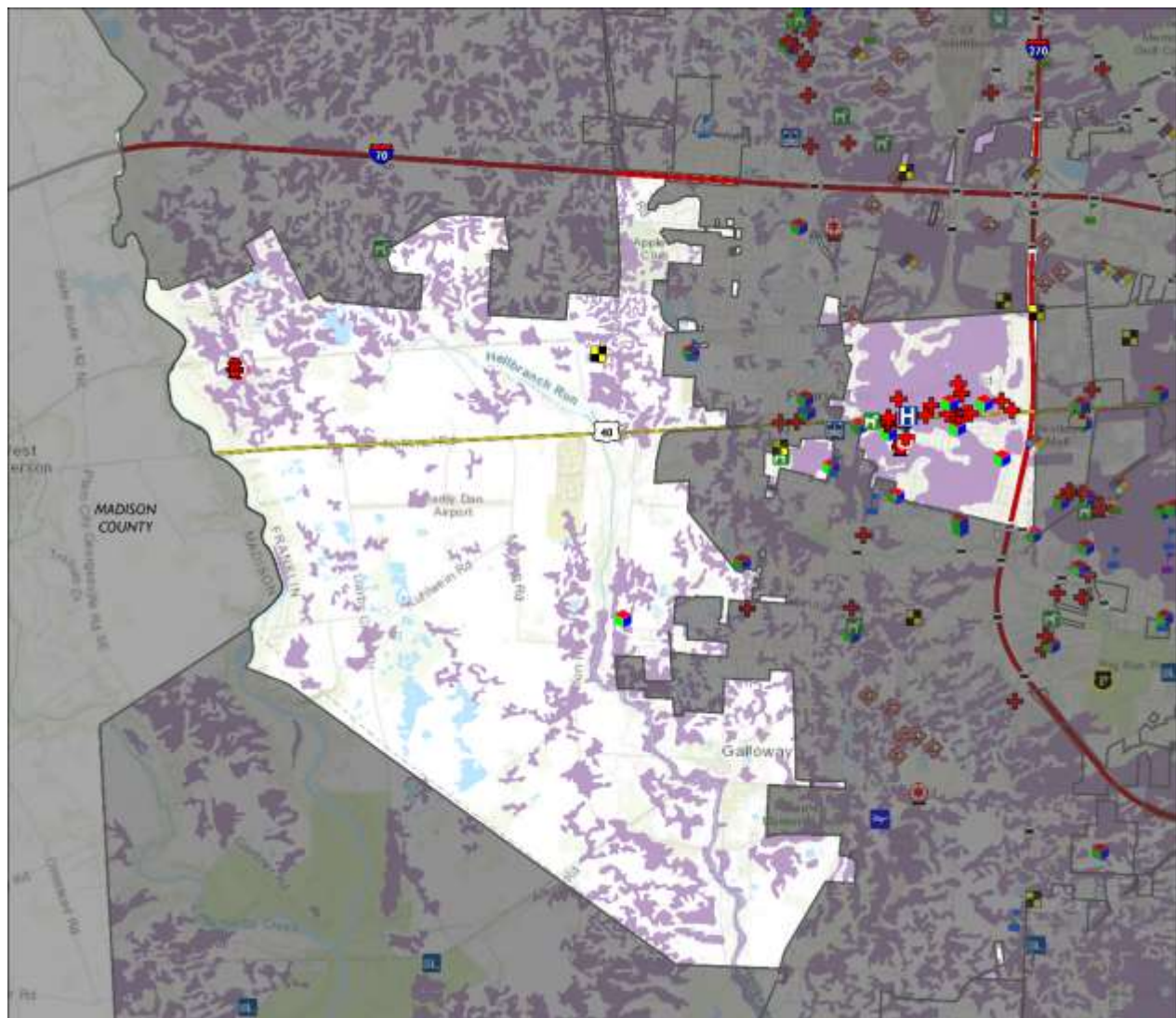


Prairie (T)

0 0.5 1 Miles

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | FEMA Flood Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | 1-Percent Annual Chance |
| Dam | Intermodal Facility | Research/Development Facility | 0.2-Percent Annual Chance |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | <i>The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.</i> |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | Tetra Tech |
| EOC | Medical Supply Chain Facility | Veterinary Services | <small>Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021</small> |
| Electric Substation | Park and Ride | Wastewater Systems | <small>Notes: City (C), Township (T), Village (V)</small> |
| Emergency Medical Service | | | |

Figure 9.31-3. Prairie Township Hazard Area Extent and Location Map-Inland Erosion



Prairie (T)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service

- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

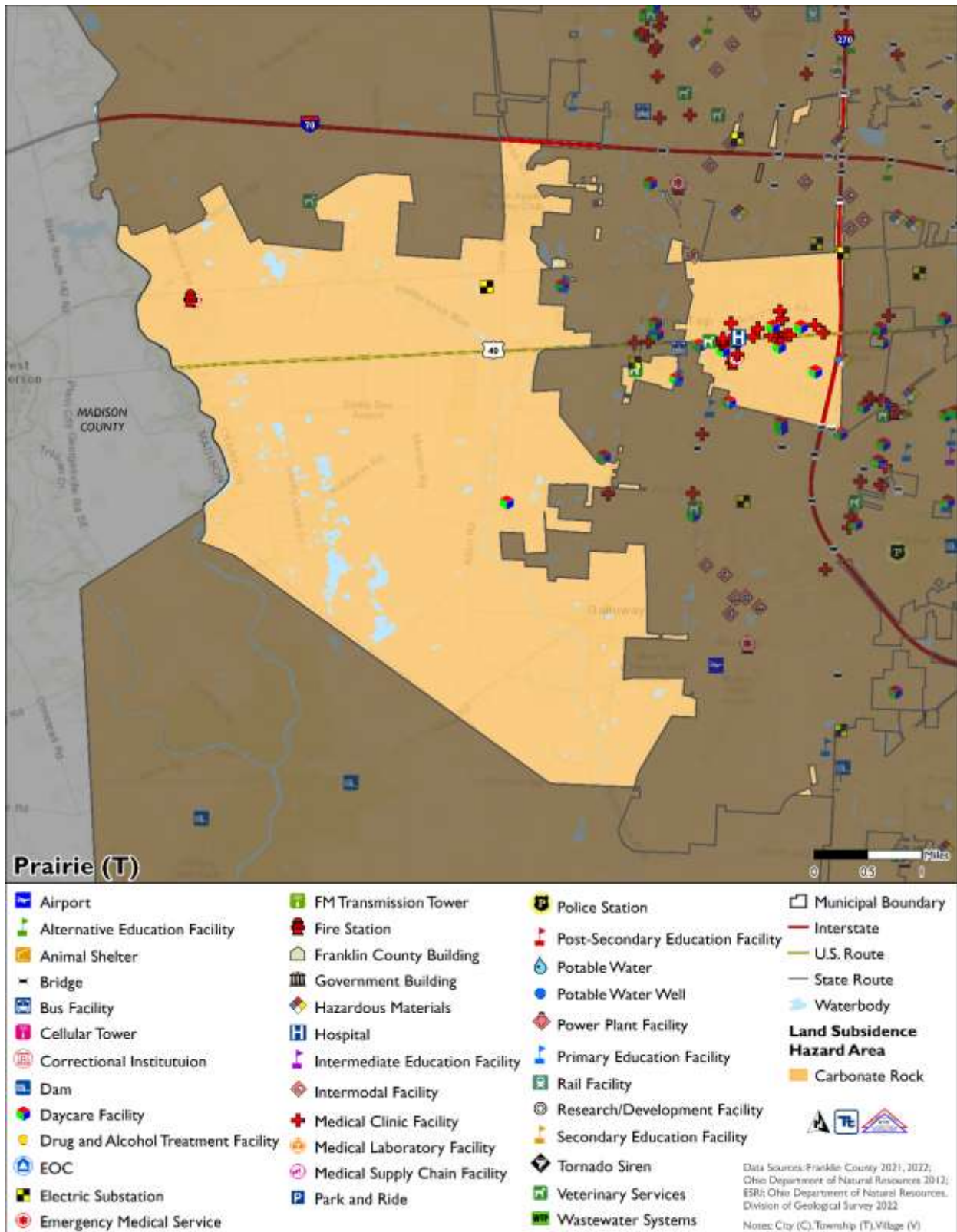
- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems

0 0.5 1 Miles

- Municipal Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody
- Inland Erosion Hazard Area**
- K-Factor: ≥ 0.49

Data Sources: Franklin County 2021, 2022;
Ohio Department of Natural Resources 2012;
ESRI; United States Department of Agriculture,
Natural Resources Conservation Service 2022
Notes: City (C), Township (T), Village (V)

Figure 9.31-4. Prairie Township Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Prairie Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Prairie Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.31-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| April 3-4, 2018 | EF-1 Tornado | N/A | Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage. | The Township did not experience any notable damages or losses. The Fire Department – assisted with aid for Grove City |
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Township did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Township did not experience any notable damages or losses. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | Financial/Staffing Township Wide – Overtime / COVID revenue helped PTCC salaries, Fire Salary Costs, admin leave for COVID positives Sherriff’s Contract) |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community

capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Prairie Township. The Prairie Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Prairie Township indicated the following:

- The Township agrees with all hazard rankings.

Table 9.31-14. Hazard Ranking Input

| Hazard | Ranking |
|-----------------------|---------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.31-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Prairie Township

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | - |
| Inland Erosion (K-Factor: >= 0.49) Hazard Area | 45 | 41 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 58 | 50 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Prairie Township identified the following vulnerabilities within its community:

- There is increased flooding along Tamara Avenue that limits and sometimes eliminates roadway access to 22 homes and limits access of emergency services.
- The entire Village of Galloway floods causes standing water that draws in mosquitos and omits an odor. There are also other parts of the Township that experience flooding problems. *
- The Township residents do not have a safe place to go in the event of an extreme hazard event. The homeless population is extremely at risk. *
- The Township does not currently have a generator at the Community Center which hinders it from being used as a shelter or clinic during power outages.
- The Township currently does not have any information readily available to residents regarding the current hazards of concern.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.31.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.31-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|---------------------------|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding for repetitive loss structures to permanently reduce damage to these structures (2 known properties est. at 300,000 /4 years) | Township Trustee's office | Completed | No | - | - |
| Reduce flooding along Tamara Avenue that impacts road access to twenty-two homes. (5 years) | Township Trustee's office | Ongoing | Yes | There is increased flooding along Tamara Avenue that limits and sometimes eliminates roadway access to 22 homes and limits access of emergency services. | Homeowners, Engineer, Township Administration |
| Seek funding for equipment to establish a tree trimming program to reduce the amount of fallen tree limbs along the public right-of-way | Township Trustee's office | Ongoing | Yes | The Township does not have equipment to create a program to trim the limbs of trees in preparation and as a result of storms. | Township Administration |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Prairie Township identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, the Prairie Township has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Prairie Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.31-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | - | X | - | X | - | - | X | - | - | X |
| Disease Outbreak | - | X | - | X | - | - | X | - | - | X |
| Drought | - | X | - | X | - | - | X | - | - | X |
| Earthquake | - | X | - | X | - | - | X | - | - | X |
| Extreme Temp | - | X | - | X | - | - | X | - | - | X |
| Flood | - | X | - | X | - | - | X | - | X | X |
| Geologic | - | X | - | X | - | - | X | - | - | X |
| Invasive Species | - | - | - | X | - | - | X | - | - | - |
| Severe Summer Weather | - | X | - | X | - | - | X | - | X | X |
| Severe Winter Weather | - | X | - | X | - | - | X | - | X | X |
| Tornado | - | X | - | X | - | - | X | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.31-17)
 Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions that Prairie Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.31-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------------|-------------------------------------|--|---|-----------|--------------------|--------------------------------------|--|---|--------------------------|----------|---------------------|--------------|
| 2023-Prairie Township-001 | Flood Reduction along Tamara Avenue | <p>Problem: There is increased flooding along Tamara Avenue that limits and sometimes eliminates roadway access to 22 homes and limits access of emergency services.</p> <p>Solution: The Township will implement a flood study to determine the best and most cost-effective way to reduce flooding along Tamara Avenue. This would ensure that emergency services have better access to the 22 homes impacted.</p> | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Less than 5 years | Homeowners, Engineer, Administration | FMA, HMGP, BRIC, CDBG, Township Budget | Emergency access will be available to the 22 homes even during a precipitation event. | TBD after engineer study | High | SIP | SP |
| 2023-Prairie Township-002 | Old Village of Galloway Drainage * | <p>Problem: The entire Village of Galloway floods causes standing water that draws in mosquitos and omits an odor. There are also other parts of the Township that experience flooding problems.</p> <p>Solution: The Township will conduct a flood study in the Village of Galloway and</p> | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Less than 5 years | Homeowners, Engineer, Administration | FMA, HMGP, BRIC, CDBG, Township Budget | The Standing water issue will be fixed | TBD after engineer study | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------------|----------------------------|--|---|-----------|--------------------|---------------------------|----------------------------------|--|-----------------|----------|---------------------|--------------|
| | | throughout the entire Township and will implement the best and most cost effective solution to fix flooding and drainage issues associated with the standing water. | | | | | | | | | | |
| 2023-Prairie Township-003 | Shelter Designation* | <p>Problem: The Township residents do not have a safe place to go in the event of an extreme hazard event. The homeless population is extremely at risk.</p> <p>Solution: The Township will designate or develop a shelter that has backup power that will be used during extreme hazard events.</p> | Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic Severe Summer Weather Severe Winter Weather Tornado | 5 | Less than 3 Years | Administration | HMGP, BRIC, Township Budget | Residents will be safer during hazard events | \$20,000 | High | EAP | ES |
| 2023-Prairie Township-004 | Community Center Generator | <p>Problem: The Township does not currently have a generator at the Community Center which hinders it from being used as a shelter or clinic during power outages.</p> <p>Solution: The Township will conduct a generator study to ensure the proper sized generator will be used and will purchase and install the generator. The Township will</p> | Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic Severe Summer Weather | 5 | Less than 5 years | Administration | HMGP, BRIC, EOC, Township Budget | Residents will be able to utilize this as a shelter during power outages | \$100,000 | High | SIP | ES |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------------|---|---|--|-----------|--------------------|---------------------------|---------------------------|---|-----------------|----------|---------------------|--------------|
| | | perform routine maintenance on the generator. | Severe Winter Weather Tornado | | | | | | | | | |
| 2023-Prairie Township-005 | Public Education Brochures and Website Update | <p>Problem: The Township currently does not have any information readily available to residents regarding the current hazards of concern.</p> <p>Solution: The Township will update their website to include how to prepare for the hazards of concern, emergency numbers to call, shelters nearby and health information regarding each hazard. The Township will also put this information into a brochure and distribute to the homeless population.</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 1 | 1 Year | Administration | Township Budget | The residents of the Township will become more knowledgeable about the hazards of concern | Staff time | High | EAP | PI |
| 2023-Prairie Township-006 | Debris Program | <p>Problem: The Township does not have equipment to create a program to trim the limbs of trees in preparation and as a result of storms.</p> <p>Solution: Seek funding for equipment to establish a tree trimming program to reduce the amount of fallen tree limbs along the public right-of-way.</p> | Severe Summer Weather, Severe Winter Weather, Tornado | 2 | 1 Year | Township Administration | Township Budget | Vegetative debris will have a decreased likelihood of falling onto public rights-of-way before and after a storm. | Medium | High | LPR | PR |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|---------------------------|---------------------------------|--|---------------------------|-----------|--------------------|---|---|--|-----------------|---------------------------|---------------------|--------------|
| 2023-Prairie Township-007 | Repetitive Loss Area Mitigation | Problem: Portions of the Township experienced repetitive flooding. Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | Flood | 6 | 4 years | Township Administration, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | High | > \$100,000 per structure | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CRS Community Rating System
- FEMA Federal Emergency Management Agency
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.



- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.31-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|---------------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Prairie Township-001 | Flood Reduction along Tamara Avenue | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-Prairie Township-002 | Old Village of Galloway Drainage * | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-Prairie Township-003 | Shelter Designation* | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-Prairie Township-004 | Community Center Generator | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-Prairie Township-005 | Public Education Brochures and Website Update | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-Prairie Township-006 | Debris Program | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 10 | High |
| 2023-Prairie Township-007 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.32 CITY OF REYNOLDSBURG

This section presents the jurisdictional annex for the City of Reynoldsburg that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Reynoldsburg participated in the planning process, an assessment of the City of Reynoldsburg’s risk and vulnerability, the different capabilities used in the City of Reynoldsburg, and an action plan that will be implemented to achieve a more resilient community.

9.32.1 Hazard Mitigation Planning Team

The City of Reynoldsburg identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Reynoldsburg departments, including building department. The Chief Building Official represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.32-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|--|
| Name/Title: | Yeong T. Jiang, PE, CBO/ Chief Building Official | Name/Title: | Joe Begeny/Mayor |
| Address: | 7232 E Main Street Reynoldsburg, Ohio 43068 | Address: | 7232 E Main Street Reynoldsburg, Ohio 43068 |
| Phone Number: | 614-322-6800 | Phone Number: | 614-322-6800 |
| Email: | YJiang@reynoldsburg.gov | Email: | jbegeny@reynoldsburg.gov |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Eric Meyer, Planning and Zoning Administrator | | |
| Address: | 7232 East Main Street, Reynoldsburg, OH, 43068 | | |
| Phone Number: | 614-322-6829 | | |
| Email: | - | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.32.2 Municipal Profile

The City of Reynoldsburg is in the eastern side of Franklin County and is encompassed by Truro Township and is bordered by Licking County to the east. Blacklick Creek flows through the City from north to south.

According to the American Community Survey, the 2021 population for the City was 39,803, a 10.89 percent increase from the 2010 Census population of 35,893. Data from the 2021 American Community Survey indicates that 7.2 percent of the population is 5 years of age or younger and 14.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.32.3 Jurisdictional Capability Assessment and Integration

The City of Reynoldsburg performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Reynoldsburg to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Reynoldsburg and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.32-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Chapter 1339 | Local | Planning |
| <p><i>How does this reduce risk?</i></p> <p>The purpose of the Ohio Building Code as adopted herein is to establish uniform minimum requirements for the erection, construction, repair, alteration and maintenance of buildings, including construction of industrialized units. Such requirements shall relate to the conservation of energy, safety, and sanitation of buildings for their intended use and occupancy with consideration for the following:</p> <ul style="list-style-type: none"> (a) Establish such requirements, in terms of performance objectives for the use intended. (b) Permit to the fullest extent feasible, the use of materials and technical methods, devices and improvements which tend to reduce the cost of construction and erection without affecting minimum requirements for the health, safety, and security of the occupants of buildings without preferential treatment of types or classes of materials or products or methods of construction. (c) To encourage, so far as may be practicable, the standardization of construction practices, methods, equipment, material and techniques, including methods employed to produce industrialized units. | | | | |
| Zoning/Land Use Code | Yes | Chapter 1101 | Local | Planning |
| <p><i>How does this reduce risk?</i></p> <p>Responsible development and growth of the City of Reynoldsburg and hereby adopts this Code for the following purposes:</p> <ul style="list-style-type: none"> (1) To promote the achievement of the Comprehensive Land Use Plan for the City; (2) To advance the position of the City as a center of commerce, industry, recreation and culture; (3) To provide for desirable, appropriately located living areas in a variety of dwelling types and at a suitable range of population densities, with adequate provision for sunlight, fresh air and usable open space; (4) To protect residential, commercial, industrial and civic areas from the intrusions of incompatible uses, and to provide opportunities for establishments to concentrate for efficient operation in mutually beneficial relationship to each other and to share services; (5) To ensure preservation of adequate space for commercial, industrial and other activities necessary for a healthy economy; (6) To promote safe, fast and efficient movement of people and goods without sacrifice to the quality of the City's environment and to provide adequate off-street parking; (7) To stabilize expectations regarding future development of the City, thereby providing a basis for wise decisions with respect to such development; (8) To preserve and enhance the quality of the City's environment; (9) To provide for effective signage that is compatible with the surrounding urban environment; and (10) To maintain the safety and potability of public water supplies located within the City. | | | | |
| Subdivision Ordinance | Yes | Chapter 1111 | Local | Planning |
| <p><i>How does this reduce risk?</i></p> <p>Notwithstanding any other provisions of the Subdivision Regulations, a proposed division of a parcel of land along an existing public street, whether the parcel to be divided fronts on the street or has access to it by private right-of-way or private driveway, not involving more than five (5) lots after the original tract has been completely subdivided, may be submitted to the Planning Commission for approval without plat.</p> | | | | |
| Site Plan Ordinance | Yes | Chapter 1109.19 | Local | Planning |
| <p><i>How does this reduce risk?</i></p> <p>A site plan illustrating the following:</p> <ul style="list-style-type: none"> A. The dimensions of property lines, parcel dimensions and adjoining rights-of-way. B. The current zoning of the parcel and all adjacent parcels. C. The location of proposed buildings and structures. D. The location of existing water bodies, streams, drainage ditches, stands of trees and other pertinent features within one hundred fifty (150) feet of the proposed development. E. Setbacks and building separations shall be noted in accordance with zoning requirements. F. A landscape concept plan, including approximate location of all new landscape material and plantings, that addresses the applicable district requirements. G. A transportation and parking plan, including location and number of all parking and loading spaces and location of all proposed walkways and bike/pedestrian access points, that addresses the applicable district requirements. | | | | |
| Stormwater Management Ordinance | Yes | Chapter 960.02 | Local | Planning |
| <p><i>How does this reduce risk?</i></p> <p>The ordinance provides regulations for the operation, management and maintenance of the stormwater system and facilities or cause the regulations for the operation, management and maintenance of the stormwater system and facilities to be established by ordinance.</p> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|--|---|--|
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | Chapter 1335 | Local | Planning |
| <i>How does this reduce risk?</i> It is the purpose of these regulations to promote the public health, safety and general welfare, and to: (a) Protect human life and health; (b) Minimize expenditure of public money for costly flood control projects; (c) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; (d) Minimize prolonged business interruptions; (e) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines and streets and bridges located in areas of special flood hazard; (f) Help maintain a stable tax base by providing for the proper use and development of areas of special flood hazard so as to protect property and minimize future flood blight areas; (g) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions; (h) Minimize the impact of development on adjacent properties within and near flood prone areas; (i) Ensure that the flood storage and conveyance functions of the floodplain are maintained; (j) Minimize the impact of development on the natural, beneficial values of the floodplain; (k) Prevent floodplain uses that are either hazardous or environmentally incompatible; and (l) Meet community participation requirements of the National Flood Insurance Program | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | Yes | Chapter 901.05 | Local | Planning |
| <i>How does this reduce risk?</i> In any case where a real and actual emergency exists, making it necessary for an excavation to be made within the limits | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | Yes | Historic Preservation Ordinance | ??? | ??? |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Olde Reynoldsburg Strategic Plan Brice and Livingston Strategic Area Plan | Local | Planning |
| <i>How does this reduce risk?</i> The comprehensive plan is the culmination of a community-driven effort to determine goals and a corresponding plan for the future, serving as a guide for investment, policy, and decision-making. | | | | |
| Capital Improvement Plan | Yes | November 2017 | Local | Planning |
| <i>How does this reduce risk?</i> The City of Reynoldsburg maintains and operates the roadways, sanitary sewers, water distribution lines, storm sewers and city parks. The City ensures that potential projects are included in the plan. | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Disaster Debris Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Floodplain Management or Watershed Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Stormwater Management Plan <i>How does this reduce risk?</i> The City of Reynoldsburg ("City") is required to prepare a stormwater management program (SWMP) in accordance with 40 CFR 123.25 and Ohio law (OAC 3745-39). This document outlines the City's program to develop, implement and enforce a stormwater management program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate requirements of the Clean Water Act (CWA) in accordance with the Ohio Environmental Protection Agency (OEPA) National Pollutant Discharge Elimination System (NPDES) Phase II program. | Yes | June 3, 2022 | Local | City Admin |
| Open Space Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Urban Water Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Habitat Conservation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Economic Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Shoreline Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| <i>Consider the following:</i> <ul style="list-style-type: none"> Does your CEMP cover short-term response and long-term recovery to address communications, evacuation, and housing necessary for identified hazards? | | | | |
| Continuity of Operations Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the City of Reynoldsburg to oversee and track development.

Table 9.32-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---------------------|
| Do you issue development permits? <ul style="list-style-type: none"> If yes, what department is responsible? | Yes | Building Department |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | Floodplain |
| Do you have a buildable land inventory? <ul style="list-style-type: none"> If yes, please describe | N/A | - |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Reynoldsburg and their current responsibilities that contribute to hazard mitigation.

Table 9.32-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Administrative Capability | | |
| Planning Board | Yes | The Department of Development is responsible for land development, land use planning, economic development, zoning, and implementation of a comprehensive plan for the City of Reynoldsburg. |
| Zoning Board of Adjustment | Yes | Planning and zoning combined under the development department |
| Planning Department | Yes | Planning and zoning combined under the development department |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | Yes | Parks & Recreation Commission |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | Yes | The primary mission of the Reynoldsburg Street Department is to provide a safe and maintained road network. |
| Construction/Building/Code Enforcement Department | Yes | The Building Division is responsible for regulating the Ohio Building Code, the Residential Code of Ohio, the National Electrical Code, the Property Maintenance Code, and the Flood Damage Prevention Code. |
| Emergency Management/Public Safety Department | No | - |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | No | - |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | The Water/Wastewater Department is responsible for the operation and maintenance of the water distribution and sewer collection system and billing of water and sewer, refuse and storm water, as well as all fire hydrants and water meters throughout the city. |
| Mutual aid agreements | No | - |
| Human Resources Manual | | Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | - |
| Engineers or professionals trained in building or infrastructure construction practices | No | - |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to the City of Reynoldsburg.

Table 9.32-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | - |
| Capital improvements project funding | - |
| Authority to levy taxes for specific purposes | - |
| User fees for water, sewer, gas or electric service | - |
| Impact fees for homebuyers or developers of new development/homes | - |
| Stormwater utility fee | - |
| Incur debt through general obligation bonds | - |
| Incur debt through special tax bonds | - |
| Incur debt through private activity bonds | - |
| Withhold public expenditures in hazard-prone areas | - |
| Other federal or state Funding Programs | - |
| Open Space Acquisition funding programs | - |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | - |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Reynoldsburg.

Table 9.32-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|----------|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | No | - |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | No | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | No | - |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | No | - |

Community Classifications

The table below summarizes classifications for community programs available to the City of Reynoldsburg.

Table 9.32-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | | | |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.32-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.32.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Reynoldsburg.

Table 9.32-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|------------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Reynoldsburg (C) | 52 | 124 | \$885,582.78 | 16 | 2 |

Sources: *a* BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Reynoldsburg.

Table 9.32-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | City of Reynoldsburg maintains a GIS system incorporating FEMA flood map to identify all floodplain areas and properties within the City limits. |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No at the present time No at the present time |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | Yes, SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director. None |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | 1 Property owner |

| NFIP Topic | Comments |
|---|--|
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why. | Yes |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | City of Reynoldsburg Building Department |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed? | Yes Any training will help |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | Permit review, consultation, inspections |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Based on the definition in Ohio Building Code & flood damage prevention ordinance. |
| What are the barriers to running an effective NFIP program in the community, if any? | No |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | June 2, 2022 |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | Chapter 1335 / Ordinance 29-2022 03/28/2022 |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | Yes, meet the minimum requirements |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Yes, all new development projects go through site plan review for floodplain requirements. |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.32.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.32-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|---------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 1 | 0 | 1 | 0 | 1 | 1 | 24 | 0 | 66 | 0 |
| Multi-Family | 10 | 0 | 0 | 0 | 144 | 0 | 96 | 0 | 62 | 0 |

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Other (commercial, mixed-use, etc.) | 7 | 1 | 2 | 0 | 6 | 1 | 3 | 1 | 5 | 0 |
| Total Permits Issued | 18 | 1 | 3 | 0 | 151 | 2 | 123 | 1 | 133 | 0 |

Table 9.32-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-----------------------------|----------------------------------|----------------------|---|
| Recent Major Development from 2018 to Present | | | | | |
| Kroger Building | Commercial | 1 building | 6580 E Main Street | None | New Kroger store building; Completed |
| Truro Township Fire Station | Commercial | 1 building | 6900 E Main Street | None | New fire station building; completed |
| Chick-Fil-A | Commercial | 1 building | 2364 Taylor Park Dr | Floodplain | New restaurant building; Completed |
| Laurel Bluff Apartments | Residential | 170 units / 32 building | Taylor Road | None | 170 Units in 32 apartment buildings Completed |
| Sheetz Gas Station | Commercial | 1 building | 8271 E Broad Street | None | New Sheetz gas station; Completed |
| Spring Hill Farm Phase 1, 2, 3 | Residential | 112 Single family homes | Waggoner Road | None | 112 Single family homes; In progress |
| Ravines at Taylor | Residential | 128 units / 15 buildings | Taylor Road SW | Floodplain | 128 Rental units in 15 buildings; In progress |
| Thornton Hall Development | Residential | 264 units / 12 buildings | Eastwood Drive West | None | 12 Residential buildings; 24 units per building; In progress |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| Rose Hill Townhome Development | Residential | 76 Townhomes / 15 buildings | Rosehill Road | Floodplain | 76 townhome units in 15 buildings; Building 1 completed; Others in progress |
| Central Ohio Primary Care | Commercial | 1 building | 8050 E Main Street | None | Health care facilities; Construction starts in 2023 |
| West Licking County Fire Station #404 | Commercial | 1 Building | 8070 Taylor Road SW | None | New building for Fire station #404; Construction starts in 2023 |
| Columbus Metropolitan Library @ Reynoldsburg | Commercial | 1 building | 1402 Brice Road | None | Public library Reynoldsburg branch; Construction starts in 2023 |
| Wilson Ridge Townhome Development | Residential | 81 Townhomes / 15 buildings | Waggoner Road | Floodplain | 81 Townhome units in 15 buildings; Planning stage |
| Spring Hill Farm Phase 4, 5, 6 | Residential | 242 Single family homes | Waggoner Road | None | 242 Single family homes; construction starts in 2023 |
| The Alliance | Commercial | 5 to 6 Buildings | E Main Street & Brice road | None | Conference center, garage, hotel, restaurants. Construction starts in 2023 |
| Eastwood Development Phase 1, 2, and 3 | Residential | 248 Single family | Park Place & Sunny Drive | None | 248 Single family residential lots; Planning stage |
| Eastwood Development Lot 5 | Residential | 159 units | Eastwood Drive East | None | 159 units in 24 Residential buildings; Planning stage |
| Trivium Reynoldsburg | Commercial | 2 buildings | E main Street & Lancaster Avenue | Floodplain | 2 commercial buildings; Planning stage |
| Oliver Development | Residential | 145 units / 11 Buildings | Lancaster Avenue | None | 145 Residential units; Planning stage |

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|------------------------------|-------------------------|-------------------------|-----------------------|----------------------|--|
| Maplewood Townhome | Residential | 71 units / 13 buildings | Summit Road | None | 71 residential units in 13 buildings; Planning stage |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.32.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Reynoldsburg’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Reynoldsburg has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.32-1. City of Reynoldsburg Hazard Area Extent and Location Map-Flood

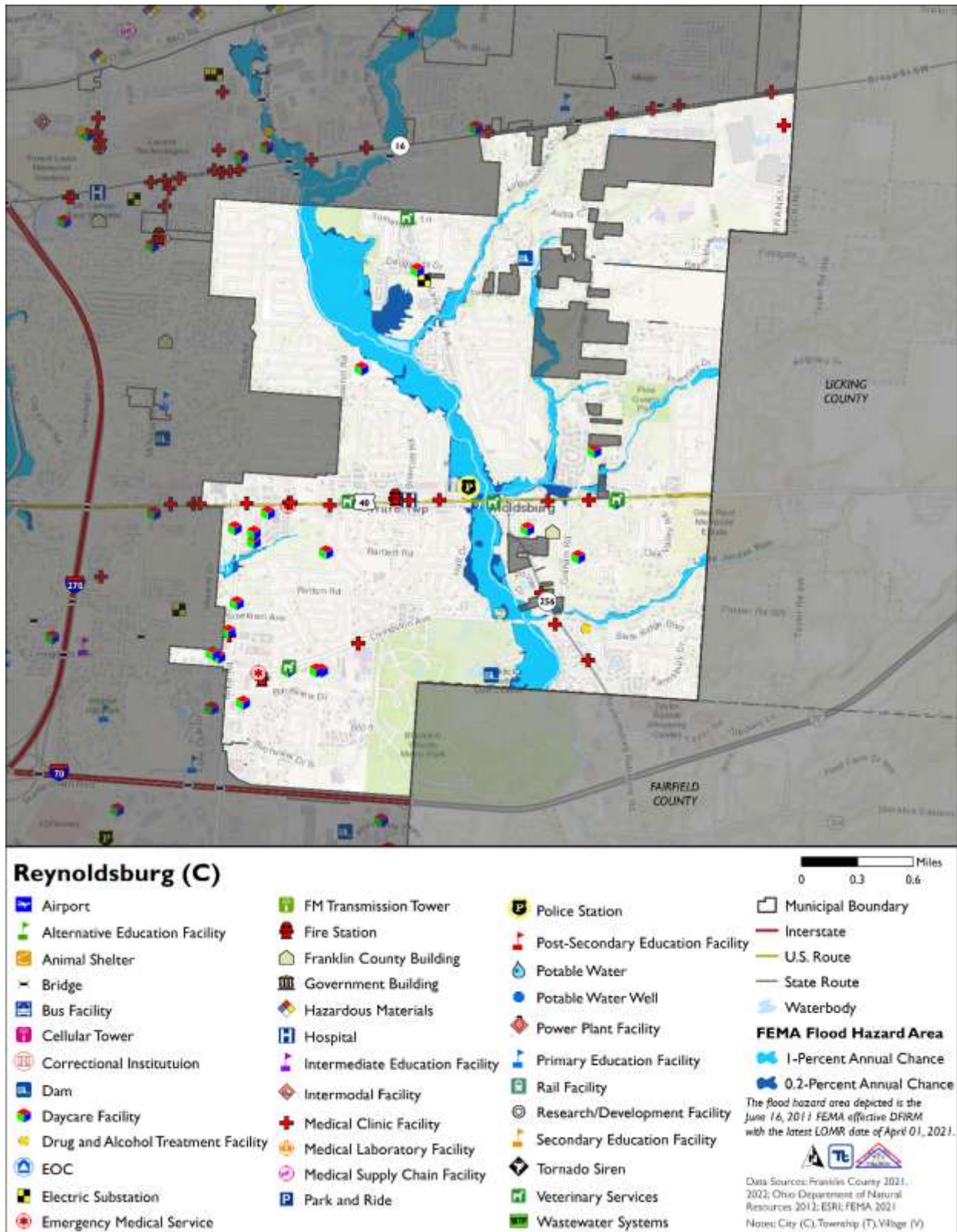


Figure 9.32-2. City of Reynoldsburg Hazard Area Extent and Location Map-Inland Erosion

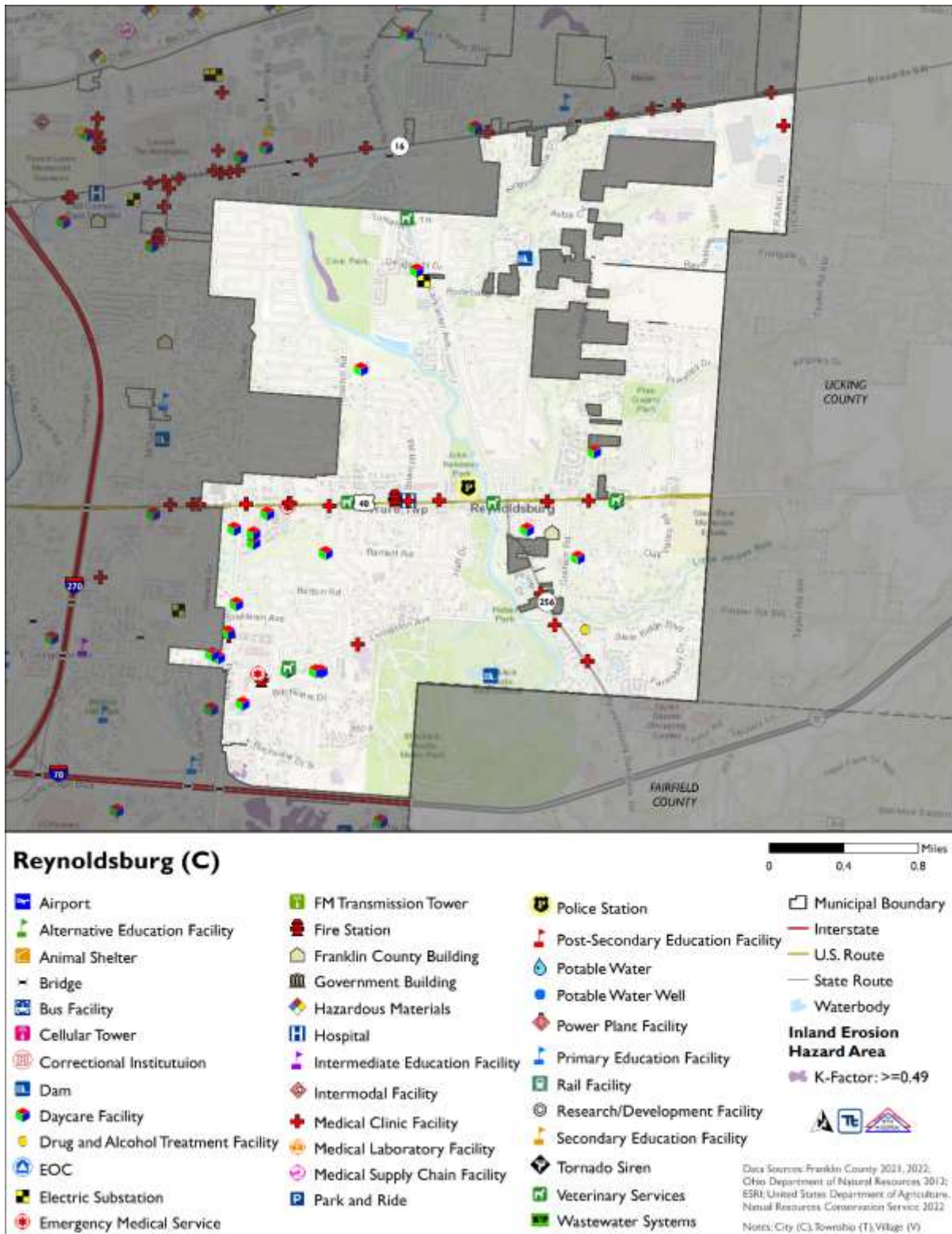
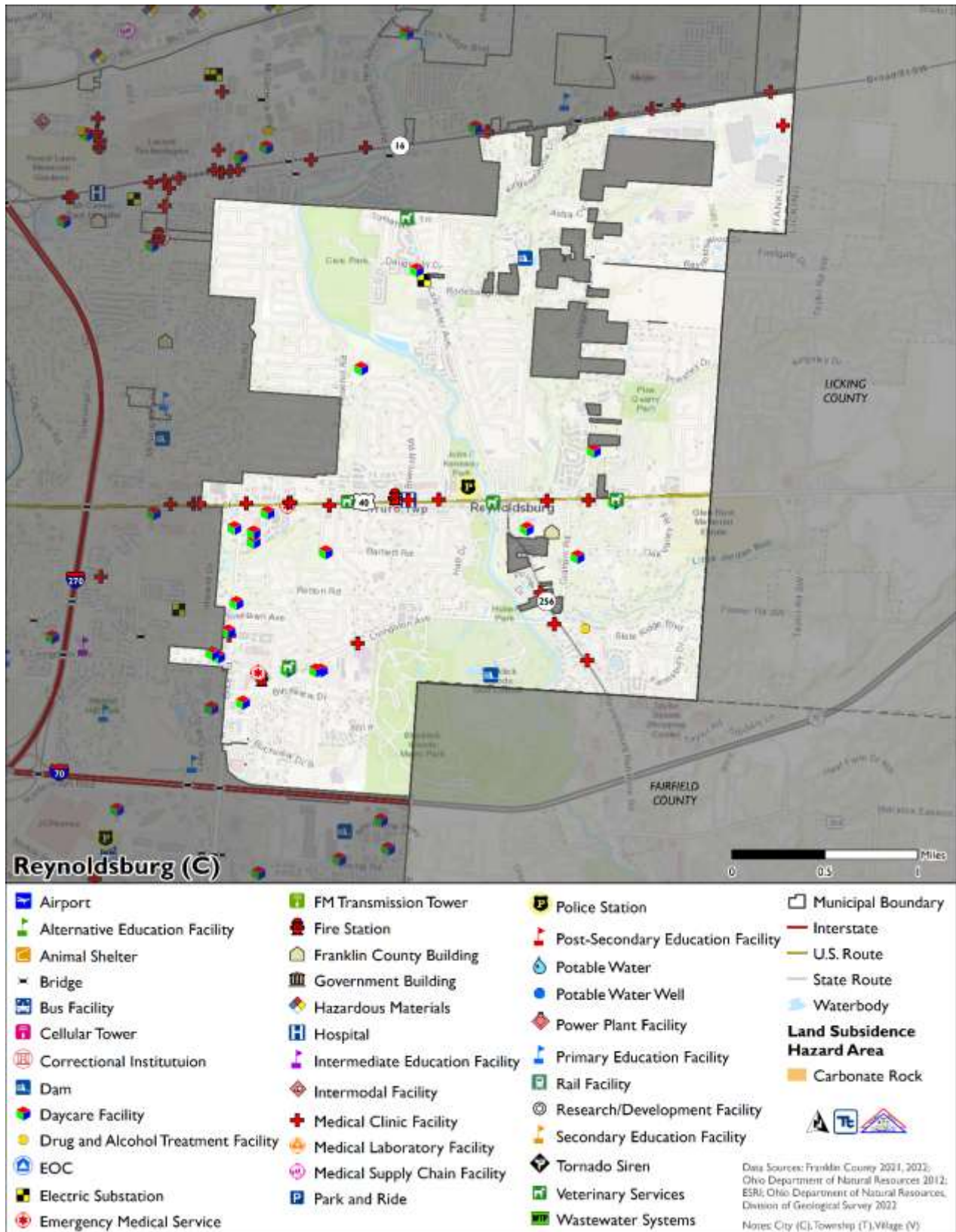


Figure 9.32-3. City of Reynoldsburg Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events is provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Reynoldsburg’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Reynoldsburg experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.32-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|--|--------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Town did not experience any additional damages losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Town did not experience any additional damages losses. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Town did not experience any additional damages losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Reynoldsburg. The City of Reynoldsburg reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.32-14. Hazard Ranking Input

| Hazard | Rankings |
|-----------------------|----------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.32-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Reynoldsburg

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Reynoldsburg identified the following vulnerabilities within its community:

- Reynoldsburg has 16 repetitive loss properties and 2 severe repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.
- The following critical facilities are municipally owned and located in the special flood hazard area:
 - Reynoldsburg Police Department
- The City of Reynoldsburg has experienced flooding at a higher rate than in the past due to extreme weather conditions exacerbated due to climate change. The area impacted is along Blacklick Creek from the Main Street Bridge in between Davidson Dr. and Lancaster along the Huber Park area.
- The City of Reynoldsburg has suffered from increase severity of flooding due to extreme weather. This has impacted areas of Reynoldsburg that have been built out but now sit in the floodway/zone.
- The City has limited information on location and capabilities of critical infrastructure in the City.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.32.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.32-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|-------------------|---|--|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding for outdated NFIP maps for the Blacklick Creek area in coordination with areas that flood. (20,000 / 2 years) | Mayor's Office | No Progress | Yes | The City of Reynoldsburg has experienced flooding at a higher rate than in the past due to extreme weather conditions exacerbated due to climate change. The area impacted is along Blacklick Creek from the Main Street Bridge in between Davidson Dr. and Lancaster along the Huber Park area | NFIP Floodplain Administrator |
| Evaluate smaller streams that are draining from newly developed areas in adjoining municipalities affecting the city.(4,000,000 / 2 years) | Mayor's Office | No Progress | Yes | The City of Reynoldsburg has suffered from increase severity of flooding due to extreme weather. This has impacted areas of Reynoldsburg that have been built out but now sit in the floodway/zone. | NFIP Floodplain Administrator |
| Seek funding for back-up generators for critical public buildings. (50,000 / 1 year) | Mayor's Office | No Progress | No | - | - |
| Research and determine the cause of municipal building lightning strikes and why it has been hit by lightning so many times. Seek funding to permanently mitigate cause, if possible.(20,000 / 1 year) | Mayor's Office | No Progress | No | - | - |



| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|-------------------|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding for lightning detection/warning for city parks. (40,000 / 1 year | Mayor's Office | No Progress | No | - | - |
| Seek funding for back-up generators for evacuation route intersections. (120,000 / 6 months | Mayor's Office | No Progress | No | - | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Reynoldsburg identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, the City of Reynoldsburg has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Reynoldsburg participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.32-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | - | - | - | X | - | - | X | - | - | - |
| Disease Outbreak | - | - | - | X | - | - | X | - | - | - |
| Drought | - | - | - | X | - | - | X | - | - | - |
| Earthquake | - | - | - | X | - | - | X | - | - | - |
| Extreme Temp | - | - | - | X | - | - | X | - | - | - |
| Flood | - | X | - | X | - | - | X | - | X | - |
| Geologic | - | - | - | X | - | - | X | - | - | - |
| Invasive Species | - | - | - | X | - | - | X | - | - | - |
| Severe Summer Weather | - | X | - | X | - | - | X | - | X | - |
| Severe Winter Weather | - | X | - | X | - | - | X | - | X | - |
| Tornado | - | - | - | X | - | - | X | - | - | - |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.32-17)
 Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Reynoldsburg will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.32-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------------------|--------------------------------|---|---|-----------|--------------------|--|---------------------------|--|----------------------------------|----------|---------------------|--------------|
| 2023- City of Reynoldsburg-001 | Repetitive Loss Mitigation | <p>Problem: Reynoldsburg has 16 repetitive loss properties and 2 severe repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.</p> <p>Solution: The City will conduct outreach to the RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information, and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).</p> | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Less than 5 Years | NFIP Floodplain Administrator, Property Owners | HMGP, FMA, BRIC, CDBG | The Repetitive loss structures will no longer flood as frequently. | >\$100,000 per property | High | SIP | SP |
| 2023- City of Reynoldsburg-002 | Flood Vulnerability Evaluation | <p>Problem: The following critical facilities are municipally owned and located in the special flood hazard area:</p> <ul style="list-style-type: none"> Reynoldsburg Police Department <p>Solution: The City will conduct a feasibility assessment to determine what</p> | Flood | 6 | Less than 5 Years | NFIP Floodplain Administrator, Property Owners | HMGP, FMA, BRIC, CDBG | Critical facilities will be able to continue to operate and will not | TBD after feasibility assessment | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------------------|------------------------------------|--|---|-----------|--------------------|-------------------------------|---------------------------|--|-----------------|----------|---------------------|--------------|
| | | <p>additional floodproofing measures are needed at the facility to protect each to the 500-year flood level. Options include:</p> <ul style="list-style-type: none"> • Elevation of facility • Floodproofing of facility • Mobile flood barriers <p>Once the most cost-effective option is identified, the City will carry out the option.</p> | | | | | | flood as often. | | | | |
| 2023- City of Reynoldsburg-003 | Blacklick Creek Stream Restoration | <p>Problem: The City of Reynoldsburg has experienced flooding at a higher rate than in the past due to extreme weather conditions exacerbated due to climate change. The area impacted is along Blacklick Creek from the Main Street Bridge in between Davidson Dr. and Lancaster along the Huber Park area.</p> <p>Solution: The City has started the process for Blacklick Creek Stream Bank restoration and stabilization. The project will allow improved water flow from areas north of Reynoldsburg. This will be accomplished by improved directional devices that will focus the water to the center line. Additionally, the creek will be cleared of debris from fallen/dead trees to other waste. This project will also address erosion along the east and west banks by removing invasive species and replaced with soil enhancing vegetation. The design process is complete, funding is approved, and work is set to begin in late 2023.</p> | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Less than 5 years | NFIP Floodplain Administrator | HMGP, FMA, BRIC, CDBG | The Creek will experience reduced flooding | \$650,000 | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------------------|----------------------------------|--|--|-----------|--------------------|--|---------------------------|--|-----------------|----------|---------------------|--------------|
| 2023- City of Reynoldsburg-004 | Flood Mitigation Study | <p>Problem: The City of Reynoldsburg has suffered from increase severity of flooding due to extreme weather. This has impacted areas of Reynoldsburg that have been built out but now sit in the floodway/zone.</p> <p>Solution: The Flood mitigation study will review all waterways into and out of the City of Reynoldsburg, identify cost-effective solutions or courses of action to prevent loss of property.</p> | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Less than 5 years | NFIP Floodplain Administrator | HMGP, FMA, BRIC, CDBG | The City will experience reduced flooding | \$330,000 | High | SIP | SP |
| 2023- City of Reynoldsburg-005 | Critical Infrastructure Database | <p>Problem: The City has limited information on location and capabilities of critical infrastructure in the City.</p> <p>Solution: The City will create and maintain a GIS database of all critical infrastructure in the City. The strategy is as follows:</p> <ul style="list-style-type: none"> Identify all critical infrastructure in the city. This includes things like hospitals, power plants, water treatment facilities, and transportation hubs. Collect data on each piece of infrastructure, such as its location, size, function and ability to provide backup power. Enter the data into a GIS database. Make the database accessible to emergency management personnel. | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 6 | 1 Year | Department of Information Systems, GIS Department of Public Safety, Division of Building, Department of Economic Development | City Budget, HMGP | The City will be more aware of critical infrastructure and their capabilities. | \$1,000 | High | EAP | PI |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|--------------------------------|----------------------------|--|--|-----------|--------------------|---------------------------|---------------------------|---|-----------------|----------|---------------------|--------------|
| | | This strategy would be valuable for emergency management because it would provide a centralized location for all critical infrastructure of the City. | | | | | | | | | | |
| 2023- City of Reynoldsburg-006 | Public Education | <p>Problem: The City does not have a public education method to educate their residents on how to prepare, act and recover, before, during and after a hazard event.</p> <p>Solution: The City will prepare yearly education seminars to educate City residents on the hazards of concern as identified in the HMP update. This includes distributing brochures to the homeless and elderly, updating websites and using social media to alert and push preventative measures.</p> | Dam/Levee Disease Outbreak, Drought, Earthquake Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 5 | Ongoing | City Administration | City Budget | The City residents will be better prepared to handle hazard events. | Staff Time | High | EAP | PI |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- *Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.32-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|--------------------------------|--------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023- City of Reynoldsburg-001 | Repetitive Loss Mitigation | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023- City of Reynoldsburg-002 | Flood Vulnerability Evaluation | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 11 | High |



| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|--------------------------------|------------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023- City of Reynoldsburg-003 | Blacklick Creek Stream Restoration | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023- City of Reynoldsburg-004 | Flood Mitigation Study | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 | High |
| 2023- City of Reynoldsburg-005 | Critical Infrastructure Database | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023- City of Reynoldsburg-006 | Public Education | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 12 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.33 SHARON TOWNSHIP

This section presents the jurisdictional annex for Sharon Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Sharon Township participated in the planning process, an assessment of Sharon Township’s risk and vulnerability, the different capabilities used in Sharon Township, and an action plan that will be implemented to achieve a more resilient community.

9.33.1 Hazard Mitigation Planning Team

Sharon Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Sharon Township departments. The Fiscal Officer represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.33-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--|---|----------------------------|--|
| Name/Title: | Michael Farley, Fiscal Officer | Name/Title: | Tony Palmer, Trustee |
| Address: | 95 E Wilson Bridge Road Worthington, OH 43085 | Address: | 95 E Wilson Bridge Road Worthington, OH 43085 |
| Phone Number: | (614) 885-5115 x403 | Phone Number: | (614) 885-5115 |
| Email: | fiscalofficer@sharontwp.us | Email: | tpalmer@sharontwp.us |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Matt Brown, Planning and Floodplain Administrator | | |
| Address: | 150 S. Front St., FSL, Suite 10, Columbus, OH 43215 | | |
| Phone Number: | (614) 525-5647 | | |
| Email: | mybrown@franklincountyohio.gov | | |
| Additional Contributors | | | |
| Name/Title: Method of Participation: | No additional contributors | | |

9.33.2 Municipal Profile

Sharon Township is in the north-center of Franklin County and borders Perry Township, Blendon Township, Clinton Township, and the border with Delaware County. Located 11 miles north of the City of Columbus, Sharon Township is known for its sparse suburban feel, in which most residents live in their own houses. The Township offers many restaurants, coffee shops, and parks. Sharon Township has a total area of 9.0 square miles, 8.8 square miles of land and 0.2 square miles of water.

According to the U.S. Census, the 2020 population for Sharon Township was 17,109, a 7.1 percent increase from the 2010 Census population. Data from the 2020 U.S. Census indicate that 7.2 percent of the population is 5 years of age or younger and 21 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.33.3 Jurisdictional Capability Assessment and Integration

Sharon Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Sharon Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Sharon Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.33-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | 2019 Residential Code of Ohio | Franklin County | Franklin County Economic Development and Planning Department |
| <i>How does this reduce risk?</i> Provides restrictions and requirements on how buildings must be constructed. | | | | |
| Zoning/Land Use Code | Yes | Franklin County Zoning Resolution – October 11, 2022 | Franklin County | Zoning Officer |
| <i>How does this reduce risk?</i> Specifies the allowable uses of land within each district, the regulations pertaining to the development and use of the land, and buildings are uniform for each class or kind of building. | | | | |
| Subdivision Ordinance | Yes | Franklin County Subdivision Regulations – March 27, 2012 | Franklin County | Franklin County Economic Development and Planning Department |
| <i>How does this reduce risk?</i> Manage growth and development in accordance with plans, policies, and resolutions of the FCPC, county and townships and surrounding area plans. Provide for adequate and convenient open spaces for traffic, utilities, fire and maintenance forces, recreation, light and air. Provide for the preservation of natural resources, sensitive natural areas, and natural features. Provide safety from fire, flood, and other danger. Address public requirements and facilities, traffic circulation, stormwater management, water and sanitary services, open space, airport noise and hazard areas. | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Climate Change Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Capital Improvement Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Disaster Debris Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Floodplain Management or Watershed Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Stormwater Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Open Space Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Urban Water Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Habitat Conservation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Economic Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Shoreline Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> Identifies risks associated with the hazards in the area and how to potentially mitigate those risks. | Yes | Franklin County Risk Assessment | County | Franklin County EMA |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of Sharon Township to oversee and track development.

Table 9.33-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--|
| Do you issue development permits? • If yes, what department is responsible? | No | The Franklin County Economic Development and Planning Department collects Zoning Compliance applications and issues the appropriate certifications. The Franklin County Building Department is responsible for issuing building permits for 1-, 2- and 3-family residential structures and associated development. The State of Ohio issues commercial building permits. |
| If you do not issue development permits, what is your process for tracking new development? | N/A | Coordinate with the Franklin County Building Department. |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | The Township of Sharon does not track permits; it coordinates with the Franklin County Building Department to maintain its list. |
| Do you have a buildable land inventory? • If yes, please describe | No | The Franklin County Building Department and/or the Franklin County Economic Development and Planning Department may have an inventory, but the Township of Sharon does not. |

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|--|--------|----------|
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Sharon Township and their current responsibilities that contribute to hazard mitigation.

Table 9.33-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|---------------------|--|
| Administrative Capability | | |
| Planning Board | No | Sharon Township relies on the Franklin County Planning Commission. The Planning Commission consists of the three Franklin County Commissioners and eight members appointed by the Board of County Commissioners. Three of the eight members are appointed from individuals nominated by the city of Columbus, another three members are appointed from individuals residing in unincorporated Franklin County recommended by townships of the county and the final two members are appointed at the discretion of the Board of County Commissioners with one member residing in unincorporated Franklin County and one member residing in a municipal corporation of the county. The specific powers and duties of the Planning Commission are identified in Section 713.23 of the Ohio Revised Code. The Planning Commission is responsible for reviewing major subdivision and rezoning requests, and for completing Comprehensive Plans for townships in Franklin County. |
| Zoning Board of Adjustment | No | Sharon Township relies on the Franklin County Board of Zoning Appeals. The Board of Zoning Appeals consists of five members appointed by the Franklin County Board of County Commissioners. Members must reside in the unincorporated area of one of the ten townships with County Zoning. It is a quasi-judicial board that acts on administrative appeals, conditional uses, and variances. It is their duty to maintain the intent and spirit of the zoning district in conformity with the Zoning Resolution. The BZA is responsible for hearing and deciding on three types of applications related to the administration of the Franklin County Zoning Resolution. These include administrative appeals, conditional uses, and variances. |
| Planning Department | No | Sharon Township relies on the Franklin County Planning and Zoning Department. The planning and zoning department is responsible for all zoning, code enforcement and land-use planning activities in the unincorporated area of Franklin County. The Economic Development and Planning Department administers county zoning for ten of the seventeen townships in Franklin County: Brown, Clinton, Franklin, Hamilton, Madison, Mifflin, Norwich, Pleasant, Sharon and Truro Townships. |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | Sharon Township relies on the Franklin County Community Development section of the Economic Development & Planning Department. This section is responsible for providing funding and technical assistance to support community development activities and initiatives in Franklin County outside the auspices of the City of Columbus. The planning and zoning department is responsible for all zoning, code enforcement and land-use planning activities in the unincorporated area of Franklin County. |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Public Works/Highway Department | Yes | The Road Department provides several services, depending on the time of year. They mow and trim vegetation that interfere with traffic and sight, repair and clean storm sewers, patch pavement, provide leaf collection, and snow removal on township roads. They are also responsible for installing/replacing street signs on township roads as needed. The township currently has approximately 10 miles of roadways to maintain. The maintenance crew takes care of Walnut Grove and Flint Cemeteries as well. This includes mowing, trimming, installing monument foundations, burial openings and closings and selling of grave spaces. The Road Department currently has five full time employees and uses two season employees during the summer months. |
| Construction/Building/Code Enforcement Department | No | The Franklin County Building Department is the Building Department for Sharon Township. The Building Department is responsible for issuing building permits for 1-, 2- and 3-family residential structures and associated development. The State of Ohio issues commercial building permits. |
| Emergency Management/Public Safety Department | No | The Township of Madison has a Police Department, but not a joint Public Safety Department. Franklin County has an Emergency Management and Homeland Security Department that covers the entire County. |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Tornado sirens, Alert Franklin County (Everbridge, requires signup) |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | The staff at the Road Department have duties which include to mow and trim vegetation that interfere with traffic and sight, repair and clean storm sewers, patch pavement, provide leaf collection, and snow removal on township roads. |
| Mutual aid agreements | No | - |
| Human Resources Manual | No | - |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | Franklin County Planning Commission |
| Engineers or professionals trained in building or infrastructure construction practices | No | Franklin County Building Department |
| Planners or engineers with an understanding of natural hazards | No | Franklin County Economic Development & Planning Department |
| Staff with expertise or training in benefit/cost analysis | Yes | The Fiscal Officer in Sharon Township |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | Franklin County has an Emergency Management and Homeland Security Department that covers the entire County. |
| Grant writer(s) | No | County assist the Township with grants. |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|------------------------|---|
| How do your administrative/technical capabilities contribute to risk reduction in your community? | | |
| The Township of Sharon is reliant on Franklin County for assistance with many of the administrative/technical capabilities. However, this partnership creates a greater understanding of the risks in the community at the County level so various funding opportunities and projects are able to be implemented. | | |

Fiscal Capability

The table below summarizes financial resources available to Sharon Township.

Table 9.33-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | No |
| Capital improvements project funding | No |
| Authority to levy taxes for specific purposes | No |
| User fees for water, sewer, gas, or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | No |
| Incur debt through special tax bonds | No |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | No |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Sharon Township.

Table 9.33-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|--|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | No | - |
| Hazard mitigation information available on your website | Yes | There are webpages dedicated to Storm Water Pollution, Public Health, Household Hazardous Waste, Recycling, Public Safety Awareness, and the USGS Water Monitor. |
| Social media for hazard mitigation education and outreach | Yes | The Township has a Facebook page. The page can be used for hazard mitigation education and outreach. |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Tornado sirens, Alert Franklin County (Everbridge, requires signup) |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | Yes | Social Media (Facebook) |

Community Classifications

The table below summarizes classifications for community programs available to Sharon Township.

Table 9.33-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.33-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee Failure | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temperatures | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornadoes | Moderate |

9.33.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP).

The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for Sharon Township.

Table 9.33-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|--------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Sharon (Twp) | NR | NR | NR | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)
^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Sharon Township.

Table 9.33-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | No |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | Evaluate the cost of repairs vs the pre-damaged value of structure. No substantial damage determinations made recently. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | Do not know many. |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | No, the most recent map update in 2007 did not include new analysis of streams. |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Franklin County Economic Development & Planning Department (EDP) |
| Are any certified floodplain managers on staff in your jurisdiction? | Yes |
| Do you have access to resources to determine possible future flooding conditions from climate change? | Unsure |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? | No |

| NFIP Topic | Comments |
|--|--|
| <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | |
| Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability) | Franklin County EDP provides permit review, response to resident enquiries about floodplains, enforcement |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Franklin County EDP will evaluate cost of improvements and current value of structure |
| What are the barriers to running an effective NFIP program in the community, if any? | N/A |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | 2017 |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | Special Resolution National Flood Insurance Program Regulation |
| Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? | 2007 |
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Yes, freeboard requirement |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | Floodplain management is administered by Franklin County EDP which also administers county zoning and subdivision regulations. |

9.33.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.33-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Multi-Family | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other (commercial, mixed-use, etc.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Permits Issued | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 9.33-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g., Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|--------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |

| Property or Development Name | Type (e.g., Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|--------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| There has been no major development or infrastructure from 2018 to present. | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| There are no known or anticipated major development and infrastructure in the next five (5) years. | | | | | |

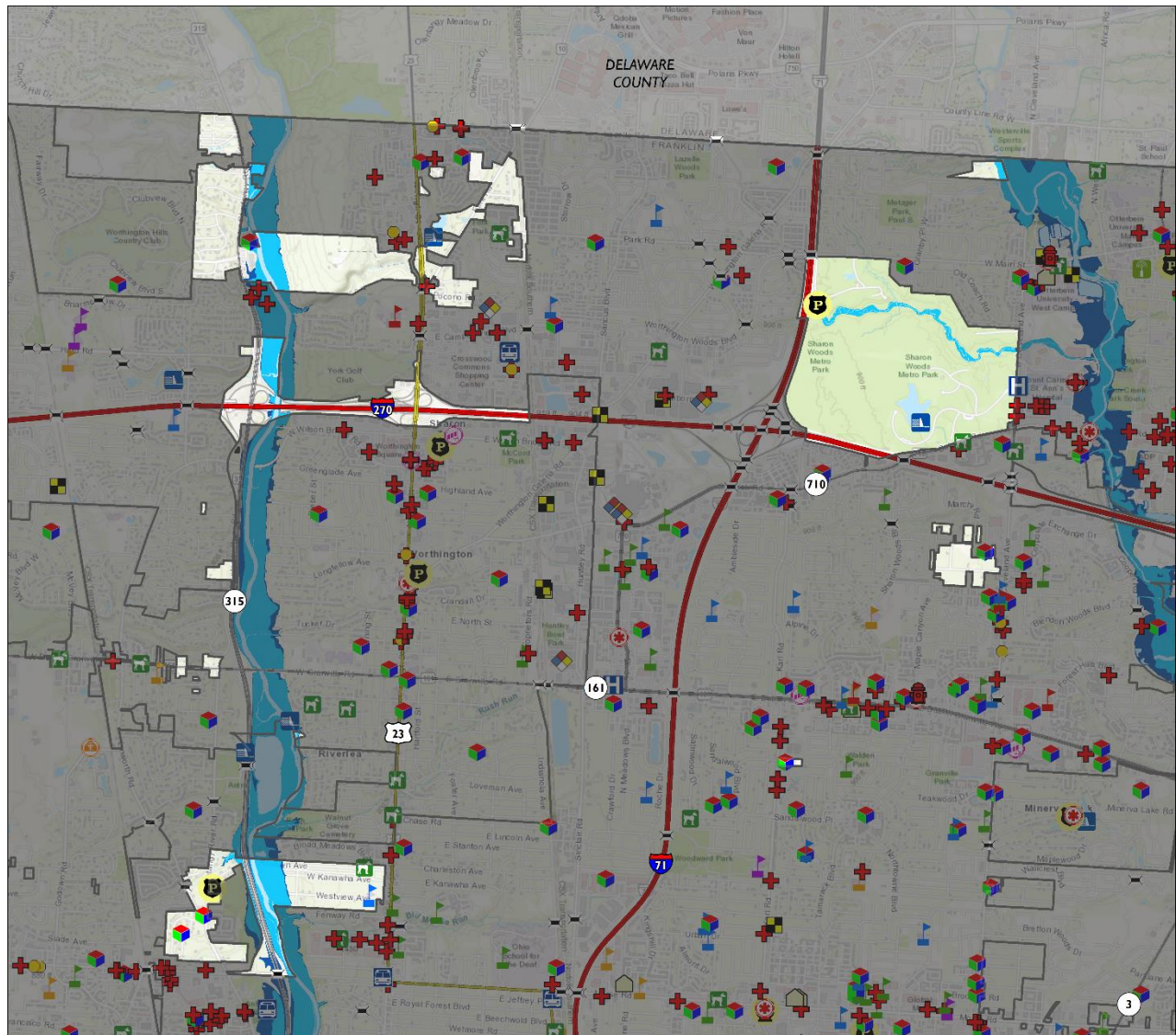
Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.33.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Sharon Township’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which Sharon Township has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.33-1. Sharon Township Hazard Area Extent and Location Map – Flood



Sharon (T)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | FEMA Flood Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | 1-Percent Annual Chance |
| Dam | Intermodal Facility | Research/Development Facility | 0.2-Percent Annual Chance |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | <i>The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.</i> |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | |
| EOC | Medical Supply Chain Facility | Veterinary Services | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021 |
| Electric Substation | Park and Ride | Wastewater Systems | Notes: City (C), Township (T), Village (V) |
| Emergency Medical Service | | | |

Figure 9.33-2. Sharon Township Hazard Area Extent and Location Map – Land Subsidence

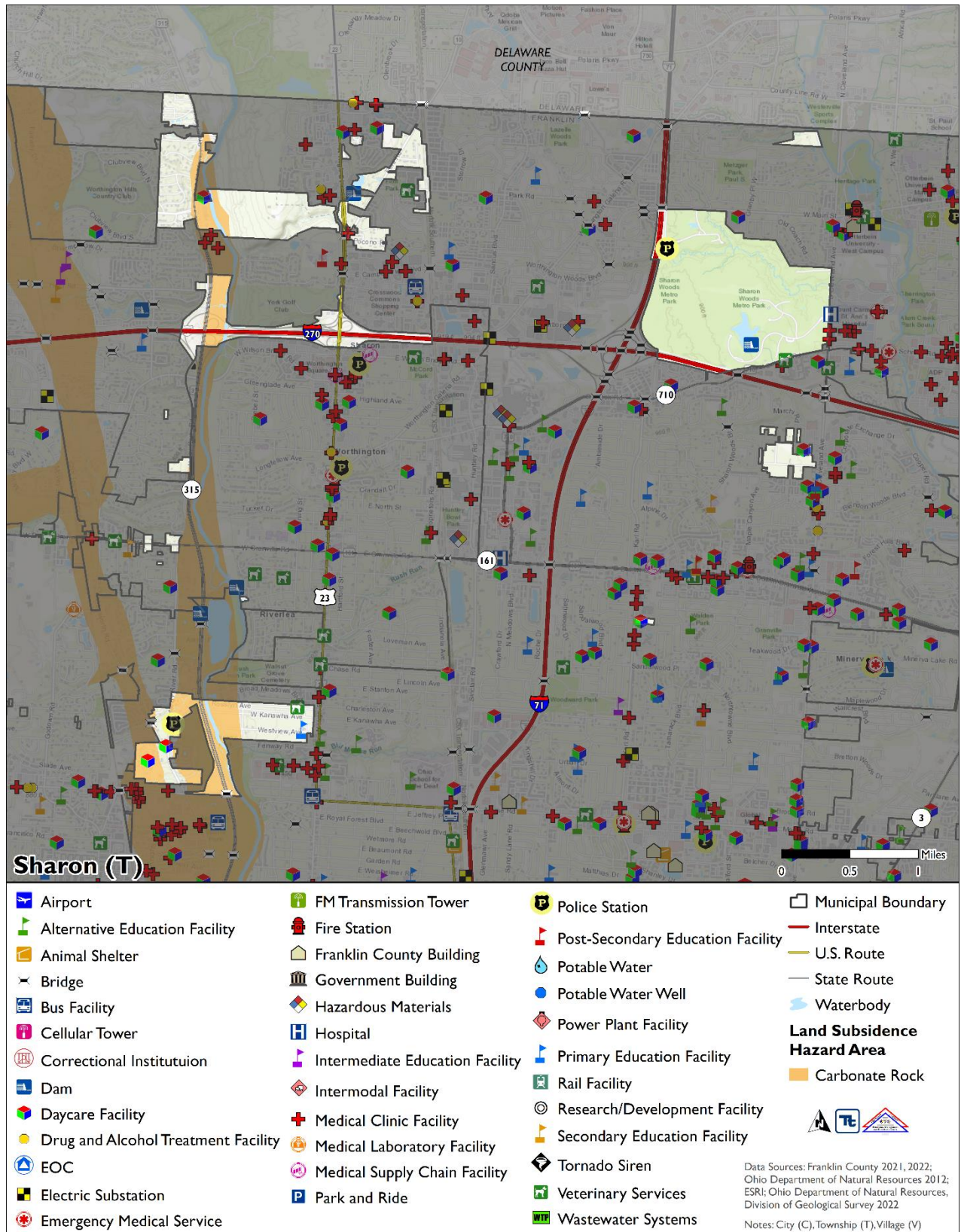
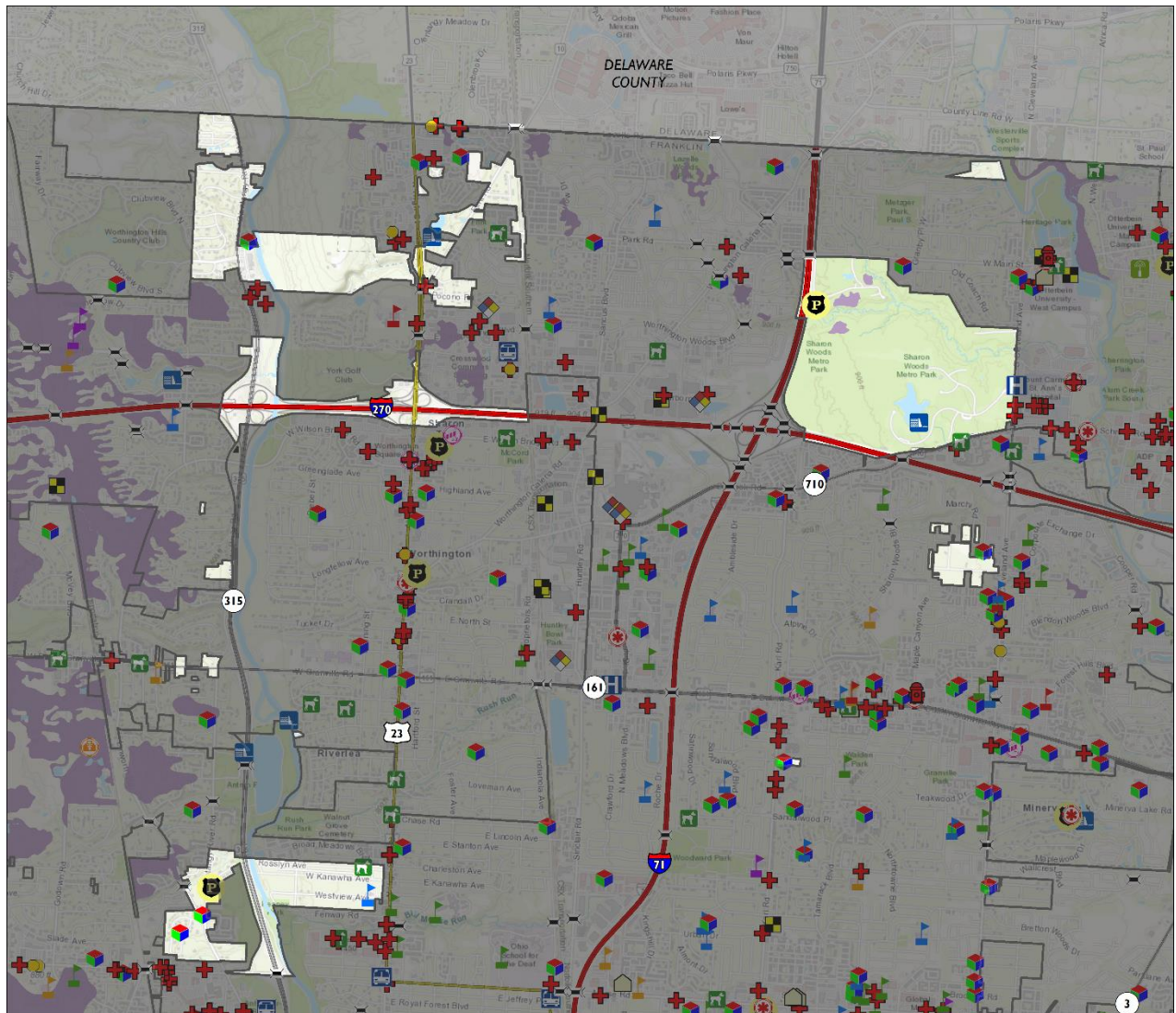


Figure 9.33-3. Sharon Township Hazard Area Extent and Location Map – Inland Erosion



Sharon (T)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|-----------------------------------|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Inland Erosion Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | K-Factor: ≥ 0.49 |
| Dam | Intermodal Facility | Research/Development Facility | |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | |
| EOC | Medical Supply Chain Facility | Veterinary Services | |
| Electric Substation | Park and Ride | Wastewater Systems | |
| Emergency Medical Service | | | |

Scale: 0 to 1 Miles

Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; United States Department of Agriculture, Natural Resources Conservation Service 2022

Notes: City (C), Township (T), Village (V)

Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Sharon Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Sharon Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.33-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Township did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Township did not experience any notable damages or losses. |
| March 2020-present | Covid-19 Pandemic | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Township did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazard’s of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below

summarizes the hazard risk/vulnerability rankings of potential natural hazards for Sharon Township. Sharon Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Sharon Township indicated that the hazard ranking was appropriate.

Table 9.33-14. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee Failure | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temperatures | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornadoes | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.33-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Sharon Township

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 3 | 2 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | 2 | 2 |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Sharon Township identified the following vulnerabilities within its community:

- Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.
- Local roadways become inundated with flood waters during heavy rainfalls.
- The Township does not have a centralized way to notify residents of potential hazards and problem areas.

9.33.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation action, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The 2018 Franklin County HMP did not identify mitigation actions for Sharon Township, therefore no actions are displayed in the table below.

Table 9.33-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---------|-------------------|--|---|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| - | - | - | - | - | - |

Additional Mitigation Efforts

Sharon Township did not identify any additional mitigation efforts completed since the last HMP.

Since the adoption of the County's first HMP, Sharon Township has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and the CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.33-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee Failure | - | - | - | X | - | - | X | - | - | X |
| Disease Outbreak | - | - | - | X | - | - | X | - | - | X |
| Drought | - | - | - | X | - | - | X | - | - | X |
| Earthquake | - | - | - | X | - | - | X | - | - | X |
| Extreme Temperatures | - | - | - | X | - | - | X | - | - | X |
| Flood | - | X | - | X | X | - | X | - | - | X |
| Geologic | - | - | - | X | - | - | X | - | - | X |
| Invasive Species | - | - | - | X | - | - | X | - | - | X |
| Severe Summer Weather | - | X | - | X | X | - | X | - | - | X |
| Severe Winter Weather | - | - | - | X | - | - | X | - | - | X |
| Tornadoes | - | - | - | X | - | - | X | - | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.33-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the specific mitigation action Sharon Township would like to pursue in the future to reduce the effects of hazards. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.33-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|----------------------------------|---|--|-----------|--------------------|---|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-Sharon-01 | All-Hazards Education Campaign | <p>Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.</p> <p>Solution: Work with Franklin County EM&HS to provide residents of Sharon Township with the necessary information to protect themselves and understand the threats of all hazards.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 2, 4, 5 | 2 years | Franklin County EM&HS, Sharon Township Administration | HMGP, Local Funds | High | Low | High | EAP | PI |
| 2023-Sharon-02 | Storm Maintenance Program Update | <p>Problem: Local roadways become inundated with flood waters during heavy rainfalls.</p> <p>Solution: Update stormwater maintenance program to include maintenance activities prior to an upcoming storm.</p> | Flood, Severe Summer Weather | 3, 6 | 1 year | Sharon Township Public Works | Local Funds | High | Low | High | SIP | PR |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|---------------------------------|---|--|-----------|--------------------|--|---|--|--------------------------|----------|---------------------|--------------|
| 2023-Sharon-03 | Alert Franklin County Campaign | <p>Problem: The Township does not have a centralized way to notify residents of potential hazards and problem areas.</p> <p>Solution: Partner with Franklin County EM&HS, to promote the ALERT Franklin system so residents can stay informed and aware of any impending hazards.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 4, 5 | 2 years | Franklin County EM&HS, Sharon Township Administration | HMGP, Local Funds | High | Low | High | EAP | ES |
| 2023-Sharon-04 | Repetitive Loss Area Mitigation | <p>Problem: Portions of the Township experienced repetitive flooding.</p> <p>Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity.</p> | Flood | 6 | 4 years | Sharon Township Administration, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
FEMA Federal Emergency Management Agency

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program

BRIC Building Resilient Infrastructure and Communities Program

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.33-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------|--------------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Sharon-01 | All Hazards Public Outreach Campaign | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 10 | High |

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------|-----------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Sharon-02 | Storm Maintenance Program Updates | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 11 | High |
| 2023-Sharon-03 | Alert Franklin County Campaign | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 10 | High |
| 2023-Sharon-04 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.34 TRURO TOWNSHIP

This section presents the jurisdictional annex for Truro Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Truro Township participated in the planning process, an assessment of Truro Township’s risk and vulnerability, the different capabilities used in Truro Township, and an action plan that will be implemented to achieve a more resilient community.

9.34.1 Hazard Mitigation Planning Team

Truro Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Township departments. The Township Administrator represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.34-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|--|
| Name/Title: | Jason W. Nicodemus, Township Administrator | Name/Title: | Jeff Sharps, Fire Chief |
| Address: | 6900 E. Main Street, Reynoldsburg, OH 43068 | Address: | 6900 E. Main Street, Reynoldsburg OH 43068 |
| Phone Number: | (614) 866-1317 | Phone Number: | (614) 729-1901 |
| Email: | jnicodemus@trurotp.org | Email: | chiefsharps@trurotp.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Matt Brown, Planning and Floodplain Administrator | | |
| Address: | 150 S. Front St., FSL, Suite 10, Columbus, OH 43215 | | |
| Phone Number: | (614) 525-5647 | | |
| Email: | mybrown@franklincountyohio.gov | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.34.2 Municipal Profile

The Truro Township is located along the eastern side of Franklin County and is bordered by Jefferson and Mifflin Township to the north, Montgomery Township to the west, Madison Township to the south and Licking County borders the Township to the east. Most of what was once Truro Township has been annexed by the cities of Reynoldsburg, in the east, and Columbus everywhere else, although the village of Brice is located in southern Truro Township, and several small unincorporated portions remain. A prominent creek that flows through the Truro is Blacklick Creek, which has a few different tributaries that covers most of east Truro Township.

According to the American Community Survey, the 2021 population for Truro Township was 30,165, a 12.4 percent increase from the 2010 Census population of 26,837. Data from the 2021 American Community Survey indicates that 7.1 percent of the population is 5 years of age or younger and 14.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.34.3 Jurisdictional Capability Assessment and Integration

Truro Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Truro Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Truro Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.34-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|--|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | 2019 Residential Code of Ohio | County | Franklin County Economic Development and Planning Department |
| <i>How does this reduce risk?</i> Provides restrictions and requirements on how buildings must be constructed. | | | | |
| Zoning/Land Use Code | Yes | Franklin County Zoning Resolution – October 11, 2022 | County | Zoning Officer |
| <i>How does this reduce risk?</i> Specifies the allowable uses of land within each district, the regulations pertaining to the development and use of the land, and buildings are uniform for each class or kind of building. | | | | |
| Subdivision Ordinance | Yes | Franklin County Subdivision Regulations – March 27, 2012 | County | Franklin County Economic Development and Planning Department |
| <i>How does this reduce risk?</i> Manage growth and development in accordance with plans, policies, and resolutions of the FCPC, county and townships and surrounding area plans. Provide for adequate and convenient open spaces for traffic, utilities, fire and maintenance forces, recreation, light and air. Provide for the preservation of natural resources, sensitive natural areas, and natural features. Provide safety from fire, flood, and other danger. Address public requirements and facilities, traffic circulation, stormwater management, water and sanitary services, open space, airport noise and hazard areas. | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | Yes | Franklin County Stormwater Drainage Manual – March 13, 2012 | County | Franklin County Economic Development and Planning Department |
| <i>How does this reduce risk?</i> To help improve/ensure proper drainage and to protect natural water ways. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | Franklin County's Flood Damage Reduction Regulation – September 19, 2007 | County | Franklin County Floodplain Administrator |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Provides a vision that achieves the goals of preparing for future growth while protecting the desires of the community; enhancing the quality of life for Truro Township residents; and ensuring that the community is safe and well cared for. | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | Yes | Franklin County Stormwater Management Plan – December 19, 2016 | County | Stormwater Executive Committee |
| <i>How does this reduce risk?</i> | | | | |
| The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. Polluted stormwater runoff is often transported through municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. To address this reality, federal and state regulations require the establishment of MS4 stormwater management programs to improve the nation's waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events. The MS4 Stormwater Permit outlines six minimum measures (MCMs) that a SWMP must address. These minimum measures are: | | | | |
| <ol style="list-style-type: none"> 1) public education and outreach, 2) public participation / involvement, 3) illicit discharge detection and elimination (IDDE), 4) construction site runoff control, 5) post-construction runoff control and 6) pollution prevention / good housekeeping for municipal operations. | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Shoreline Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of Truro Township to oversee and track development.

Table 9.34-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? • If yes, what department is responsible? | No | Truro Township does not provide zoning services nor issue building permits. These services are provided by either the City of Reynoldsburg or Franklin County. |
| If you do not issue development permits, what is your process for tracking new development? | N/A | There is no process. The Township relies on the City of Reynoldsburg or Franklin County to track new development. |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | The building permit application asks for floodplain information so it can be applied to building code requirements if needed. Franklin County Development issues floodplain permits in Truro Township. The permits issued by Franklin County are sent to various departments for review, depending on the nature of the work. If any issues arise, it is noted and discussed. |
| Do you have a buildable land inventory? • If yes, please describe | No | The Township does not have a buildable land inventory. However, the County stores information at the Auditor's Office. Some information can be found online utilizing the Auditor's Office County webpage. |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Truro Township and their current responsibilities that contribute to hazard mitigation.

Table 9.34-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|---------------------|--|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | No | - |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | Yes | The Roads Department currently maintains 3.625 miles of roads in the Township, which consists of: <ul style="list-style-type: none"> • Snow Removal • Road Repairs • Storm water drainage • Road signage • Trimming of trees and cleanup of fallen trees • Litter, bulk trash, and dead animal removal from road rights-of-way <ul style="list-style-type: none"> • Mowing of roadside, etc. • Maintenance Technician – 1 staff (full-time) |
| Construction/Building/Code Enforcement Department | No | - |
| Emergency Management/Public Safety Department | Yes | Truro Township Fire Department serves Reynoldsburg, Brice, and Truro Township. Fire/EMS Department – 44 staff (full-time) |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| | | Truro Township does not provide police services. These services are provided by either the City of Reynoldsburg or Franklin County. |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | No | - |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | No | - |
| Mutual aid agreements | No | - |
| Human Resources Manual | No | - |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | - |
| Engineers or professionals trained in building or infrastructure construction practices | No | - |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to Truro Township.

Table 9.34-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | No |
| Capital improvements project funding | No |
| Authority to levy taxes for specific purposes | No |
| User fees for water, sewer, gas or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | No |
| Incur debt through special tax bonds | No |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | No |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Truro Township.

Table 9.34-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|--------------------------------------|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | No | - |
| Hazard mitigation information available on your website | Yes | Information on stormwater management |
| Social media for hazard mitigation education and outreach | No | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | No | - |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | No | - |

Community Classifications

The table below summarizes classifications for community programs available to Truro Township.

Table 9.34-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.34-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.34.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for Truro Township.

Table 9.34-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|--------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Truro (Twp) | NR | NR | NR | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfip-services.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Truro Township.

Table 9.34-10. NFIP Summary

| NFIP Topic | Comments |
|--|----------|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. Do you maintain a list of properties that have been damaged by flooding? | No |
| Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |

| NFIP Topic | Comments |
|---|---|
| Are any RiskMAP projects currently underway in your jurisdiction? If so, state what projects are underway. | No |
| How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | Evaluate the cost of repairs vs the pre-damaged value of structure. No substantial damage determinations made recently. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? If there are mitigated properties, how were the projects funded? | Unknown |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? If not, state why. | No, the most recent map update in 2007 did not include new analysis of streams. |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Franklin County Economic Development & Planning Department (EDP) |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | Unsure |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | Franklin County EDP provides permit review, response to resident enquiries about floodplains, enforcement |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Franklin County EDP will evaluate cost of improvements and current value of structure |
| What are the barriers to running an effective NFIP program in the community, if any? | N/A |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | 2017 |
| What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | Special Resolution National Flood Insurance Program Regulation |
| Does your floodplain management program meet or exceed minimum requirements? If exceeds, in what ways? | 2007 |
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Yes, freeboard requirement |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

9.34.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.34-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | - | - | - | - | - | - | - | - | - |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | - | - | - | - | - | - | - | - | - | - |

Table 9.34-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g., Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|--------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

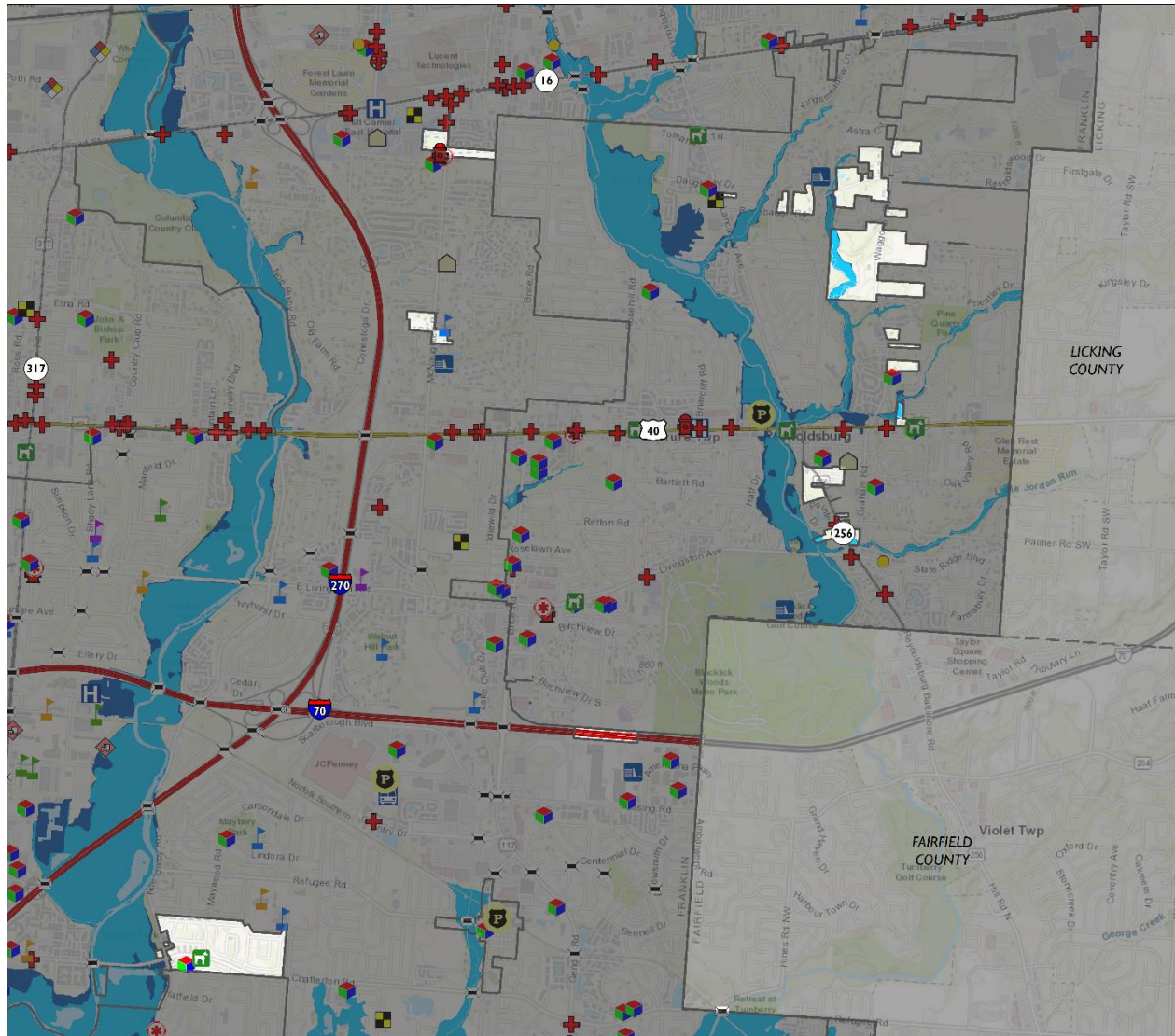
Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.34.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Truro Township’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which Truro Township has significant exposure. The maps also show the location of potential new development, where available.

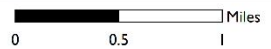
Figure 9.34-1. Truro Township Hazard Area Extent and Location Map – Flood



Truro (T)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service
- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems



- Municipal Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody
- FEMA Flood Hazard Area**
- 1-Percent Annual Chance
- 0.2-Percent Annual Chance

The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.



Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021
Notes: City (C), Township (T), Village (V)

Figure 9.34-2. Truro Township Hazard Area Extent and Location Map – Land Subsidence

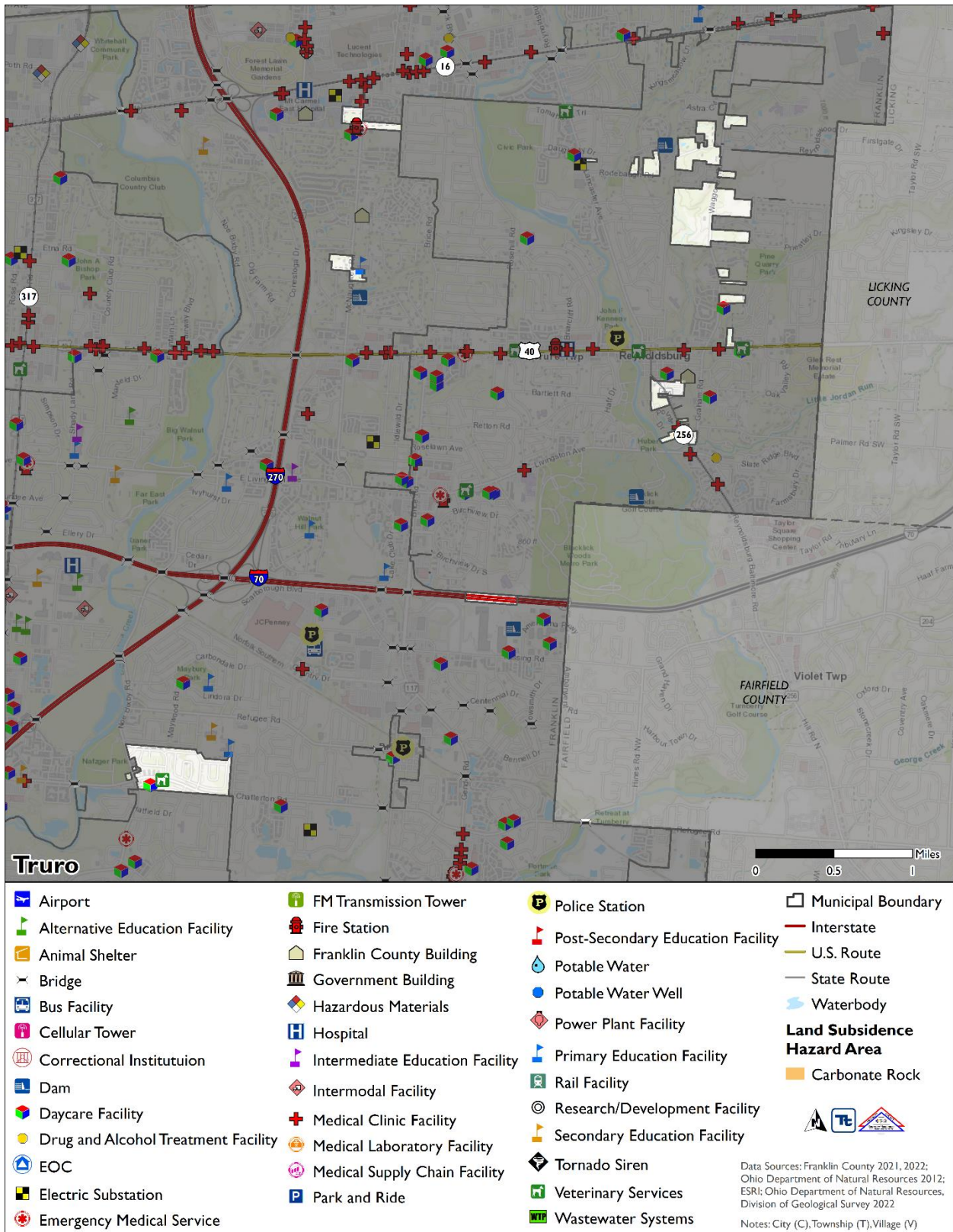
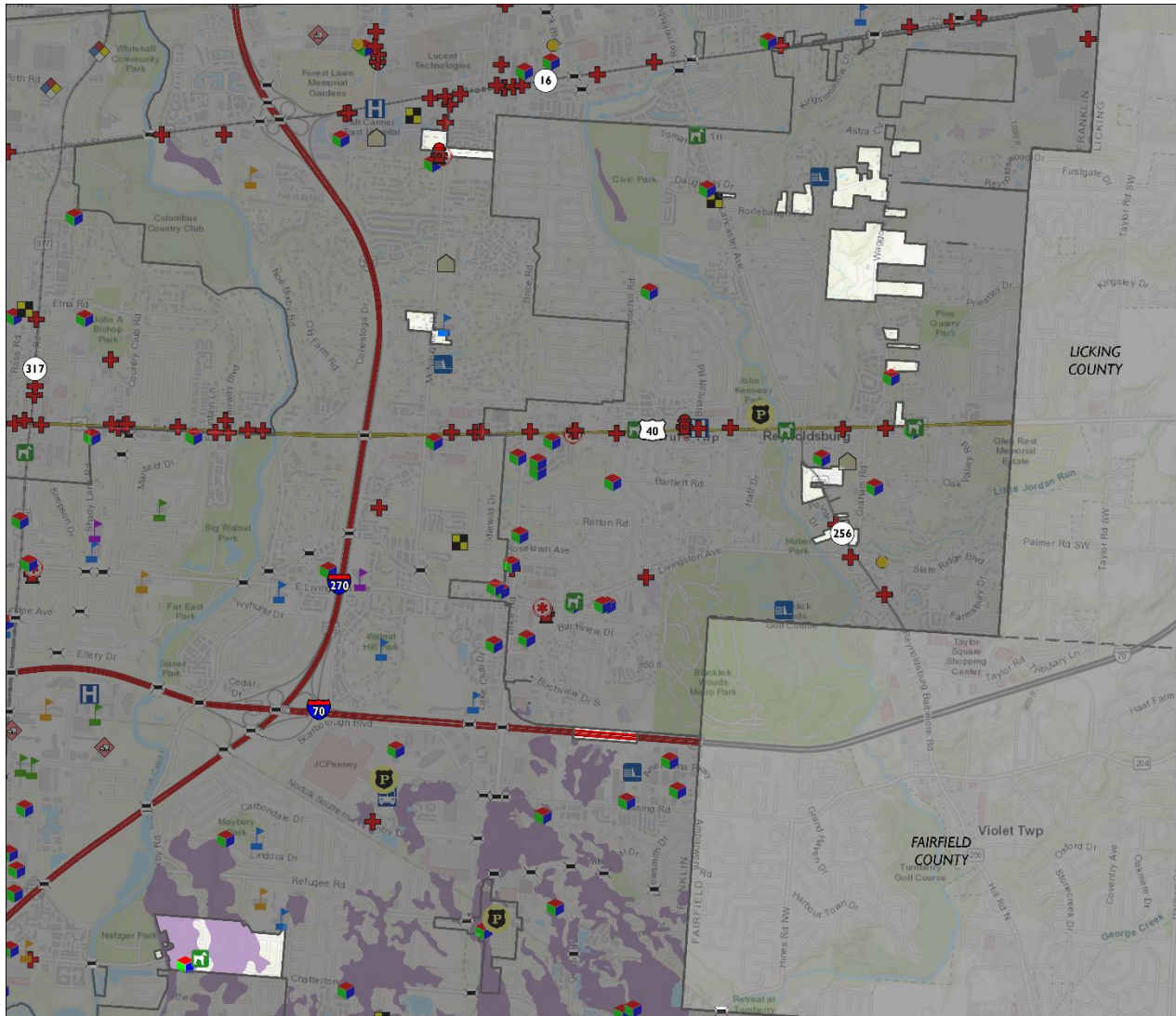


Figure 9.34-3. Truro Township Hazard Area Extent and Location Map – Inland Erosion



Truro (T)

- | | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Inland Erosion Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | K-Factor: >=0.49 |
| Dam | Intermodal Facility | Research/Development Facility | |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; United States Department of Agriculture, Natural Resources Conservation Service 2022 |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | Notes: City (C), Township (T), Village (V) |
| EOC | Medical Supply Chain Facility | Veterinary Services | |
| Electric Substation | Park and Ride | Wastewater Systems | |
| Emergency Medical Service | | | |

0 0.5 1 Miles

Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Truro Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage that Truro Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.34-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| April 3-4, 2018 | EF-1 Tornado | N/A | Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage. | Although the County was impacted, the Township did not report damages. |
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | Although the County was impacted, the Township did not report damages. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | Although the County was impacted, the Township did not report damages. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths were reported in the County. | The Township was subject to closures and masking/social distancing requirements. |
| August 17, 2021 | Flash Flooding | N/A | Heavy rains, 4.5”+ in hour and half, from remnants of Tropical Depression Fred, developed over the city of Reynoldsburg. Caused substantial street flooding in Reynoldsburg. | No known damages/losses to Truro Township. Township Fire and EMS Department responded to numerous calls and alarms. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community

capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for Truro Township. Truro Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, Truro Township indicated the preliminary hazard rankings were appropriate for the jurisdiction.

Table 9.34-14. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.34-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in Truro Township

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | - |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | 1 | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Truro Township identified the following vulnerabilities within its community:

- Residents may not be informed or educated on how to protect themselves and their property from the various hazards which may impact the Village.
- The Township does not have a Comprehensive Plan developed that integrates the current HMP into regulations and limitations.

9.34.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.34-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|---------------------------|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Extreme heat - Fan collection/distribution program for senior population | Township Trustees office | Ongoing Capability. Project is conducted yearly. Public donates fans to fire department for distribution | No | - | - |
| Seek funding for public information including outreach projects and technical assistance to property owners. (5000 / 1 year) | Township Trustee's office | In Progress | Yes | Public Educational Opportunities | Township Trustee's Office |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, Truro Township identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County's first HMP, the Truro Township has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

Truro Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide-range of activities and mitigation measures selected.

Table 9.34-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | - | - | X | X | - | X | - | - | - |
| Disease Outbreak | X | - | - | X | X | - | X | - | - | - |
| Drought | X | - | - | X | X | - | X | - | - | - |
| Earthquake | X | - | - | X | X | - | X | - | - | - |
| Extreme Temp | X | - | - | X | X | - | X | - | - | - |
| Flood | X | - | - | X | X | - | X | - | - | - |
| Geologic | X | - | - | X | X | - | X | - | - | - |
| Invasive Species | X | - | - | X | X | - | X | - | - | - |
| Severe Summer Weather | X | - | - | X | X | - | X | - | - | - |
| Severe Winter Weather | X | - | - | X | X | - | X | - | - | - |
| Tornado | X | - | - | X | X | - | X | - | - | - |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.34-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions that Truro Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.34-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|--------------------------------|--|--|-----------|--------------------|---|---------------------------|--|-----------------|----------|---------------------|--------------|
| 2023-Truro Township-001 | All-Hazards Education Campaign | Problem: Residents may not be informed or educated on how to protect themselves and their property from the various hazards which may impact the Village. Solution: Work with Franklin County EM&HS to provide residents with the necessary information to understand the threats of all hazards and protect themselves and their property. | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 2, 4, 5 | 2 years | Franklin County EM&HS and Township Trustee's Office | HMGP, Local Funds | The Township residents will be better educated. | Low | High | EAP | PI |
| 2023-Truro Township-002 | Comprehensive Plan Development | Problem: The Township does not have a Comprehensive Plan developed that integrates the current HMP into regulations and limitations. Solution: The Township will develop a Comprehensive Plan that integrates the HMP to guide development based on hazard area and problem areas. This plan will also address invasive species areas and will identify potential vaccination sites and shelters. | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 1, 6 | 1 Year | Township Administration | Local Funds | The Township will have a plan to guide growth and development that integrates the HMP. | Staff Time | High | LPR | PR |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|---------------------------------|--|---------------------------|-----------|--------------------|---|---|--|--------------------------|----------|---------------------|--------------|
| 2023-Truro Township-003 | Repetitive Loss Area Mitigation | Problem: Portions of the Township experienced repetitive flooding. Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | Flood | 6 | 4 years | Township Administration, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.

- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.34-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-------------------------|---------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Truro Township-001 | All-Hazards Education Campaign | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 11 | High |
| 2023-Truro Township-002 | Comprehensive Plan Development | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 12 | High |
| 2023-Truro Township-003 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.35 CITY OF UPPER ARLINGTON

This section presents the jurisdictional annex for the City of Upper Arlington that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Upper Arlington participated in the planning process, an assessment of the City of Upper Arlington’s risk and vulnerability, the different capabilities used in the City of Upper Arlington, and an action plan that will be implemented to achieve a more resilient community.

9.35.1 Hazard Mitigation Planning Team

The City of Upper Arlington identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Upper Arlington departments, including the Fire Department, City Manager, and City Planning. The Assistant Fire Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.35-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|--|
| Name/Title: | Chris Zimmer/Assistant Fire Chief | Name/Title: | Jackie Thiel/Assistant City Manager |
| Address: | 3600 Tremont Rd. Upper Arlington OH 43221 | Address: | 3600 Tremont Rd. Upper Arlington OH 43221 |
| Phone Number: | 614-583-5000 | Phone Number: | 614-583-5000 |
| Email: | czimmer@uaoh.net | Email: | jthiel@uaoh.net |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Justin Milam, Planning Officer | | |
| Address: | 3600 Tremont Road, Upper Arlington, OH 43221 | | |
| Phone Number: | 614-583-5083 | | |
| Email: | - | | |
| Additional Contributors: | | | |
| Name/Title: | Alyssa Kelly/Planning Officer | | |

| | |
|---|--|
| Method of Participation: | Provided key input throughout the planning process |
| Name/Title: Method of Participation: | Aaron Scott P.E./Assistant City Engineer Provided key input throughout the planning process |

9.35.2 Municipal Profile

The City of Upper Arlington is in the northwest area of Franklin County. Upper Arlington is bordered on the west by the Scioto River, on the north and east by Columbus, and on the south by Marble Cliff and Grandview Heights. The Olentangy River and the main campus of the Ohio State University are a short distance to the east of Upper Arlington.

According to the American Community Survey, the 2021 population for the City was 36,566, a 8.28 percent increase from the 2010 Census population of 33,771. Data from the 2021 American Community Survey indicates that 8.4 percent of the population is 5 years of age or younger and 16.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.35.3 Jurisdictional Capability Assessment and Integration

The City of Upper Arlington performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Upper Arlington to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Upper Arlington and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.35-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Part 13 – Building Code | Local, State | Community Development |
| <i>How does this reduce risk?</i> All new buildings and structures must comply with state and local codes. This reduces risk to healthy, safety and welfare of community members. | | | | |
| Zoning/Land Use Code | Yes | Part 11 – Unified Development Ordinance | Local | Community Development |
| <i>How does this reduce risk?</i> The zoning code establishes dimensional, use, and performance standards for development to ensure that development is compatible with the area and that areas are not overdeveloped. Additional standards are required to develop in a floodplain. | | | | |
| Subdivision Ordinance | Yes | Part 11 – Unified Development Ordinance | Local | Community Development |
| <i>How does this reduce risk?</i> The subdivision regulations require detailed information on existing geographic features and how an area will be developed, including access, utilities, and drainage, to mitigate risk. Additional standards are required to develop in a floodplain. | | | | |
| Site Plan Ordinance | Yes | Part 11 – Unified Development Ordinance | Local | Community Development |
| <i>How does this reduce risk?</i> The site plan regulations require detailed information on existing geographic features and how a site will be developed. | | | | |
| Stormwater Management Ordinance | Yes | Part 11 – Unified Development Ordinance | Local | Public Service |
| <i>How does this reduce risk?</i> The utility shall monitor the design, operation, maintenance, inspection and construction of all stormwater systems in the city. The utility shall be responsible for the design and construction of public stormwater systems in the city and shall inspect, operate and maintain them. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | Part 11, 6.05 – Floodplain Design Standards | Local | Community Development |
| <i>How does this reduce risk?</i> The ordinance discourages or prohibits development within flood hazard areas. | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | Yes | Historic Preservation Ordinance | Local | Community Development |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | City of Upper Arlington Master Plan | Local | Community Development |
| <i>How does this reduce risk?</i> The City's Master Plan encourages growth in existing commercial areas that are already developed and provide the appropriate location for additional growth and development. The City's maps identify 100-year floodplain zones to avoid. | | | | |
| Capital Improvement Plan | Yes | Upper Arlington CIP | Local | Engineering |
| <i>How does this reduce risk?</i> The City is able to plan for large budget expenditures to make sure roadways, utilities, parks, etc. are maintained for the future. | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | Yes | Stormwater Management Plan | Local | Public Service |
| <i>How does this reduce risk?</i> This helps the City plan for and mitigate potential stormwater or flooding issues. | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | Yes | Economic Development Blueprint | Local | Economic Development |
| <i>How does this reduce risk?</i> The Economic Development Plan encourages development/redevelopment in key corridors and aims to attract and retain businesses. This focuses investment where development has already occurred and modernizes sites and buildings, reducing risk during hazardous events. | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | Yes | Transportation Plan | Local | Public Service |
| <i>How does this reduce risk?</i> This ensures City facilities are adequate for growth and for emergency situations. | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> The City's Sustainability Agenda identifies objectives and strategies to reducing waste, pollution, and emissions and increasing social, economic, and environmental resiliency in the City. | Yes | Sustainability Agenda | Local | Green Team |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> Consider the following: <ul style="list-style-type: none"> Does your CEMP cover short-term response and long-term recovery to address communications, evacuation, and housing necessary for identified hazards? | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | Yes | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | Yes | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of the City of Upper Arlington to oversee and track development.

Table 9.35-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|--|--------|---|
| Do you issue development permits? <ul style="list-style-type: none"> If yes, what department is responsible? | Yes | All permits relating to construction- building, trade, planning, etc. |

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | - |
| Do you have a buildable land inventory? • If yes, please describe | No | The City is entirely built out. |
| Describe the level of build-out in your jurisdiction. | N/A | Upper Arlington is an inner-ring, fully built-out suburb. |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Upper Arlington and their current responsibilities that contribute to hazard mitigation.

Table 9.35-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|---------------------|---|
| Administrative Capability | | |
| Planning Board | Yes | Board of Zoning and Planning |
| Zoning Board of Adjustment | Yes | Board of Zoning and Planning |
| Planning Department | Yes | Community Development |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | Yes | Tree Commission, UA Green Team |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | Yes | Community Improvement Corporation |
| Public Works/Highway Department | Yes | Public Works |
| Construction/Building/Code Enforcement Department | Yes | Community Development |
| Emergency Management/Public Safety Department | Yes | Public Works, Police and Fire |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Public Works, Police and Fire |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Parks & Recreation Department |
| Mutual aid agreements | Yes | - |
| Human Resources Manual | Yes | Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? |
| Other | - | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | - |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | - |
| Planners or engineers with an understanding of natural hazards | Yes | - |
| Staff with expertise or training in benefit/cost analysis | Yes | - |
| Professionals trained in conducting damage assessments | Yes | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | Yes | Professional Engineers on Staff. |

Fiscal Capability

The table below summarizes financial resources available to the City of Upper Arlington.

Table 9.35-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | No |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | Yes |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Upper Arlington.

Table 9.35-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|--------------------------------|
| Public information officer or communications office | Yes | - |
| Personnel skilled or trained in website development | Yes | - |
| Hazard mitigation information available on your website | Yes | - |
| Social media for hazard mitigation education and outreach | Yes | - |
| Citizen boards or commissions that address issues related to hazard mitigation | Yes | - |
| Warning systems for hazard events | Yes | - |
| Natural disaster/safety programs in place for schools | Yes | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | Yes | Social media and e-newsletters |

Community Classifications

The table below summarizes classifications for community programs available to the City of Upper Arlington.

Table 9.35-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | Yes | 4 | 9/10/2019 |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | - | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.35-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.35.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP).

The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Upper Arlington.

Table 9.35-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|---------------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Upper Arlington (C) | 39 | 49 | \$204,904.19 | 3 | 0 |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Upper Arlington.

Table 9.35-10. NFIP Summary

| NFIP Topic | Comments |
|--|--|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | No |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | N/A |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | Yes, but are possibly too liberal |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Engineering Division, Planning Division |

| NFIP Topic | Comments |
|---|---|
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | Permit review, GIS |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Increase of >20% of GFA |
| What are the barriers to running an effective NFIP program in the community, if any? | Property surveying, changes in streambank |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | N/A UDO Article 6.05 12-14-2015 |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | Meet |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Flood Plain Permit reviewed by Planning and Engineering Divisions |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | n/a |

9.35.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.35-11. Number of Building Permits for New Construction Since the Previous HMP

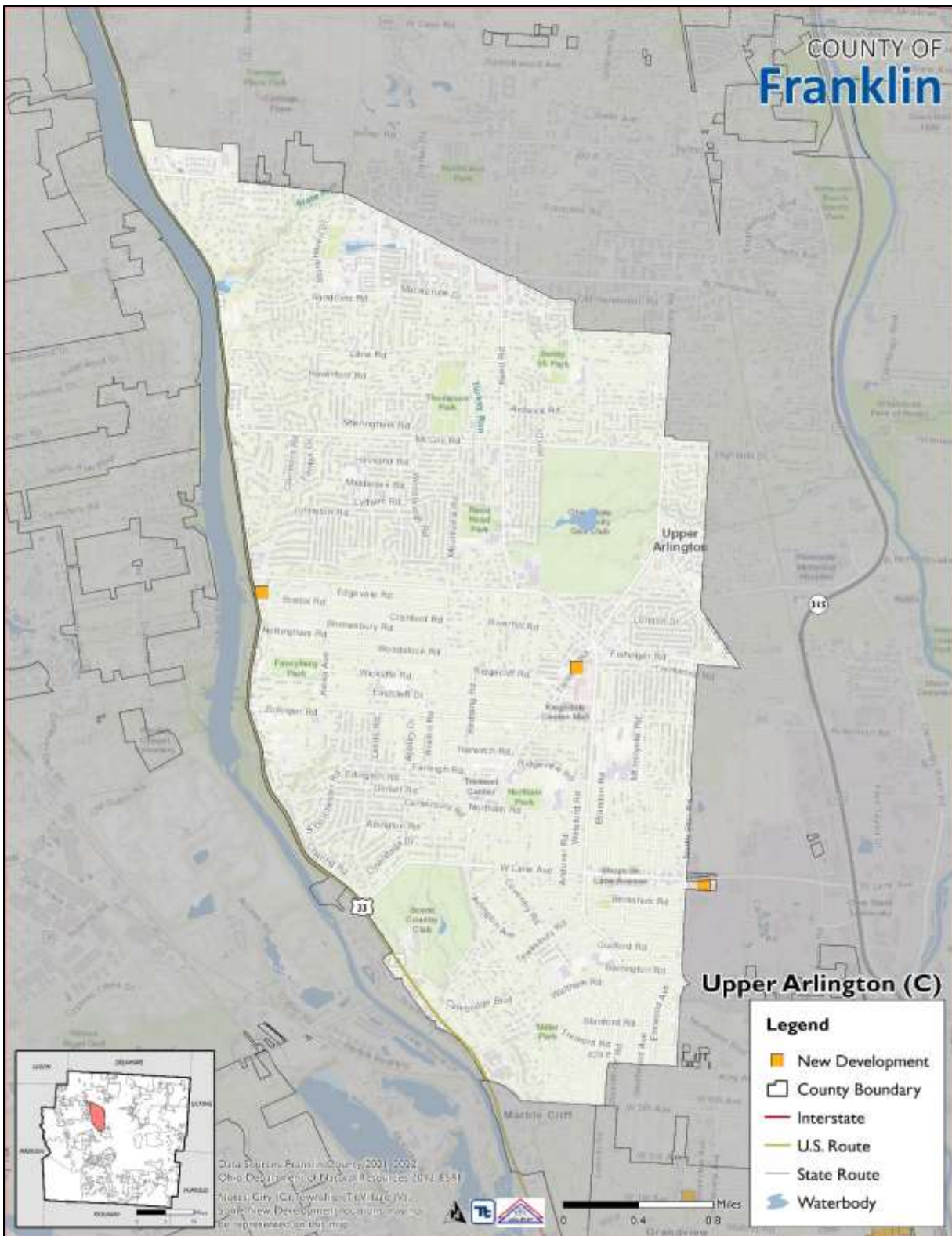
| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 47 | 0 | 25 | 0 | 35 | 0 | 19 | 0 | 27 | 0 |
| Multi-Family | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Other (commercial, mixed-use, etc.) | 4 | 0 | 11 | 0 | 1 | 0 | 7 | 0 | 11 | 0 |
| Total Permits Issued | 51 | 0 | 36 | 0 | 36 | 0 | 27 | 0 | 38 | 0 |

Table 9.35-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| Westmont at the Lane | Mixed-use | 133 | 1600 W. Lane Ave | n/a | Open |
| Arlington Gateway | Mixed-use | 97 | 1325 W. Lane Ave | n/a | Under Construction |
| Kingsdale | Mixed-use | 467 | 3220 Tremont Rd | n/a | Under Construction |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| Golden Bear | Mixed-use | 79 | 3700 Riverside Dr | n/a | Pending |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

Figure 9.35-1. City of Upper Arlington New Development Map

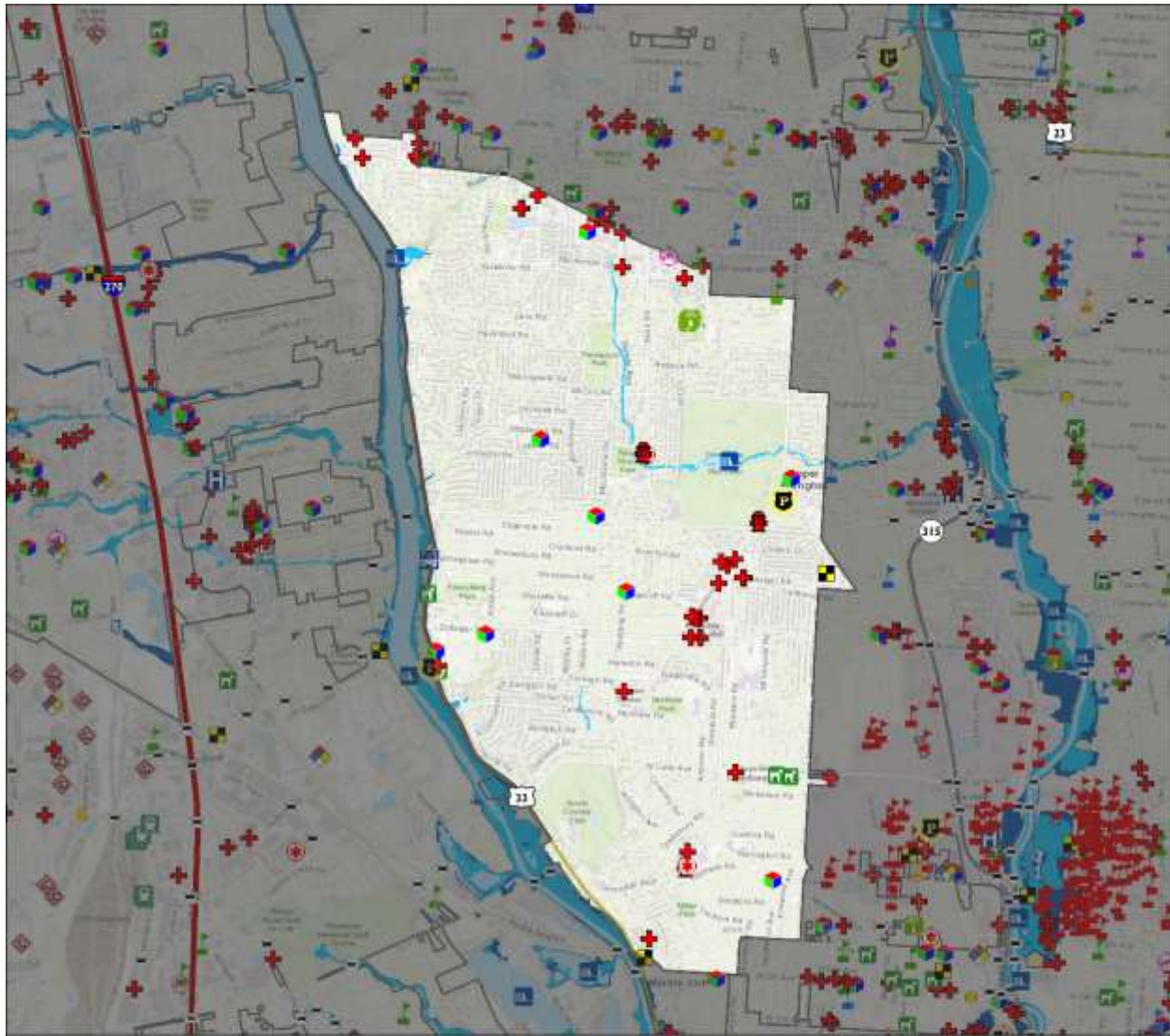


9.35.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Upper Arlington's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Upper Arlington has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.35-2. City of Upper Arlington Hazard Area Extent and Location Map-Flood



Upper Arlington (C)

| | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | 0 0.5 1 Miles |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Municipal Boundary |
| Animal Shelter | Franklin County Building | Potable Water | Interstate |
| Bridge | Government Building | Potable Water Well | U.S. Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | State Route |
| Cellular Tower | Hospital | Primary Education Facility | Waterbody |
| Correctional Institution | Intermediate Education Facility | Rail Facility | FEMA Flood Hazard Area |
| Dam | Intermodal Facility | Research/Development Facility | 1-Percent Annual Chance |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | 0.2-Percent Annual Chance |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | <small>The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.</small> |
| EOC | Medical Supply Chain Facility | Veterinary Services | Tetra Tech and Franklin County logos |
| Electric Substation | Park and Ride | Wastewater Systems | <small>Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021</small> |
| Emergency Medical Service | | | <small>Notes: City (C), Township (T), Village (V)</small> |

Figure 9.35-3. City of Upper Arlington Hazard Area Extent and Location Map-Inland Erosion

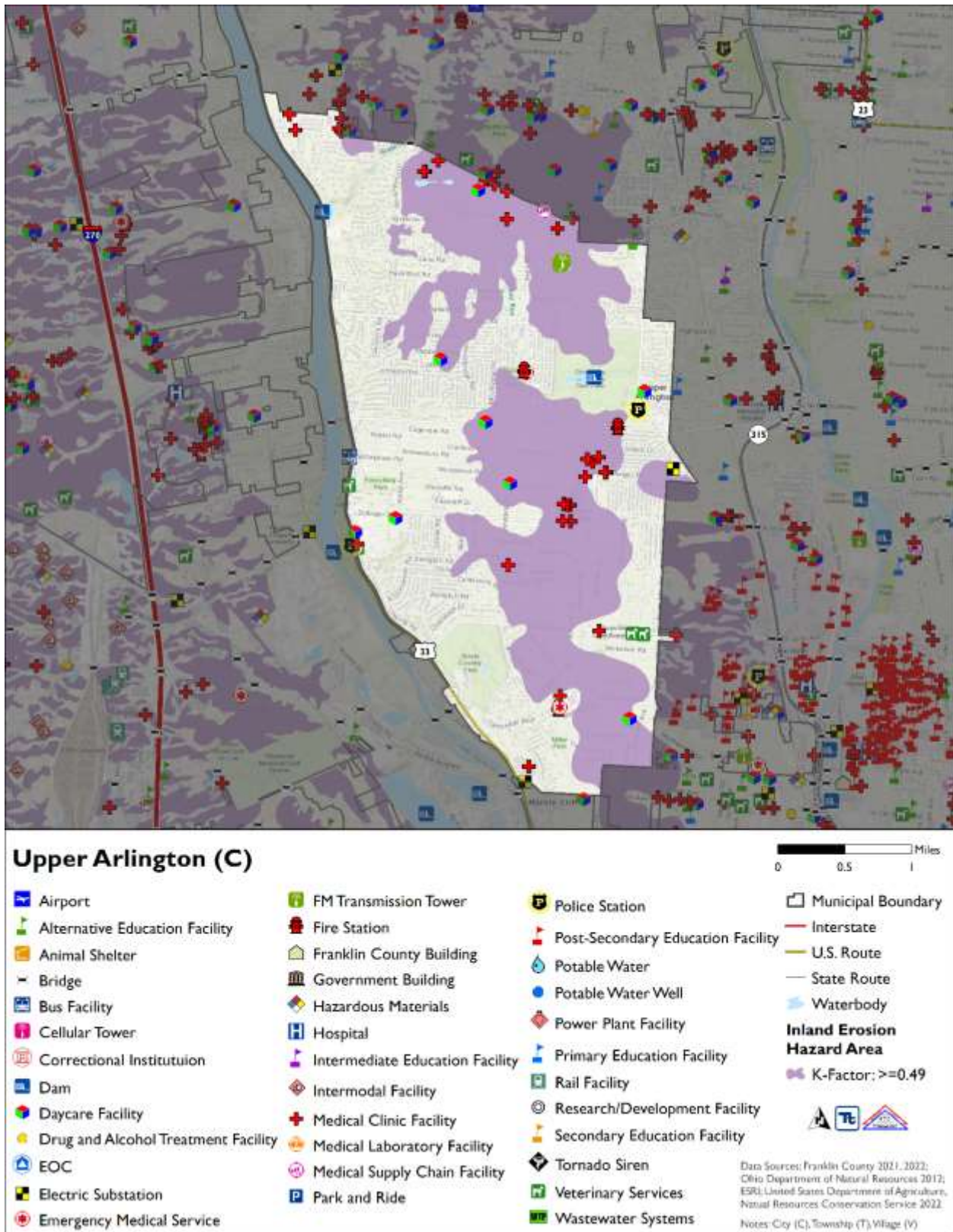
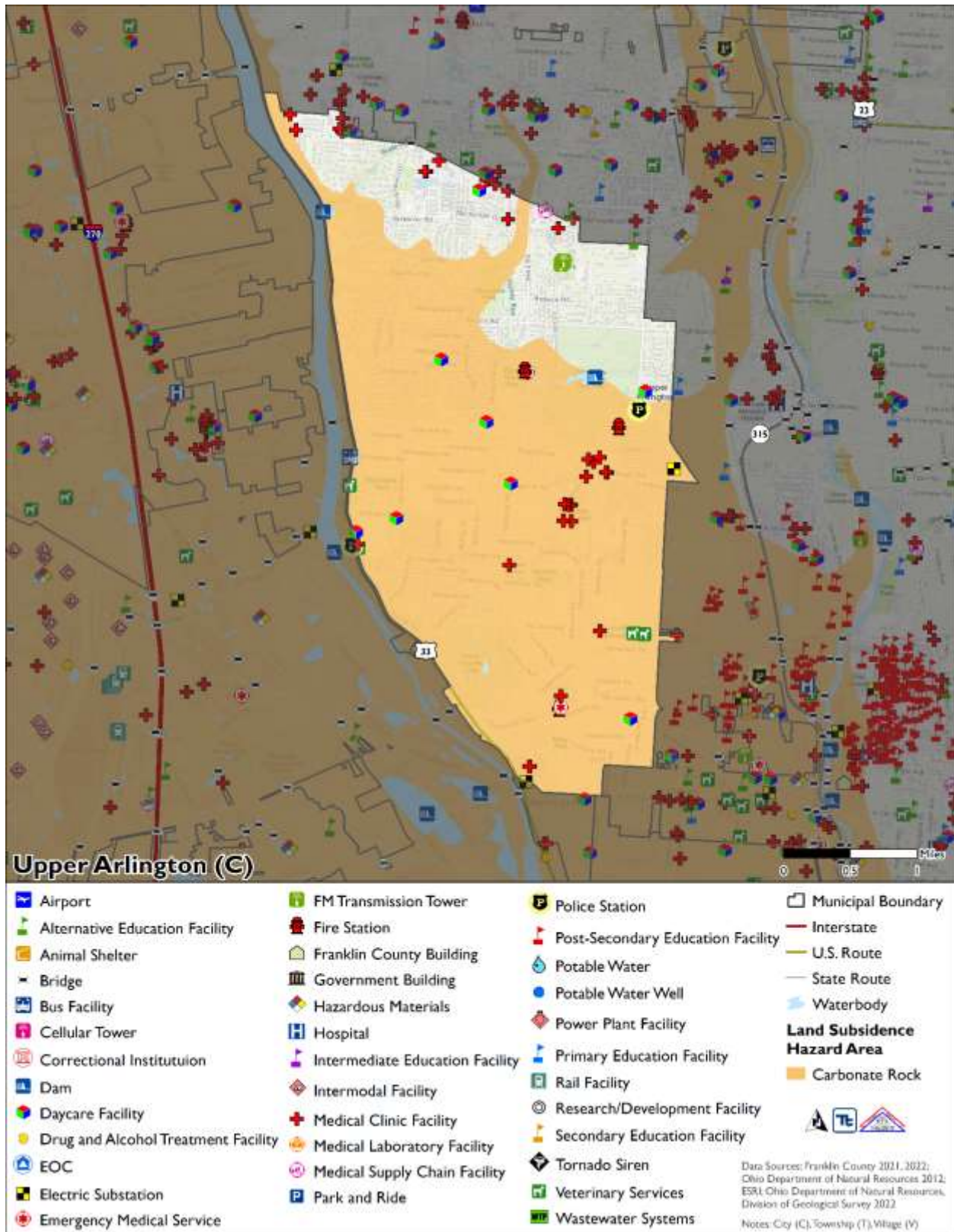


Figure 9.35-4. City of Upper Arlington Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

The City of Upper Arlington’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Upper Arlington experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.35-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde City neighborhood of Columbus. Approximately \$750,000 in property damage. | While this event impacted parts of Franklin County, the City did not identify any damages or losses from this event. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | While this event impacted parts of Franklin County, the City did not identify any damages or losses from this event. |
| June 2022 | Wide-spread power outages | N/A | Rolling, persistent blackouts related to derecho windstorms that occurred in Ohio. | \$2,200 (OT) |
| March 2020-present | COVID-19 Pandemic | Yes | Global pandemic (SARS-CoV-2 virus) | While this event impacted parts of Franklin County, the City did not identify any damages or losses from this event. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each

municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Upper Arlington. The City of Upper Arlington reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.35-14. Hazard Ranking Input

| Hazard | Rankings |
|----------------------------|----------|
| Dam/Levee | Medium |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic (Erosion) | Low |
| Geologic (Land Subsidence) | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.35-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Upper Arlington

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 1 | 1 |
| Inland Erosion (K-Factor: >= 0.49) Hazard Area | 35 | 30 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 45 | 39 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

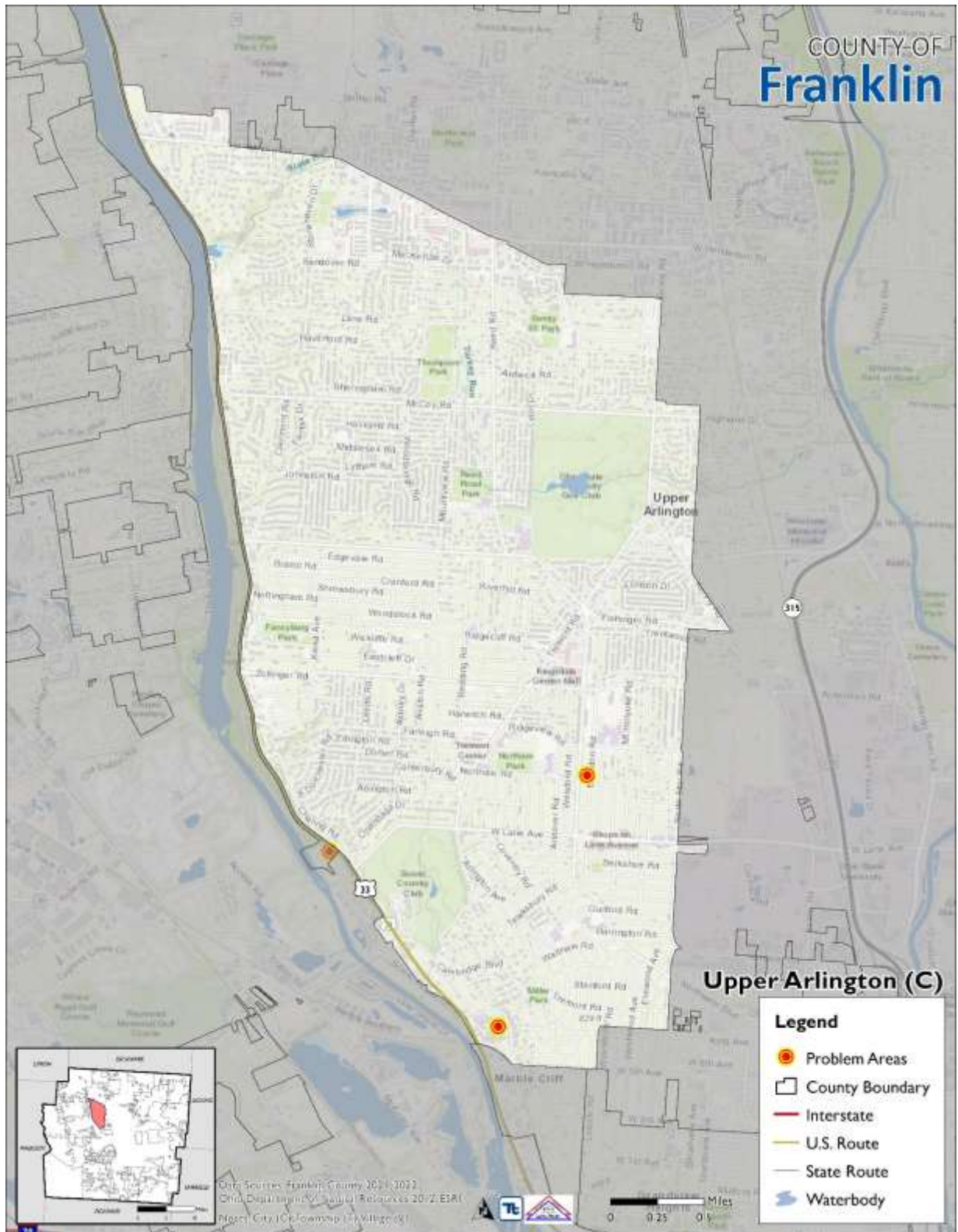
In addition to the risk assessment, the City of Upper Arlington identified the following vulnerabilities within its community:

- Upper Arlington has three repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.
- There are numerous reports of flooding issues throughout the City including numerous storm grates and properties. *

- The City experiences power outages and phone connection issues due to utility wires being knocked down due to hazard events. This presents an issue to first responders attempting to communicate with people in need during hazard events. *
- City residents are unaware of how to prepare and mitigate hazards as well as how hazards are being exacerbated by climate change. *
- The City needs to be able to operate and run during power outages, however, some buildings do not have backup power equipped to help them perform continuity of operations.
- The City has an increased need for PPE during a disease outbreak/pandemic, Past history has shown how quickly current stock can be depleted and normal supply routes disrupted. Also, proper PPE is necessary to protect our first responders and keep them well healthy and operational.

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

Figure 9.35-5. City of Upper Arlington Problem Area Map



9.35.7 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.35-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|-------------------|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding for repetitive loss structures within the jurisdiction to permanently reduce damages to these structures. (4 known properties est. at 450,000 /4 years) | Mayor's Office | No Progress | No | - | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Upper Arlington identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, the City of Upper Arlington has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.35-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|----------------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | - | X | - | X | X | - | X | - | X | - |
| Disease Outbreak | X | X | - | X | X | - | X | - | X | - |
| Drought | - | X | - | X | - | - | X | - | X | - |
| Earthquake | - | X | - | X | X | - | X | - | X | - |
| Extreme Temp | - | X | - | X | X | - | X | - | X | - |
| Flood | - | X | - | X | - | - | X | - | X | - |
| Geologic (Erosion) | - | X | - | X | - | - | X | - | X | - |
| Geologic (Land Subsidence) | - | X | - | X | - | - | X | - | X | - |
| Invasive Species | - | X | - | X | X | - | X | - | X | - |
| Severe Summer Weather | - | X | - | X | X | - | X | - | X | - |
| Severe Winter Weather | - | X | - | X | X | - | X | - | X | - |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.35-17)
 Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Upper Arlington will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.35-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------------|--|---|---|-----------|--------------------|--|---------------------------|--|-------------------------|----------|---------------------|--------------|
| 2023-City of Upper Arlington-001 | Repetitive Loss Mitigation | <p>Problem: Upper Arlington has three repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.</p> <p>Solution: The City will conduct outreach to the RL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information, and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).</p> | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Less than 5 Years | NFIP Floodplain Administrator, Property Owners | HMGP, FMA, BRIC, CDBG | The Repetitive loss structures will no longer flood as frequently. | >\$100,000 per property | High | SIP | SP |
| 2023-City of Upper Arlington-002 | City Wide Flood Study and Infrastructure Fix | <p>Problem: There are numerous reports of flooding issues throughout the City including numerous storm grates and properties.</p> <p>Solution: The City will implement a City-wide flood study to determine what is creating the flooding issues throughout</p> | Flood | 2,6 | Less than 5 Years | Floodplain Administrator | FMA, BRIC, CDBG, HMGP | The City will have reduced flooding issues. | TBD after Study | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------------|----------------------------|--|---|-----------|--------------------|----------------------------|-------------------------------|---|-----------------|----------|---------------------|--------------|
| | | the entire City. Once causes of flooding are determined, cost effective solutions will be implemented to reduce issues. | | | | | | | | | | |
| 2023-City of Upper Arlington-003 | Utility Wires | <p>Problem: The City experiences power outages and phone connection issues due to utility wires being knocked down due to hazard events. This presents an issue to first responders attempting to communicate with people in need during hazard events.</p> <p>Solution: The City will conduct a study to determine if it is feasible to move utility wires underground to prevent hazard events from knocking them down. Once feasibility is determined, the City will implement a process to start moving wires underground.</p> | Dam/Levee, Earthquake, Extreme Temp, Severe Summer Weather, Severe Winter Weather, Tornado | 2,6 | Less than 5 Years | Department of Public Works | CDBG, HMGP, BRIC, City Budget | The City will experience less connection and power issues. | TBD after Study | High | SIP | SP, PR |
| 2023-City of Upper Arlington-004 | Climate Change Education | <p>Problem: City residents are unaware of how to prepare and mitigate hazards as well as how hazards are being exacerbated by climate change.</p> <p>Solution: The City will create a spot on their website detailing how to prepare and mitigate hazards and will also detail climate change information so that residents can be prepared for how hazards may intensify. The City will also distribute this information in the form of a brochure to distribute to shelters and the homeless population.</p> | Dam/Levee, Disease, Outbreak, Drought, Earthquake, Extreme Temp, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 5 | Less than a year | Administration | City Budget | City residents will become more educated on the hazards of concern. | Staff time | High | EAP | PI |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------------------------|----------------------------|---|--|-----------|--------------------|---------------------------|---------------------------|---|--------------------------|----------|---------------------|--------------|
| 2023-City of Upper Arlington-005 | Generator Study | <p>Problem: The City needs to be able to operate and run during power outages, however, some buildings do not have backup power equipped to help them perform continuity of operations.</p> <p>Solution: The City will create an inventory of buildings that need a backup generator so that they may perform continuity of operations during power outages. Once this is complete, the City will conduct generator studies to determine what size generator each building needs and will implement them.</p> | Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic Invasive Species Severe Summer Weather Severe Winter Weather Tornado | 6 | Less than 5 years | Administration, Engineer | FMA, BRIC, HMGP, CDBG | The City will be able to perform continuity of operation. | TBD after engineer study | High | SIP | SP |
| 2023-City of Upper Arlington-006 | PPE | <p>Problem: The City has an increased need for PPE during a disease outbreak/pandemic. Past history has shown how quickly current stock can be depleted and normal supply routes disrupted. Also, proper PPE is necessary to protect our first responders and keep them well healthy and operational.</p> <p>Solution: The City will obtain, properly store and distribute PPE for emergency workers in the event of a disease outbreak.</p> | Disease Outbreak | 2 | Less than 2 years | Administration | HMGP, City Budget | Having enough PPE on hand will help to protect first responders and allow them to remain operational and respond to the needs of the public that will be increased during a | Unknown | High | LPR | PR |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|----------------------------|-------------------------------------|---------------------------|-----------|--------------------|---------------------------|---------------------------|---------------------------------|-----------------|----------|---------------------|--------------|
| | | | | | | | | disease outbreak/pandemic event | | | | |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.35-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------------------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-City of Upper Arlington-001 | Repetitive Loss Mitigation | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 12 | High |
| 2023-City of Upper Arlington-002 | City Wide Flood Study and Infrastructure Fix | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 11 | High |
| 2023-City of Upper Arlington-003 | Utility Wires | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-City of Upper Arlington-004 | Climate Change Education | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 | High |
| 2023-City of Upper Arlington-005 | Generator Study | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-City of Upper Arlington-006 | PPE | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.36 VILLAGE OF URBANCREST

The Village of Urbancrest did not participate in the 2023 update of the Franklin County HMP. If the Village chooses to participate in the future, this annex will be updated accordingly, and the Village will follow the linkage procedures as outlined in Appendix H (Linkage Procedures).

9.36.1 Hazard Mitigation Planning Team

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.36-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|---|
| Name/Title: | Elder Joseph Barnes, Sr. / Mayor | Name/Title: | Vera Ziglar-Zimmerman / Village Council |
| Address: | 3492 First Avenue Urbancrest, OH 43123 | Address: | 3492 First Avenue Urbancrest, OH 43123 |
| Phone Number: | (614) 875-1279 | Phone Number: | (614) 875-1279 |
| Email: | mayorjbarnes33ubc@sbcglobal.net | Email: | finance@villageofurbancrestoh.us |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Matt Brown, Planning and Floodplain Administrator | | |
| Address: | 150 S. Front St., FSL, Suite 10, Columbus, OH 43215 | | |
| Phone Number: | (614) 525-5647 | | |
| Email: | mybrown@franklincountyohio.gov | | |
| Additional Contributors | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.36.2 Municipal Profile

The Village of Urbancrest is in the southwest corner of Franklin County and is surrounded by Columbus and Grove Cities with pieces of Franklin Township bordering some of the Village to the north. Marsh Run surrounds the Village flowing east to west.

According to the American Community Survey, the 2021 population for the Village of Urbancrest was 1,124, a 17.08 percent increase from the 2010 Census population of 960. Data from the 2021 American Community Survey indicates that 12.6 percent of the population is 5 years of age or younger and 8.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.36.3 Jurisdictional Capability Assessment and Integration

The Village of Urbancrest performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Village capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Village of Urbancrest to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Urbancrest and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.36-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | 2019 Residential Code of Ohio | Franklin County | Franklin County Economic Development and Planning Department |
| <i>How does this reduce risk?</i> Provides restrictions and requirements on how buildings must be constructed. | | | | |
| Zoning/Land Use Code | Yes | Franklin County Zoning Resolution – October 11, 2022 | Franklin County | Zoning Officer |
| <i>How does this reduce risk?</i> Specifies the allowable uses of land within each district, the regulations pertaining to the development and use of the land, and buildings are uniform for each class or kind of building. | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|--|---|--|
| Subdivision Ordinance | Yes | Franklin County Subdivision Regulations – March 27, 2012 | Franklin County | Franklin County Economic Development and Planning Department |
| <i>How does this reduce risk?</i> Manage growth and development in accordance with plans, policies, and resolutions of the FCPC, county and townships and surrounding area plans. Provide for adequate and convenient open spaces for traffic, utilities, fire and maintenance forces, recreation, light and air. Provide for the preservation of natural resources, sensitive natural areas, and natural features. Provide safety from fire, flood, and other danger. Address public requirements and facilities, traffic circulation, stormwater management, water and sanitary services, open space, airport noise and hazard areas. | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | Yes | Franklin County Stormwater Drainage Manual – March 13, 2012 | Franklin County | Franklin County Economic Development and Planning Department |
| <i>How does this reduce risk?</i> To help improve/ensure proper drainage and to protect natural water ways. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | Franklin County's Flood Damage Reduction Regulation – September 19, 2007 | Franklin County | Franklin County Floodplain Administrator |
| <i>How does this reduce risk?</i> Regulations designed to promote the public health, safety, and general welfare and to minimize public and private loss due to flooding. | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Village of Urbancrest Community Plan, March 2022 | Local | Franklin County Economic Development |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| | | | | and Planning, Plan Working Committee |
| <i>How does this reduce risk?</i> | | | | |
| This plan addresses land use, housing, transportation, economic development, and other planning issues facing the Village for the next 10-20 years. | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | Yes | Franklin County Stormwater Management Plan – December 19, 2016 | Franklin County | Stormwater Executive Committee |
| <i>How does this reduce risk?</i> | | | | |
| The purpose of the Stormwater Management Program (SWMP) is to protect and improve water quality, stream corridors and public health in accordance with federal and state stormwater regulations. Polluted stormwater runoff is often transported through municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. To address this reality, federal and state regulations require the establishment of MS4 stormwater management programs to improve the nation’s waterways by reducing the quantity of pollutants that stormwater picks up and carries into storm sewer systems during storm events. The MS4 Stormwater Permit outlines six minimum measures (MCMs) that a SWMP must address. These minimum measures are: | | | | |
| <ol style="list-style-type: none"> 1) public education and outreach, 2) public participation / involvement, 3) illicit discharge detection and elimination (IDDE), 4) construction site runoff control, 5) post-construction runoff control and 6) pollution prevention / good housekeeping for municipal operations. | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Continuity of Operations Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Urbancrest to oversee and track development.

Table 9.36-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--|
| Do you issue development permits? <ul style="list-style-type: none"> If yes, what department is responsible? | No | Residents are required to obtain a zoning compliance from the Village, but the Franklin County Building Department issues the building permit. |

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| If you do not issue development permits, what is your process for tracking new development? | N/A | Coordinate with the Franklin County Building Department. |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | The Village of Urbancrest does not track permits; it coordinates with the Franklin County Building Department to maintain its list. |
| Do you have a buildable land inventory? • If yes, please describe | No | The Village does not have a buildable land inventory. However, the County stores information at the Auditor's Office. Some information can be found online utilizing the Auditor's Office County webpage. |
| Describe the level of build-out in your jurisdiction. | N/A | The Village is primarily residential and industrial use with very little parks and recreations and institutional uses mixed in; there are also areas of commercial use. Above Route 270 is industrial and commercial use only. All residential, institutional, and parks and recreation uses are below Route 270; there is a small area of commercial use along Broadway/Harrisburg Pike. |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Urbancrest and their current responsibilities that contribute to hazard mitigation.

Table 9.36-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|---------------------|---|
| Administrative Capability | | |
| Planning Board | Yes | The Planning Commission meets on an as needed basis. |
| Zoning Board of Adjustment | Yes | The Board of Zoning Appeals convenes on an as needed basis. The Board conducts public hearings and final determinations on approval, conditional approval, or denial of all applications for conditional uses, except for planned developments, variances, and appeals. The Board makes final determinations on approval or denial relating to properties with nonconformities as provided in the nonconformities section of the village ordinances. The Board determines the exact location of any zoning district boundary line should there be uncertainty as to the exact location involved. The Board must file an Annual Report with the Village Council and Village Mayor setting forth its transactions and recommendations. The Board of Zoning Appeals will adopt bylaws and other procedural rules consistent with Village ordinances and state statutes; recommend to the Village Council the employment of such professional zoning, legal, engineering of administrative staff or consulting assistance as is necessary to fulfill its responsibilities; and carry out any other functions that may be conferred upon it by any other Village ordinance or state statute and discharge any other duties referred or assigned to it by Village Council. |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | Yes | Street Commission |



| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|--|
| Construction/Building/Code Enforcement Department | Yes | The purpose of code enforcement within the Village of Urbancrest is to respond to concerns from citizens that affect the quality of life within the Village of Urbancrest. Such as zoning, overgrown lots or yards, inoperative or unlicensed vehicles, maintenance of structures, illegal signs, and public nuisances. Systematic inspections are also performed to ensure properties are compliant with the village zoning code. |
| Emergency Management/Public Safety Department | No | - |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | No | - |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | No | - |
| Mutual aid agreements | No | - |
| Human Resources Manual | | Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? No. |
| Other | Yes | The Village of Urbancrest Board of Public Affairs is charged with the responsibility of maintaining the Village's Sanitary and Storm Sewer services provided to the residents of the Village of Urbancrest. The board may make laws and rules relative to the safe, efficient, and economical management and protection of the village's utilities. |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | - |
| Engineers or professionals trained in building or infrastructure construction practices | No | - |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |
| How do your administrative/technical capabilities contribute to risk reduction in your community? | | |

Fiscal Capability

The table below summarizes financial resources available to the Village of Urbancrest.

Table 9.36-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|--|--|
| Community development Block Grants (CDBG, CDBG-DR) | - |

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Capital improvements project funding | - |
| Authority to levy taxes for specific purposes | - |
| User fees for water, sewer, gas, or electric service | - |
| Impact fees for homebuyers or developers of new development/homes | - |
| Stormwater utility fee | - |
| Incur debt through general obligation bonds | - |
| Incur debt through special tax bonds | - |
| Incur debt through private activity bonds | - |
| Withhold public expenditures in hazard-prone areas | - |
| Other federal or state Funding Programs | - |
| Open Space Acquisition funding programs | - |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | - |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Urbancrest.

Table 9.36-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|----------------------------------|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | Yes | Contracted to Robert J. Mitchell |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | No | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | No | - |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | No | - |

Community Classifications

The table below summarizes classifications for community programs available to the Village of Urbancrest.

Table 9.36-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---------|----------------------------|-----------------------------------|------------------------------------|
| Other | - | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.36-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee Failure | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temperatures | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornadoes | Moderate |

9.36.4 National Flood Insurance Program Compliance

The Village of Urbancrest does not participate in the National Flood Insurance Program. Therefore, NFIP statistics and NFIP summary were not provided.

9.36.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.36-9. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|---------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | - | - | - | - | - | - | - | - | - |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | - | - | - | - | - | - | - | - | - | - |

Table 9.36-10. Recent and Expected Future Development

| Property or Development Name | Type (e.g., Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|--------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.36.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Village of Urbancrest’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Village of Urbancrest has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.36-1. Village of Urbancrest Hazard Area Extent and Location Map – Flood



Urbancrest (V)

- | | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | 0 0.1 0.2 Miles |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Municipal Boundary |
| Animal Shelter | Franklin County Building | Potable Water | Interstate |
| Bridge | Government Building | Potable Water Well | U.S. Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | State Route |
| Cellular Tower | Hospital | Primary Education Facility | Waterbody |
| Correctional Institution | Intermediate Education Facility | Rail Facility | FEMA Flood Hazard Area |
| Dam | Intermodal Facility | Research/Development Facility | 1-Percent Annual Chance |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | 0.2-Percent Annual Chance |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | <small>The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the lowest LOMR date of April 01, 2021.</small> |
| EOC | Medical Supply Chain Facility | Veterinary Services | Tetra Tech logo |
| Electric Substation | Park and Ride | Wastewater Systems | <small>Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ES&I; FEMA 2021</small> |
| Emergency Medical Service | | | <small>Notes: City (C), Township (T), Village (V)</small> |

Figure 9.36-2. Village of Urbancrest Hazard Area Extent and Location Map – Land Subsidence

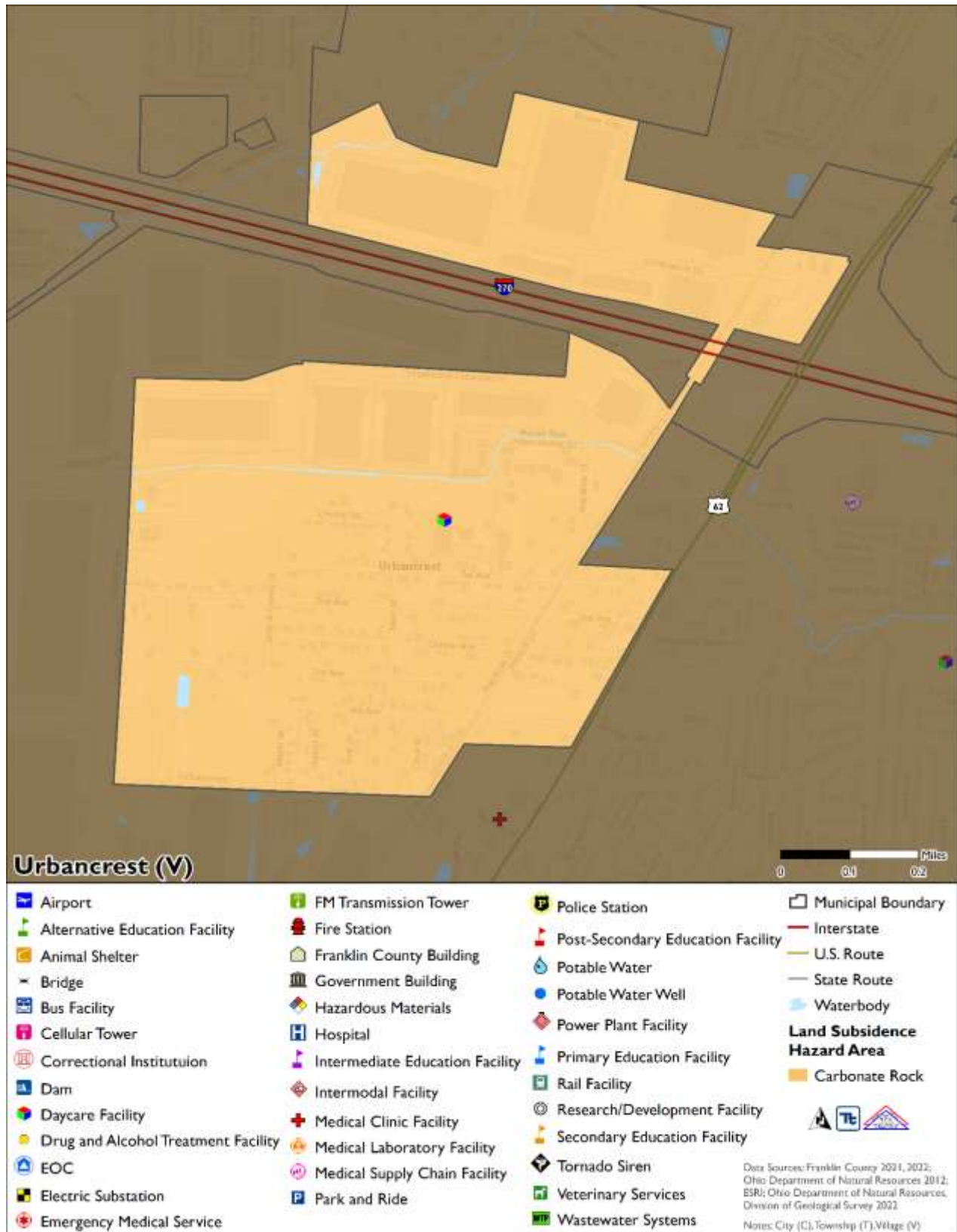


Figure 9.36-3. Village of Urbancrest Hazard Area Extent and Location Map – Inland Erosion



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Village of Urbancrest history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Village of Urbancrest experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.36-11. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Village of Urbancrest experienced no damages or losses from this event. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Village of Urbancrest experienced no damages or losses from this event. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Village of Urbancrest experienced no damages or losses from this event. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Urbancrest.

Table 9.36-12. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee Failure | Low |
| Disease Outbreak | Medium |
| Drought | Medium |
| Earthquake | Low |
| Extreme Temperatures | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornadoes | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.36-13. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Village of Urbancrest

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | - |
| Inland Erosion (K-Factor: >= 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the Village of Urbancrest identified the following vulnerabilities within its community:

- The Village does not have an emergency shelter for residents in need during an event.
- Village residents may not be aware of impacts hazards have on themselves and their property.
- There is no back-up power at any Village critical facilities.

9.36.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan



update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the Capability Assessment earlier in this annex.

Table 9.36-14. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|---|--|---|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Purchase and construct a "SAFE HOUSE" for residents to go to in case of severe weather. (300,000 / 9 months) | Village Administration and Mayor's office | No Progress | - | - | - |
| Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (2,000 / 4 months) | Village Administration and Mayor's office | No Progress | - | - | - |
| Purchase Tornado Sirens through Franklin County Emergency Management & homeland Security additional Tornado Sirens around our community. (40,000 / 4 months) | Village Administration and Mayor's office | No Progress | - | - | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Village of Urbancrest identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County’s first HMP, the Village of Urbancrest has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Urbancrest participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.36-15. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|--|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES | |
| Dam/Levee Failure | | | | | | | | | | | |
| Disease Outbreak | | | | | | | | | | | |
| Drought | | | | | | | | | | | |
| Earthquake | | | | | | | | | | | |
| Extreme Temperatures | | | | | | | | | | | |
| Flood | | | | | | | | | | | |
| Geologic | | | | | | | | | | | |
| Invasive Species | | | | | | | | | | | |
| Severe Summer Weather | | | | | | | | | | | |
| Severe Winter Weather | | | | | | | | | | | |
| Tornadoes | | | | | | | | | | | |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.36-15)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Village or Urbancrest will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.36-16. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|----------------------------|-------------------------------------|---------------------------|-----------|--------------------|---------------------------|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CRS Community Rating System
- FEMA Federal Emergency Management Agency
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.36-17. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------|--------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.37 VILLAGE OF VALLEYVIEW

The Village of Valleyview did not participate in the 2023 update of the Franklin County HMP. If the Village chooses to participate in the future, this annex will be updated accordingly, and the Village will follow the linkage procedures as outlined in Appendix H (Linkage Procedures).

9.37.1 Hazard Mitigation Planning Team

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.37-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|---|
| Name/Title: | Marzia Helton/Mayor | Name/Title: | - |
| Address: | 432 N Richardson Ave Valleyview, OH 43204 | Address: | - |
| Phone Number: | 614-279-5630 | Phone Number: | - |
| Email: | fiscal@valleyviewohio.org | Email: | - |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Marzia Helton, Mayor | | |
| Address: | 436 North Richardson Street, Valleyview OH, 43204 | | |
| Phone Number: | 614-279-5630 | | |
| Email: | - | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.37.2 Municipal Profile

The Village of Valleyview is located in northeastern Franklin County and is located within the outskirts of Columbus and is considered to be an enclave to the City. The Village is located in the Franklin Township part of the city. Dry Run creek flows throughout the Village.

According to the American Community Survey, the 2021 population for the Village of Valleyview was 722, a 16.45 percent increase from the 2010 Census population of 620. Data from the 2021 American Community Survey indicates that 5.8 percent of the population is 5 years of age or younger and 14.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.37.3 Jurisdictional Capability Assessment and Integration

The Village of Valleyview performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Village capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Village of Valleyview to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Village of Valleyview and provides information as to how the capability integrates hazard mitigation and risk reduction.

Table 9.37-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Chapter 1420 | Local | Building Department |
| <i>How does this reduce risk?</i> Within the scope of the Building Code its purpose shall be to provide minimum standards to safeguard life and limb, health, property and the public welfare. | | | | |
| Zoning/Land Use Code | Yes | Title 4 | Local | Planning Commission |
| <i>How does this reduce risk?</i> Council finds that the Planning Commission has certified to Council a plan for dividing the Village into districts, including limitations and regulations of the height, bulk and location (including percentage of lot occupancy, setback building lines and areas of yards, courts and other open spaces) and uses of buildings, other structures and premises in such districts. | | | | |
| Subdivision Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Site Plan Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Stormwater Management Ordinance <i>How does this reduce risk?</i> Helps to alleviate flooding and focuses on managing storm water storage. | Yes | - | - | - |
| Post-Disaster Recovery/ Reconstruction Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Real Estate Disclosure <i>How does this reduce risk?</i> | No | - | - | - |
| Growth Management <i>How does this reduce risk?</i> | No | - | - | - |
| Environmental Protection Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Flood Damage Prevention Ordinance <i>How does this reduce risk?</i> The Village has special flood hazard areas that are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base. Additionally, structures that are inadequately elevated, floodproofed, or otherwise protected from flood damage also contribute to the flood loss. In order to minimize the threat of such damages and to achieve the purposes hereinafter set forth, these regulations are adopted. | Yes | Chapter 1228 | Local | Village Council |
| Wellhead Protection <i>How does this reduce risk?</i> | No | - | - | - |
| Emergency Management Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Change Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Other | Yes | Historic Preservation Ordinance | Local | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Capital Improvement Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Disaster Debris Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Floodplain Management or Watershed Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Stormwater Management Plan <i>How does this reduce risk?</i> | No | - | - | - |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Open Space Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Urban Water Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Habitat Conservation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Economic Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Shoreline Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | - | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |
| Post-Disaster Recovery Plan | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|-----------------------------------|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the Village of Valleyview to oversee and track development.

Table 9.37-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--------------------------------------|
| Do you issue development permits? • If yes, what department is responsible? | No | This is performed by Franklin County |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | Floodplain |
| Do you have a buildable land inventory? • If yes, please describe | N/A | - |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Valleyview and their current responsibilities that contribute to hazard mitigation.

Table 9.37-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|----------------------------------|---------------------|--|
| Administrative Capability | | |
| Planning Board | Yes | - |
| Zoning Board of Adjustment | No | - |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | Yes | Effective January 1, 1996, a Recreation Board is hereby authorized and established, vested with authority to supervise and maintain playgrounds, playfields, gymnasiums, public baths, swimming pools and indoor |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| | | recreation centers, and possessed of all the powers and subject to all the responsibilities imposed upon it by law, the Village ordinances and the directions of Council. |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | Yes | Among the specific powers and duties of the Economic Development Commission shall be the planning of the economic development of the Village, the progressive pursuit of establishing new business in the Village with the intent of creating jobs and employment opportunities and the recommendation of appropriate development incentives to insure projects that come to the Village are economically viable. |
| Public Works/Highway Department | No | - |
| Construction/Building/Code Enforcement Department | No | - |
| Emergency Management/Public Safety Department | No | - |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | No | - |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | No | - |
| Mutual aid agreements | No | - |
| Human Resources Manual | No | - |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | - |
| Engineers or professionals trained in building or infrastructure construction practices | No | - |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to the Village of Valleyview.

Table 9.37-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | - |
| Capital improvements project funding | - |
| Authority to levy taxes for specific purposes | - |
| User fees for water, sewer, gas or electric service | - |
| Impact fees for homebuyers or developers of new development/homes | - |
| Stormwater utility fee | - |

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Incur debt through general obligation bonds | - |
| Incur debt through special tax bonds | - |
| Incur debt through private activity bonds | - |
| Withhold public expenditures in hazard-prone areas | - |
| Other federal or state Funding Programs | - |
| Open Space Acquisition funding programs | - |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | - |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Valleyview.

Table 9.37-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|----------|
| Public information officer or communications office | - | - |
| Personnel skilled or trained in website development | No | - |
| Hazard mitigation information available on your website | - | - |
| Social media for hazard mitigation education and outreach | - | - |
| Citizen boards or commissions that address issues related to hazard mitigation | - | - |
| Warning systems for hazard events | - | - |
| Natural disaster/safety programs in place for schools | - | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | - | - |

Community Classifications

The table below summarizes classifications for community programs available to the Village of Valleyview.

Table 9.37-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.37-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.37.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the Village of Valleyview.

Table 9.37-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|----------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Valleyview (V) | 3 | 4 | \$8,719.88 | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA’s HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the Village of Valleyview.

Table 9.37-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | - |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | - |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | - |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also triggered when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure's market value (excluding land value). |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | - |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | - |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | - |
| Are any certified floodplain managers on staff in your jurisdiction? | - |
| Do you have access to resources to determine possible future flooding conditions from climate change? | - |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | - |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | - |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | - |
| What are the barriers to running an effective NFIP program in the community, if any? | - |

| NFIP Topic | Comments |
|---|----------|
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | - |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | - |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | - |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | - |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | - |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | - |

9.37.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The table below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.37-11. Number of Building Permits for New Construction

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | - | - | - | - | - | - | - | - | - |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | - | - | - | - | - | - | - | - | - | - |

Table 9.37-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.37.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Village of Valleyview's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Village of Valleyview has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.37-1. Village of Valleyview Hazard Area Extent and Location Map-Flood



Figure 9.37-2. Village of Valleyview Hazard Area Extent and Location Map-Inland Erosion



Valleyview (V)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service

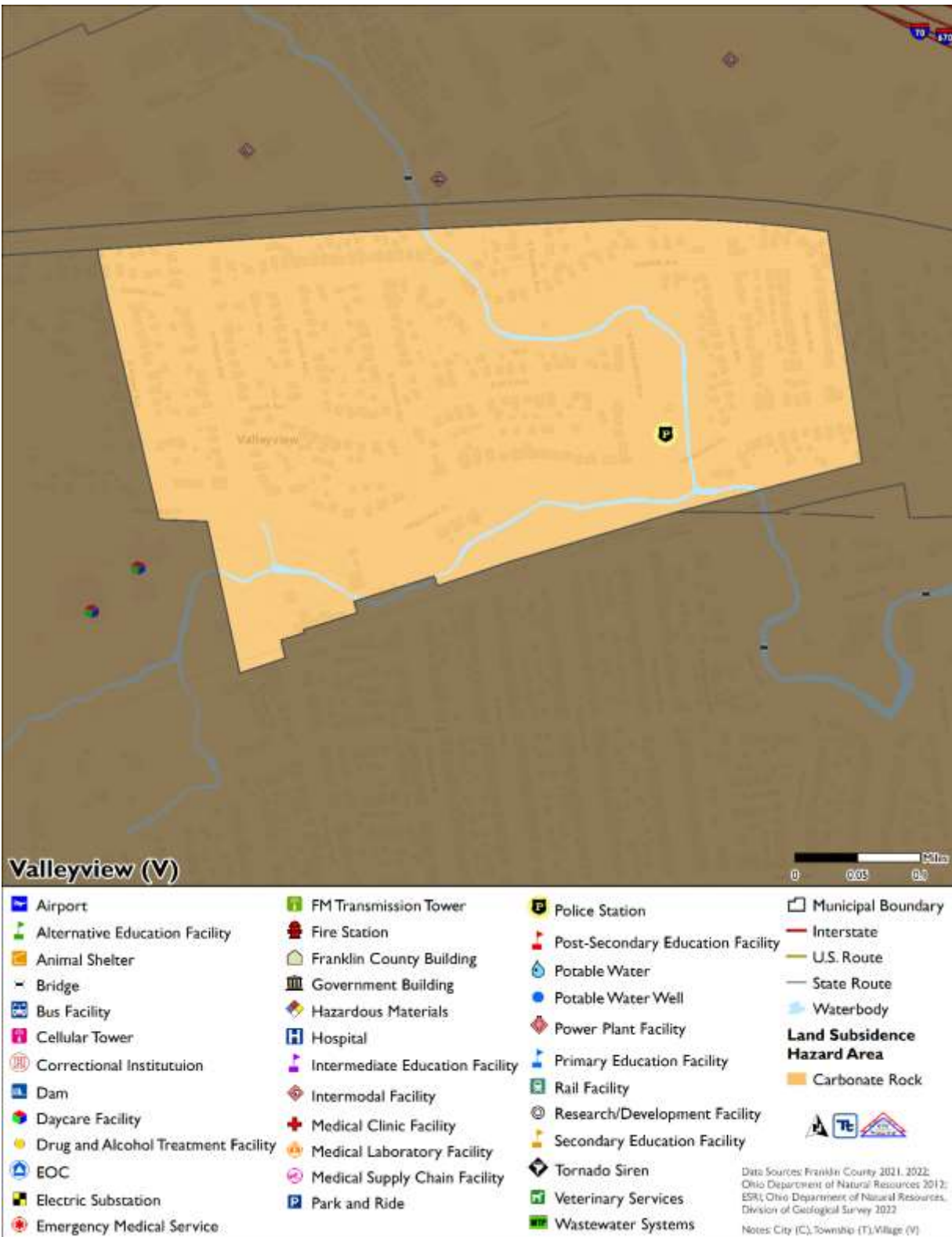
- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems

- Miles
0 0.05 0.1
- Municipal Boundary
 - Interstate
 - U.S. Route
 - State Route
 - Waterbody
- Inland Erosion Hazard Area**
- K-Factor: ≥ 0.49
-

Data Sources: Franklin County 2021, 2022;
Ohio Department of Natural Resources 2012;
ESRI; United States Department of Agriculture,
Natural Resources Conservation Service 2022
Notes: City (C), Township (T), Village (V)

Figure 9.37-3. Village of Valleyview Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

The Village of Valleyview’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Village of Valleyview experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.37-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| April 3-4, 2018 | EF-1 Tornado | N/A | Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage. | The Village did not experience any notable damages or losses. |
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Village did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Village did not experience any notable damages or losses. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Village did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each

municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Valleyview.

Table 9.37-14. Hazard Ranking Input

| Hazard | Rankings |
|-----------------------|----------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.37-15. Number of Critical Facilities and Community Lifelines in Hazard Areas

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | 1 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | 1 |
| Inland Erosion (K-Factor: >= 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 1 | 1 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the Village of Valleyview identified the following vulnerabilities within its community:

- The following critical facilities are municipally owned and located in the special flood hazard area:
 - Valleyview Police Department
- The Village residents are not aware of the impacts that the hazards of concern may and will have on them and their property.

9.37.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the ‘Capability Assessment’ earlier in this annex.

Table 9.37-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|-------------------|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Achieve acquisition of the Village Hall. This is a Village owned facility and is subject to repeat flooding as it is not only located in the Floodway, but it is subjected to runoff from homes located at a higher elevation. | Mayor's office | No Progress | No | - | - |
| Assess and mitigate the impacts of the Hague Avenue bridge reconstruction project (City of Columbus capital improvement project) on the Dry Run Creek. | Mayor's office | No Progress | No | - | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Village of Valleyview identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County’s first HMP, the Village of Valleyview has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.37-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|--|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES | |
| Dam/Levee | | | | | | | | | | | |
| Disease Outbreak | | | | | | | | | | | |
| Drought | | | | | | | | | | | |
| Earthquake | | | | | | | | | | | |
| Extreme Temp | | | | | | | | | | | |
| Flood | | | | | | | | | | | |
| Geologic | | | | | | | | | | | |
| Invasive Species | | | | | | | | | | | |
| Severe Summer Weather | | | | | | | | | | | |
| Severe Winter Weather | | | | | | | | | | | |
| Tornado | | | | | | | | | | | |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.37-17)
 Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Village of Valleyview will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.37-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|----------------------------|-------------------------------------|---------------------------|-----------|--------------------|---------------------------|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

*Mitigation initiative is related to a critical facility and/or community lifeline
 Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.

- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.37-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------|--------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.38 WASHINGTON TOWNSHIP

This section presents the jurisdictional annex for Washington Township that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in Washington Township participated in the planning process, an assessment of Washington Township’s risk and vulnerability, the different capabilities used in Washington Township, and an action plan that will be implemented to achieve a more resilient community.

9.38.1 Hazard Mitigation Planning Team

Washington Township identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Washington Township departments, including Township Administrator. The Fire Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.38-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--------------------------------------|----------------------------|--------------------------------------|
| Name/Title: | Eric Richter - Administrator | Name/Title: | Alec O’Connell – Fire Chief |
| Address: | 6200 Eiterman Road, Dublin, OH 43016 | Address: | 6200 Eiterman Road, Dublin, OH 43016 |
| Phone Number: | 614-652-3920 | Phone Number: | 614-652-3920 |
| Email: | erichter@wtwp.com | Email: | aoconnell@wtwp.com |
| NFIP Floodplain Administrator | | | |
| Name/Title: | - | | |
| Address: | - | | |
| Phone Number: | - | | |
| Email: | - | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.38.2 Municipal Profile

Washington Township contains 27.5 square miles in northwest Franklin County, southwestern Delaware County and eastern Union County. The entire City of Dublin is located within the Township. The Township is part of the greater Columbus metropolitan area. Washington Township is governed by an elected board of trustees and an elected fiscal officer. The Township has several large businesses including Cardinal Health, Ashland Chemical, OCLC, and Wendy's International (Washington Township 2022).

The Township was the first to successfully establish township zoning in Franklin County in the early 1950s and a Zoning Board of Appeals was established in 1954. Today the Township provides fire and EMS services to the entire City of Dublin, and other unincorporated areas of Franklin County including the Town of Amlin, and parcels along Cosgray, Hayden Run and Dublin roads (Washington Township 2022).

According to the American Community Survey, the 2021 population for Washington Township was 42,997, a 1.4 percent decrease from the 2010 Census. Data from the 2021 American Community Survey indicates that 5.8 percent of the population is 5 years of age or younger and 12.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.38.3 Jurisdictional Capability Assessment and Integration

Washington Township performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of Township capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for Washington Township to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Washington Township and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.38-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|---|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Residential Code of Ohio | County, State | Franklin County Economic Development and Planning |
| <i>How does this reduce risk?</i> Washington Township adopted the Franklin County 2019 Residential Code of Ohio which regulates 1, 2, and 3 family dwellings and residential homes. | | | | |
| Zoning/Land Use Code | Yes | Washington Township Zoning Resolution | Local | Township Zoning Department |
| <i>How does this reduce risk?</i> Washington Township Zoning Resolution is designed to promote and encourage the appropriate use of land through stabilizing and preserving the value of property, preventing congestion in the roadways and streets, to secure the safety from fire, flood, water contamination, air pollution and other dangers that impact infrastructure and public health, while providing adequate light, air and open space. The Zoning Resolution prevents overcrowding of land and avoids undue concentrations of population throughout the township. | | | | |
| Subdivision Ordinance | Yes | 500 – Development Standards | Washington Twp. | Fiscal Officer |
| <i>How does this reduce risk?</i> The City of Dublin maintains the subdivision ordinance for Washington Township. | | | | |
| Site Plan Ordinance | Yes | 500 – Development Standards | Washington Twp. | Joyce Robinson |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | Yes | 500 – Development Standards | Washington Twp. | Joyce Robinson |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Emergency Management Ordinance | Yes | ORC 505.82 | Trustees | Administrator |
| <i>How does this reduce risk?</i> | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Washington Township Comprehensive Plan | Local | Washington Township Board of Trustees |
| <i>How does this reduce risk?</i> The Washington Township Comprehensive Plan focuses on maintaining the rural community character, environmentally sensitive development that will protect the townships cultural features and increasing public facilities strategies for unincorporated areas of the Township. | | | | |
| Capital Improvement Plan | Yes | Washington Twp (Internal) | Local | Administrator |
| <i>How does this reduce risk?</i> | | | | |
| Disaster Debris Management Plan | Yes | County EOP, Township EOP and City of Dublin EOP | Local, County | Administrator |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | Yes | 500 – Development Standards | Washington Twp. | Joyce Robinson |
| <i>How does this reduce risk?</i> | | | | |
| Open Space Plan | Yes | 500 – Development Standards | Washington Twp. | Joyce Robinson |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> The Township of Washington utilizes the Franklin County Emergency Operations Plan in conjunction with the Town and City of Dublin. | Yes | County EOP, Township EOP and City of Dublin EOP | Multiple | Administrator |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | Yes | Washington Twp. COOP Plan | Trustees | Battalion Chief |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | Yes | Franklin County EOP | County | FCEMA |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> The Township of Washington utilizes the Franklin County Emergency Operations Plan in conjunction with the Town and City of Dublin. | Yes | County EOP, Township EOP and City of Dublin EOP | Multiple | Administrator |
| Public Health Plan <i>How does this reduce risk?</i> | Yes | County Board of Health | Board of Health | Board of Health |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of Washington Township to oversee and track development.

Table 9.38-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|--|--------|----------|
| Do you issue development permits? | No | - |

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--|
| <ul style="list-style-type: none"> If yes, what department is responsible? | | |
| If you do not issue development permits, what is your process for tracking new development? | N/A | The Township maintains the zoning authority for the unincorporated Washington Township. |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | Franklin County issues building permits for Washington Township |
| Do you have a buildable land inventory? <ul style="list-style-type: none"> If yes, please describe | N/A | |
| Describe the level of build-out in your jurisdiction. | N/A | There is minimal build-out in the Township due to the lack of public water and sewer utilities. To obtain such utilities, the township land has to be annexed to a municipality. |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Washington Township and their current responsibilities that contribute to hazard mitigation.

Table 9.38-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|---------------------|--|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | Yes | Zoning Commission – Board of Zoning Appeals - |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | No | - |
| Construction/Building/Code Enforcement Department | Yes | Via Franklin County Building Department |
| Emergency Management/Public Safety Department | Yes | Via Franklin County EMA and City of Dublin Emergency Management Coordinator |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Via Franklin County EMA and City of Dublin |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Washington Township provides snow removal, ditch maintenance, street sign maintenance and pavement maintenance for Township roads. Township roads include Baldwin Road, Fulk Road, Holiday Lane, Shier Lane, Fishel Drive and the alleys in the unincorporated town of Amlin. Washington Township has contracted with The City of Dublin and Franklin County Engineer to plow snow and spread salt as needed. The City of Dublin will be covering the Amlin area (including alleys). Franklin County Engineer will be covering Shier Lane, Holiday Lane, Baldwin Road, and Fishel Drive. Plowing and ice control in these areas will take place after primary roads have been cleared. |
| Mutual aid agreements | Yes | <ul style="list-style-type: none"> City of Dublin Emergency Operations Plan Washington Township works closely with the Franklin County engineer to tour and inspect roads and to identify and fulfill maintenance needs. By law, the county engineer serves as engineer for the townships. The county engineer bids for maintenance services, in line |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|--|
| | | with county and other township projects under way in the county. Funds are provided through gasoline taxes and motor vehicle license fees to pay for the maintenance work and road signage. <ul style="list-style-type: none"> Washington Township partners with other Townships, Franklin County and the Franklin Soil and Water Conservation District to meet the requirements of the National Pollutant Discharge Elimination System (NPDES) Phase II Storm Water Program. |
| Human Resources Manual | Yes | |
| Other | Yes | Zoning Department - The Zoning Department is responsible for enforcement of the Zoning Resolution within the unincorporated area of the township, including issuing permits; assisting residents and property owners with zoning and land-use questions; and providing informational assistance to the Zoning Commission and Board of Zoning Appeals. |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | No | - |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | Engineering firm is contracted through the Township to design and build stormwater drainage improvements |
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | Yes | Franklin County EMA |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | City of Dublin GIS Department |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | Yes | Franklin County EMA or City of Dublin Emergency Management Coordinator |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to Washington Township.

Table 9.38-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | No |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | Yes |

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|---|
| Other federal or state Funding Programs | Ohio Public Works Commission Grant and Loan |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to Washington Township.

Table 9.38-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|--|
| Public information officer or communications office | Yes | - |
| Personnel skilled or trained in website development | No | - |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | Yes | The Township maintains Facebook and Twitter social media pages and uses those pages to relay information regarding general news and information regarding hazards. |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Franklin County EMA and City of Dublin (sirens) |
| Natural disaster/safety programs in place for schools | No | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | Yes | Website, social media and printed newsletters |

Community Classifications

The table below summarizes classifications for community programs available to Washington Township.

Table 9.38-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | ISO - Class 1 | 2017 |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future

hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.38-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic (Erosion) | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Strong |
| Tornado | Moderate |

9.38.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for Washington Township.

Table 9.38-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|------------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Washington (Twp) | NR | NR | NR | NR | NR |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA’s HUDEX Report.

NR Not reported

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for Washington Township.

Table 9.38-10. NFIP Summary

| NFIP Topic | Comments |
|--|--|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | The unincorporated Washington Township has a number of agricultural fields that capture minor ponding during heavy rains. The Township does not have a record of agricultural losses. |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | The unincorporated Washington Township has no residents who have inquired about flood mitigation. |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | N/A |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | None in Washington Township. |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | Yes |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Franklin County EMA and Building Department |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | The Township utilizes FEMA documentation for climate change related conditions. |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | N/A |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | N/A |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | N/A |
| What are the barriers to running an effective NFIP program in the community, if any? | N/A |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | N/A |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | Unknown |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | N/A |
| Does your floodplain management program meet or exceed minimum requirements? | N/A |

| NFIP Topic | Comments |
|---|---|
| <ul style="list-style-type: none"> If exceeds, in what ways? | |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | The Township zoning resolution from September 12 th , 2012 |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | N/A |

9.38.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.38-11. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | - | - | - | - | - | - | - | - | - |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | - | - | - | - | - | - | - | - | - | - |

Table 9.38-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

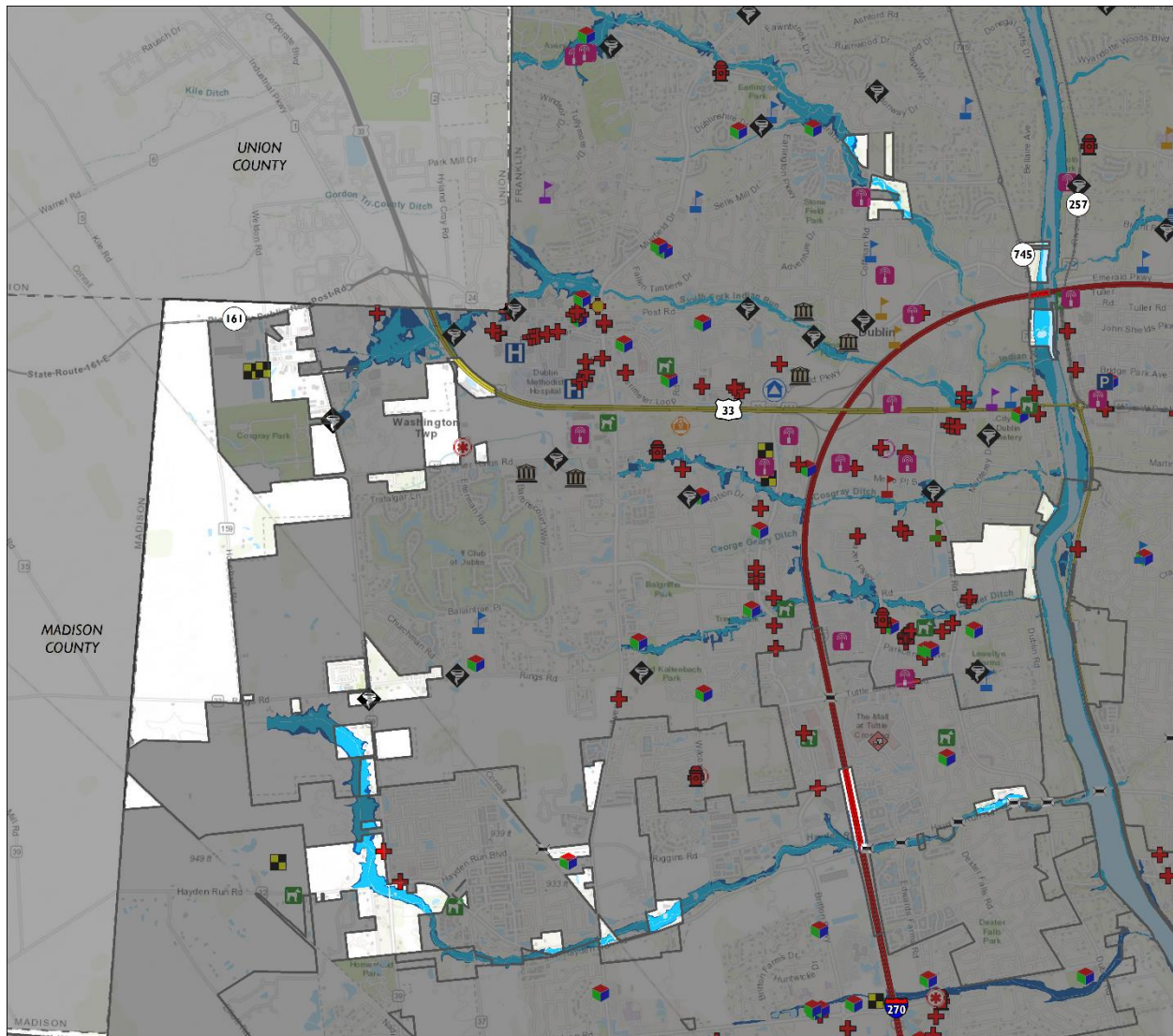
9.38.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for Washington Township’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be

identified clearly using mapping techniques and technologies and for which Washington Township has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.38-1. Washington Township Hazard Area Extent and Location Map – Flood



Washington (T)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service

- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems

0 0.5 1 Miles

- Municipal Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody
- FEMA Flood Hazard Area**
- 1-Percent Annual Chance
- 0.2-Percent Annual Chance

The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.

Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021

Notes: City (C), Township (T), Village (V)

Figure 9.38-2. Washington Township Hazard Area Extent and Location Map – Inland Erosion

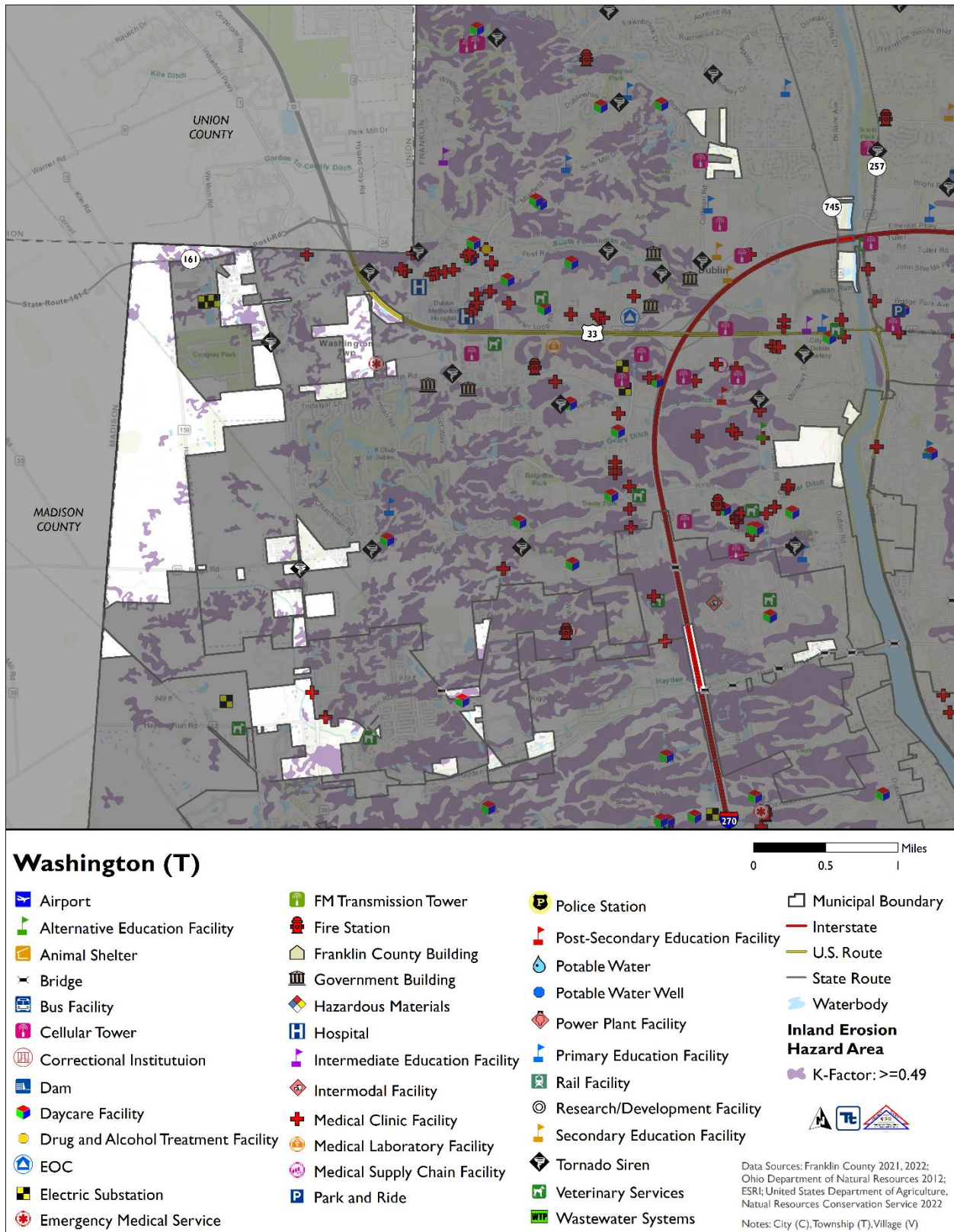
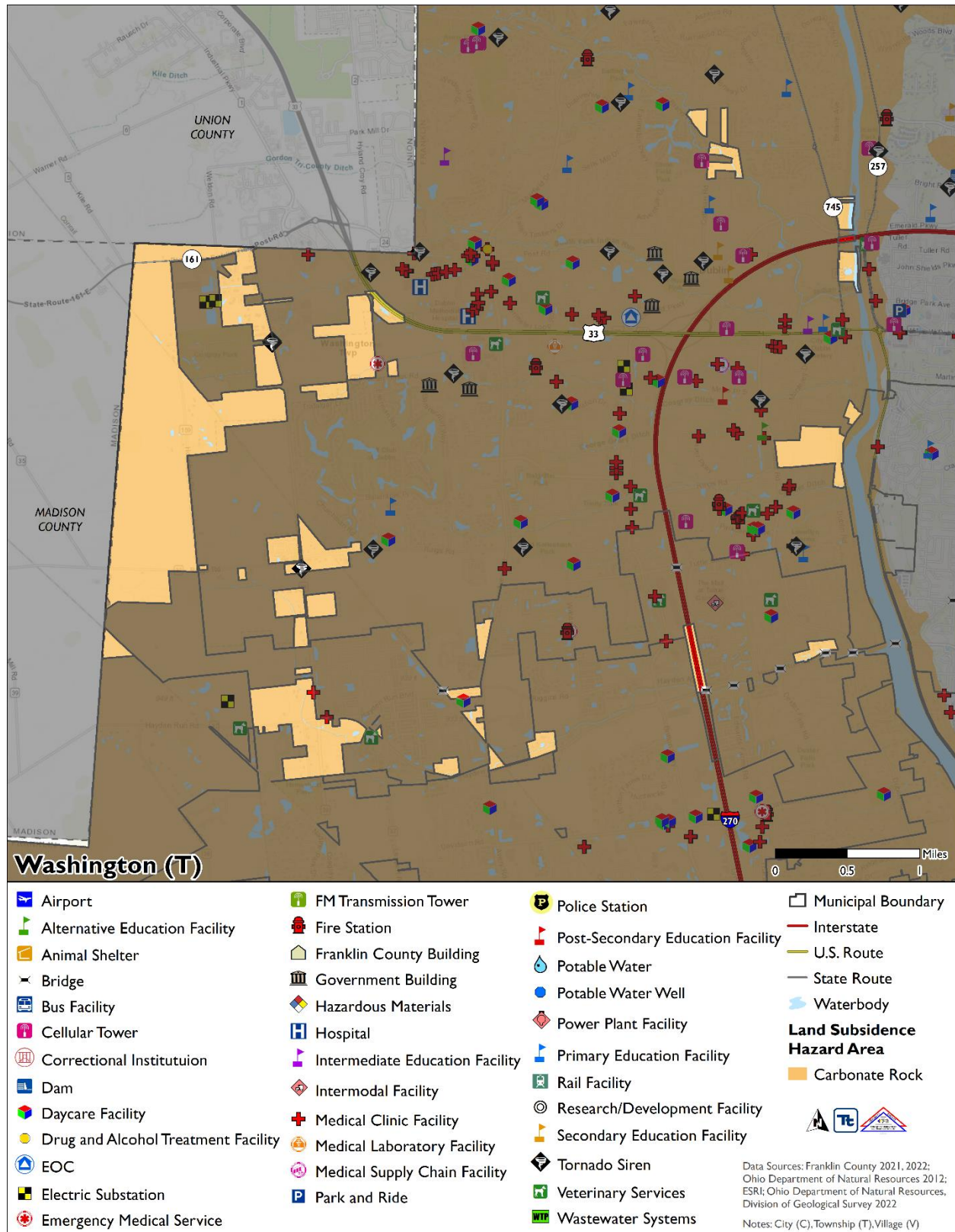


Figure 9.38-3. Washington Township Hazard Area Extent and Location Map – Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

Washington Township’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage Washington Township experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.38-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| April 3-4, 2018 | EF-1 Tornado | N/A | Severe thunderstorms and tornadoes developed. Between one to three inches of rain fell across the region. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage. | The Township did not experience any notable damages or losses. |
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The Township did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The Township did not experience any notable damages or losses. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The Township did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for Washington Township. Washington Township reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.38-14. Hazard Ranking Input

| Hazard of Concern | Ranking |
|-----------------------|---------|
| Dam/Levee | Low |
| Disease Outbreak | Low |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Low |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.38-15. Number of Critical Facilities and Community Lifelines in Hazard Areas In Washington Township

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 1 | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 1 | - |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 1 | 1 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, Washington Township identified the following vulnerabilities within its community:

- The Township stormwater drainage systems overflow and back up during flood and severe weather events.
- Washington Township does not have a certified Floodplain Administrator

- Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township.
- The Township is experiencing issues with invasive species killing and outcompeting native species.
- The Township does not have a Climate Action/Resiliency/Sustainability Plan

9.38.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.38-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|---|--|---|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Conduct regular maintenance for drainage systems and flood control structures. | Franklin County Engineer/City of Dublin | In Progress | Yes | New stormwater drains have been installed along Rings Road between Cosgray and Churchman Roads during 2022 | Washington Township secured funding and established a construction agreement with the Franklin County Engineer's Office to oversee construction. |
| Educating citizens regarding the dangers of extreme heat and cold and the steps they can take to protect themselves. | Township Trustee's office | Ongoing | Yes | Ohio is subject to periods of extreme heat in the summer, and extreme cold during winter. Make this an all-hazards education campaign. | Washington Township utilizes our web and social media channels to provide educational information to residents. The WTFD organizes fan donations to give to needy, vulnerable populations during extreme heat. |
| Educating citizens regarding severe summer weather (thunderstorms, lightning, wind, tornado), shelter in place, evacuation etc. | Township Trustee's office | Ongoing | Yes | Central Ohio is subject to severe storms at varying times throughout the year. Make this an all-hazards education campaign. | Washington Township utilizes our web and social media channels to provide educational information to residents. We participate in designated severe storm awareness activities. |
| Purchase NOAA weather alert radios for every hospital, parks & recreation center, public utility facility, large population venue, private/public school and government building accessed by the public. (2,000 / 6 months) | Township Trustee's office | Complete | No | - | - |
| Purchase Tornado Sirens through Franklin County Emergency Management & Homeland Security. (60,000 / 4 months) | Township Trustee's office | No Progress | No | A large part of our jurisdiction is covered by sirens maintained by the City of Dublin. Franklin County EMA has not reached out to us about the need for sirens in our area. | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, Washington Township identified the following mitigation efforts completed since the last HMP:

- The Amlin area improvement project totaled over \$4.2 million and was funded by a variety of sources. The new lines were installed during 2022.

Since the adoption of the County's first HMP, Washington Township has made significant mitigation progress in the following areas:

- Education of citizens regarding severe summer weather through the use of social media and online web channels.
- Purchasing of NOAA weather alert radios for every hospital, park and recreation center, public utility facility large population venues, public/private schools and government buildings accessed by the public.

Proposed Hazard Mitigation Initiatives for the HMP Update

Washington Township participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.38-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | - | - | X | X | - | X | X | - | X |
| Disease Outbreak | X | - | - | X | X | - | X | X | - | X |
| Drought | X | - | - | X | X | - | X | X | - | X |
| Earthquake | X | - | - | X | X | - | X | X | - | X |
| Extreme Temp | X | - | - | X | X | - | X | X | - | X |
| Flood | X | X | - | X | X | X | X | X | - | X |
| Geologic (Erosion) | X | - | - | X | X | - | X | X | - | X |
| Invasive Species | X | - | - | X | X | X | X | X | - | X |
| Severe Summer Weather | X | X | - | X | X | X | X | X | - | X |
| Severe Winter Weather | X | X | - | X | X | X | X | X | - | X |
| Tornado | X | | -- | X | X | - | X | X | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.38-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions that Washington Township will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.38-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|------------------------------------|--|---|-----------|--------------------|---|---------------------------|---|-----------------|----------|---------------------|--------------|
| 2023-Washington Township-001 | Stormwater Drainage Maintenance | Problem: The Township stormwater drainage systems overflow and back up during flood and severe weather events. Solution: The Township will work with Franklin County Engineer and the City of Dublin to install new stormwater drains along Rings Road. | Flood, Severe Summer Weather, Severe Winter Storm | 1 | 1 year | Franklin County Engineer, City of Dublin, Washington Township | HMGP, FMA | Increase stormwater drains to reduce overflow during storm events | High | High | SIP | PP |
| 2023-Washington Township-002 | Establish Floodplain Administrator | Problem: Washington Township does not have a certified Floodplain Administrator Solution: The Township of Washington will work with Franklin County to establish a Floodplain Administrator and maintain certification once selected. | Flood | 1 | 1 to 2 years | Washington Township, Franklin County | Local Budget | Reduce risk of loss of property in the floodplain | Low | High | LPR | PR |
| 2023-Washington Township-003 | All-Hazards Education Campaign | Problem: Residents may not be informed or educated on how to protect themselves from the various hazards which may impact the Township. | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, | 2,4,5 | 1 to 2 years | Franklin County EM&HS, Washington Township | Local Budget | Increase awareness of potential hazard risks, reduce loss | Low | High | EAP | PI, ES |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|---|---|--|-----------|--------------------|--------------------------------------|---------------------------|--|-----------------|----------|---------------------|--------------|
| | | Solution: The Township will Work with Franklin County EM&HS to provide residents of Washington Township with the necessary information to protect themselves and understand the threats of all hazards. | Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | | | | | of life and property | | | | |
| 2023-Washington Township-004 | Invasive Species Eradication Program | Problem: The Township is experiencing issues with invasive species killing and outcompeting native species. Solution: The Township will work with state agencies on developing quarantine, control, and eradication programs for invasive species to protect native species. | Invasive Species | 1 | 2 years | Washington Township | Local Budget, HMGP | The Township's native species will become better protected. | Local Budget | Medium | LPR | PP |
| 2023-Washington Township-005 | Develop Climate Action/Resiliency/Sustainability Plan | Problem: The Township does not have a Climate Action/Resiliency/Sustainability Plan Solution: The Township will work with Franklin County to develop a Climate Action Plan to address the on-going impacts of climate change on | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, | 1,3 | 1 to 3 years | Washington Township, Franklin County | Local Budget, HMGP | Reduce the impacts of climate change on infrastructure and residents | Medium | High | LPR | PR, NR |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|---------------------------------|---|---|-----------|--------------------|---|---|--|--------------------------|----------|---------------------|--------------|
| | | residents and infrastructure, and natural resources. | Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | | | | | | | | | |
| 2023-Washington Township-006 | Repetitive Loss Area Mitigation | <p>Problem: Portions of the Township experienced repetitive flooding.</p> <p>Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity.</p> | Flood | 6 | 4 years | Washington Township, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.38-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|------------------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Washington Township-001 | Drainage Maintenance | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 12 | High |
| 2023-Washington Township-002 | Establish Floodplain Administrator | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 13 | High |
| 2023-Washington Township-003 | All-Hazards Education Campaign | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 | High |
| 2023-Washington Township-004 | Invasive Species Eradication Program | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 7 | Medium |
| 2023-Washington Township-005 | Develop Climate Action/Resiliency/Sustainability Plan | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-Washington Township-006 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.39 CITY OF WESTERVILLE

This section presents the jurisdictional annex for the City of Westerville that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Westerville participated in the planning process, an assessment of the City of Westerville’s risk and vulnerability, the different capabilities used in the City of Westerville, and an action plan that will be implemented to achieve a more resilient community.

9.39.1 Hazard Mitigation Planning Team

The City of Westerville identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Westerville departments, including the Fire Department and City Manager. The Fire Chief represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.39-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|--|
| Name/Title: | Brian Miller/Fire Chief | Name/Title: | Monica Irelan/City Manager/ExComm |
| Address: | 21 S. State St. Westerville, Ohio 43081 | Address: | 21 S. State St. Westerville, Ohio 43081 |
| Phone Number: | 614-901-6400 | Phone Number: | 614-901-6400 |
| Email: | Brian.miller@westerville.org | Email: | monica.irelan@westerville.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Jeff Buehler | | |
| Address: | 64 East Walnut Street, Westerville OH, 43081 | | |
| Phone Number: | 614-901-6659 | | |
| Email: | - | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributors | | |
| Method of Participation: | | | |

9.39.2 Municipal Profile

The City of Westerville is in the northern area of Franklin County and is bordered by Blendon Township to the east and Sharon Township to the west and Columbus City to the south.

According to the American Community Survey, the 2021 population for the City was 29,933, a 17.13 percent decrease from the 2010 Census population of 36,120. Data from the 2021 American Community Survey indicates that 7 percent of the population is 5 years of age or younger and 19.7 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.39.3 Jurisdictional Capability Assessment and Integration

The City of Westerville performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Westerville to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Westerville and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.39-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | 2017 Ohio Building Code | State | Building Department |
| <i>How does this reduce risk?</i> Building code enforces minimum standards for life, safety and resiliency of the built environments. The Building Code has not been updated since the last HMP; therefore, it currently does not implement the HMP. During the next update, the City will review the HMP and implement the building code accordingly. | | | | |
| Zoning/Land Use Code | Yes | 1993-3 | Local | Planning and Development |
| <i>How does this reduce risk?</i> Identifies any potential hazards including flood plain concerns, zoning concerns, making sure areas are zoned for appropriate uses including monitoring designated wetlands. The zoning/land use code has not been updated since the last HMP; therefore, it currently does not implement the HMP. During the next update, the City will review the HMP and implement the zoning/land use code accordingly. | | | | |
| Subdivision Ordinance | Yes | 1993-3 | Local | Planning and Development |
| <i>How does this reduce risk?</i> These Regulations are adopted to: (1) Secure and provide for the public health, safety, comfort and general welfare. (2) Provide for growth and development in accordance with adopted plans, zoning regulations, policies and resolutions; (3) Provide safety from fire, flood and other danger; (4) Provide for efficient, adequate and economic drainage, storm water management, water and sanitary services, schools, open space and other public requirements and facilities; and (5) Provide for safe and convenient traffic circulation through the proper arrangement of streets or other highways in relation to existing or planned streets or highways. | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | Yes | 1993-3 | Local | Planning and Development |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | Chapter 1167 | Local | Planning and Development |
| <i>How does this reduce risk?</i> It is the purpose of this chapter to promote and provide for the proper use and development of lands subject to periodic flooding and to encourage the development of such lands in a manner that will promote the public health, safety and general welfare of the residents of the City. The intent of this chapter is to secure safety from flooding, minimize flood damage to persons and property, minimize public expenditures for flood relief and flood control projects, and to reduce the height and violence of floods insofar as such are caused by any natural or artificial obstruction. In order to accomplish its purposes, this chapter includes methods and provisions for: | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|--|---|--|
| (a) Restricting or prohibiting uses which are dangerous to health, safety and property due to flooding, or which result in damaging increases in erosion, in flood heights or in flood water velocity; (b) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; (c) Controlling the alteration of the flood plain, watercourse channels and natural protective barriers, which help accommodate or channel flood waters; (d) Controlling the filling, grading, dredging and other development which may increase flood damage; and (e) Preventing or regulating the creation of floodway obstructions or encroachments which will unnaturally divert floodwaters or which may increase flood hazards in other areas. | | | | |
| The City prohibits the following in the floodway: no building, structure or premises shall be used, and no building or structure shall be erected which is designed to be used for overnight accommodations by human habitans or any alteration of the floodway terrain through the shifting, addition or removal of material acting alone or in combination with other reasonably anticipated alterations would impair the designated floodway's ability to carry and discharge the waters resulting from the base flood is prohibited. | | | | |
| Any new construction or substantial improvement in the floodplain requires that the lowest floor, including basement, elevated to or above the flood protection elevation. | | | | |
| Wellhead Protection | Yes | ??? | Local | Water Department |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | Yes | 537. | Local | City Managers Office |
| <i>How does this reduce risk?</i> | | | | |
| Plan created for disaster response, mitigation and recovery. | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | Yes | Historic Preservation Ordinance | Local | |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Central College Area Plan Otterbein Master Plan North Westerville Plan Imagine Westerville Community Plan Westerville Road Area Plan | | |
| <i>How does this reduce risk?</i> | | | | |
| Identities future growth and redevelopment plans to include creating resilience in utility infrastructure conforming to current building and fire codes for life safety where applicable to build more resilient structures. | | | | |
| Capital Improvement Plan | Yes | 2022 | Local | Finance Department |
| <i>How does this reduce risk?</i> | | | | |
| General governmental projects (sidewalks, streets, bridges, etc., are accounted for within the General Capital Improvement Fund primarily funded by a distribution of income taxes and debt proceeds. | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | Yes | 93-12 | Local | Planning and Development |
| <i>How does this reduce risk?</i> | | | | |
| Makes sure no structures are built in the floodplain. | | | | |
| Stormwater Management Plan | Yes | 93-12 | Local | Planning and Development |
| <i>How does this reduce risk?</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| EPA Compliant and makes sure tributaries are maintained to monitor and prevent erosion. | | | | |
| Open Space Plan | Yes | PROS Master Plan | Local | Parks and Recreation |
| <i>How does this reduce risk?</i> The recommendations outlined in the PROS Master Plan are aligned with the vision, mission and core values of the community and the Department. These recommendations follow what the community has voiced as a priority. Overall, the capital improvements can be utilized as a guideline for future improvements and development with flexibility to be altered and updated as needed. | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | Yes | Comprehensive Plan adopted July 2016 | Local | Economic Development |
| <i>How does this reduce risk?</i> Multifaceted plan that covers development, new infrastructure and improving and or upgrading existing infrastructure to improve community safety and resiliency. | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Transportation Plan | Yes | Central Ohio Transportation Authority (COTA) | County | COTA |
| <i>How does this reduce risk?</i> New software is currently in the works to keep COTA buses out of Hazard areas. COTA can also be used to evacuate residents if necessary and can also be used as temporary shelter for people affected by a disaster. | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Climate Action/ Resiliency/Sustainability Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Business/ Downtown Development Plan | Yes | Uptown Plan Adopted March 6, 2014 | Local | Planning and Development |
| <i>How does this reduce risk?</i> Multifaceted plan that covers development, new infrastructure and improving and or upgrading existing infrastructure to improve community safety and resiliency. | | | | |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | Yes | Plan is updated annually | Local | Fire Division |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> | | | | |
| <i>Consider the following:</i> | | | | |
| <ul style="list-style-type: none"> Does your CEMP cover short-term response and long-term recovery to address communications, evacuation, and housing necessary for identified hazards? | | | | |
| Continuity of Operations Plan | Yes | Part of the EMP | Local | Fire Division |
| <i>How does this reduce risk?</i> | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | Yes | Franklin County List of Potential Threats/Disasters | County | EMA |
| <i>How does this reduce risk?</i> | | | | |
| Helps for local planning purposes to identify threats and how the City of Westerville can plan and prepare for responding to these types of incidents. | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Public Health Plan | Yes | ??? | County | Health |
| <i>How does this reduce risk?</i> | | | | |
| <i>Identifies public health emergencies and places funding and strategies to address these emergencies.</i> | | | | |
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the City of Westerville to oversee and track development.

Table 9.39-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|--|--------|---------------------|
| Do you issue development permits? <ul style="list-style-type: none"> If yes, what department is responsible? | Yes | Building Department |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | - |
| Do you have a buildable land inventory? <ul style="list-style-type: none"> If yes, please describe | No | - |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Westerville and their current responsibilities that contribute to hazard mitigation.

Table 9.39-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|------------------------|--|
| Administrative Capability | | |
| Planning Board | Yes | The Planning Commission is a seven-member board that holds public hearings on land use proposals such as subdivision plans and rezoning requests. The Commission also hears and reviews plans for new office and commercial land development and provides a forum for public discussion of plans and proposed development regulations. The seven members consist of six citizen volunteer appointees and one member designated by and representing City Council. |
| Zoning Board of Adjustment | Yes | The Board of Zoning Appeals (BZA) is a seven-member board that hears and decides primarily zoning variances (e.g., setback encroachment) and temporary use permits (e.g., sales trailer). The Board is also responsible for the hearing and disposition of appeals from any order or decision made by a City administrative officer in enforcing the zoning ordinance. |
| Planning Department | Yes | Includes, Building Department, Engineers, Planning, Code Enforcement |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | Yes | PROS Board: A four-time National Recreation and Park Association (NRPA) Gold Medal winner, Westerville Parks & Recreation is one of only 117 accredited agencies in the U.S. |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | Yes | Service Department |
| Construction/Building/Code Enforcement Department | Yes | The Building Division uses modern codes, industry standards and City ordinances to ensure the protection of life, health, property and general welfare of the citizens of Westerville. We issue permits for all construction and renovation projects, such as electrical, plumbing and HVAC systems. |
| Emergency Management/Public Safety Department | Yes | Fire, Police and Communications Staff |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Reverse 911, Everbridge, Franklin County Siren System can be activated by our Communications Center |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Service Department and Electric Division; The City of Westerville maintains the storm water collection system through a series of Best Management Practices. These BMPs are listed as a part of the NPDES Stormwater Management Plan. |
| Mutual aid agreements | Yes | Police, Fire, Electric Divisions all have Mutual Aid Agreements with Surrounding Communities. |
| Human Resources Manual | Yes | Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? |
| Other | No | - |
| Technical/Staffing Capability | | |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|---------------------|--|
| Planners or engineers with knowledge of land development and land management practices | Yes | Planning and Development Staff |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | Building Department Staff |
| Planners or engineers with an understanding of natural hazards | Yes | Planning and Development Staff |
| Staff with expertise or training in benefit/cost analysis | Yes | Administrative Services/Procurement Staff |
| Professionals trained in conducting damage assessments | Yes | Building Department and Fire Department Staff |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | Information Systems GIS department Staff |
| Environmental scientist familiar with natural hazards | No | Contracted Out |
| Surveyor(s) | No | Contracted Out |
| Emergency Manager | - | - |
| Grant writer(s) | No | Consider the following: Are data and maps from the HMP used to support documentation in grant applications? |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |
| <p>How do your administrative/technical capabilities contribute to risk reduction in your community? Utilizing the departments listed above our Staff all work together to identify hazards through our planning and development review processes which includes all departments reviewing site proposals and building proposals to identify and mitigate potential hazards before construction begins.</p> | | |

Fiscal Capability

The table below summarizes financial resources available to the City of Westerville.

Table 9.39-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|---|
| Community development Block Grants (CDBG, CDBG-DR) | No |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | Yes |
| Stormwater utility fee | Yes |
| Incur debt through general obligation bonds | No |
| Incur debt through special tax bonds | Yes |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Westerville.

Table 9.39-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|--|
| Public information officer or communications office | Yes | Community Affairs – Handles Social Media and other communications to the Community |
| Personnel skilled or trained in website development | Yes | Community Affairs |
| Hazard mitigation information available on your website | Yes | As needed |
| Social media for hazard mitigation education and outreach | Yes | Messages sent out as needed |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | Reverse 911 if needed |
| Natural disaster/safety programs in place for schools | Yes | Meet with Schools for Disaster Preparedness including tabletop scenarios and ICS training. |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | Yes | Fire Department goes over Disaster Preparedness at Public events. |

Community Classifications

The table below summarizes classifications for community programs available to the City of Westerville.

Table 9.39-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | Yes | N/A | N/A |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | ISO Class 1 | |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.39-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.39.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Westerville.

Table 9.39-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|-----------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Westerville (C) | 30 | 17 | \$292,464.51 | 2 | 0 |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Westerville.

Table 9.39-10. NFIP Summary

| NFIP Topic | Comments |
|--|--|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | From Schrock Road along Park Meadow to Interstate 270. Areas next to Alum Creek Yes |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |



| NFIP Topic | Comments |
|---|--|
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI inspections can be requested through the county emergency management agency director. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? | N/A |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | Yes |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Planning and Development |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | We review permits to make sure no construction happens in the flood plain. |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Change of Occupancy permits, and the building department determines if extent of any renovation requires permits. The Fire Division also conducts annual fire inspections of all commercial properties and reports any renovations to the building department for review. |
| What are the barriers to running an effective NFIP program in the community, if any? | None |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | Not aware of any |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | Unknown |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | Chapter 1167 1993 |
| Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? | Unknown |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | All new development goes through Our Planning and Development Department to make sure zoning is followed. Engineers within Planning and Development also monitor stormwater runoff plans and proposals. |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | Unknown at this time. |

9.39.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The table below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.39-11. Number of Building Permits for New Construction

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 52 | 0 | 45 | 0 | 50 | 0 | 12 | 0 | 2 | 0 |
| Multi-Family | 2 | 0 | 8 | 0 | 5 | 0 | 4 | 0 | 0 | 0 |
| Other (commercial, mixed-use, etc.) | 1 | 0 | 11 | 0 | 22 | 0 | 14 | 0 | 5 | 0 |
| Total Permits Issued | 901 | 0 | 796 | 0 | 754 | 0 | 734 | 0 | 782 | 0 |

Table 9.39-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.39.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Westerville’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Westerville has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.39-1. City of Westerville Hazard Area Extent and Location Map-Flood

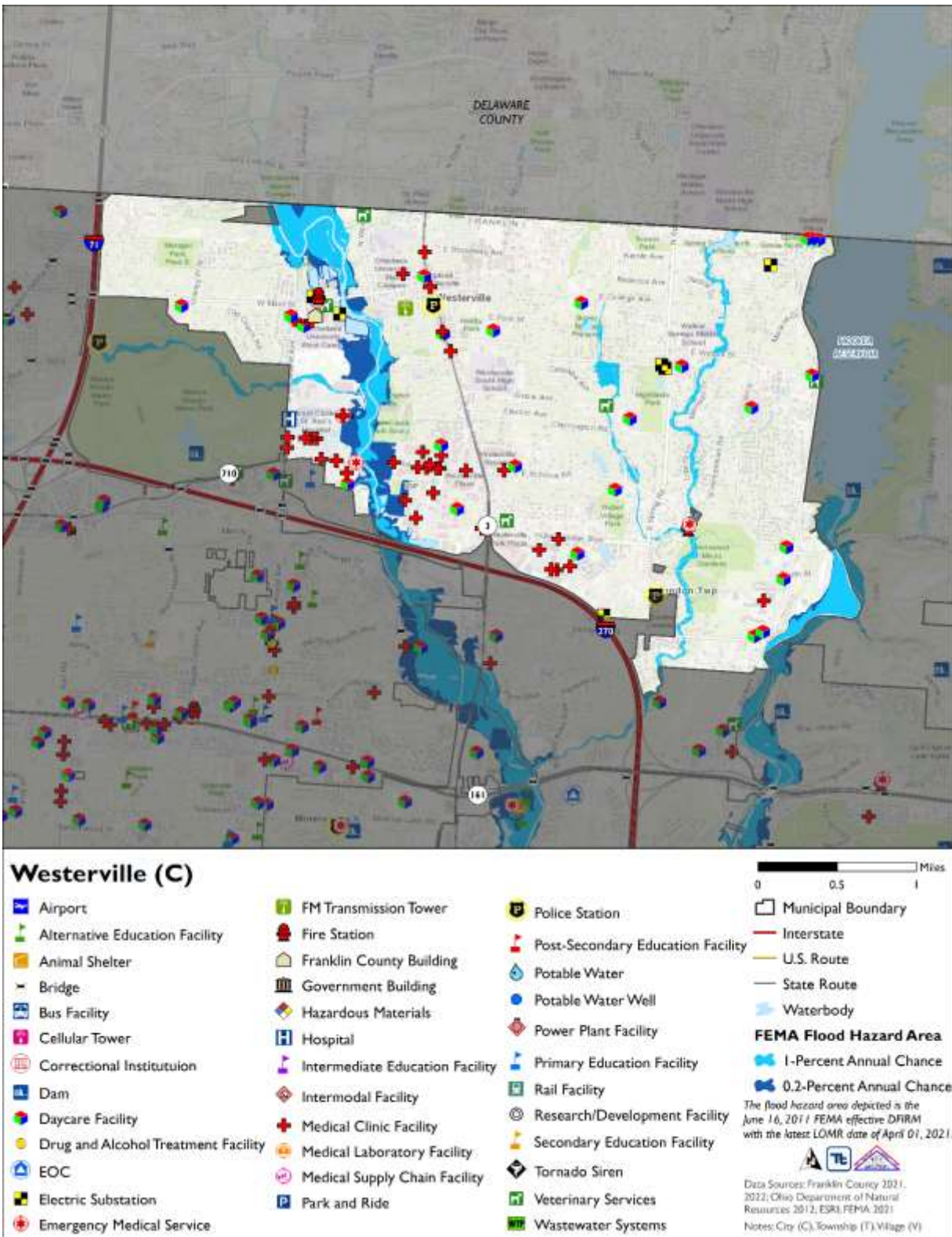


Figure 9.39-2. City of Westerville Hazard Area Extent and Location Map-Inland Erosion

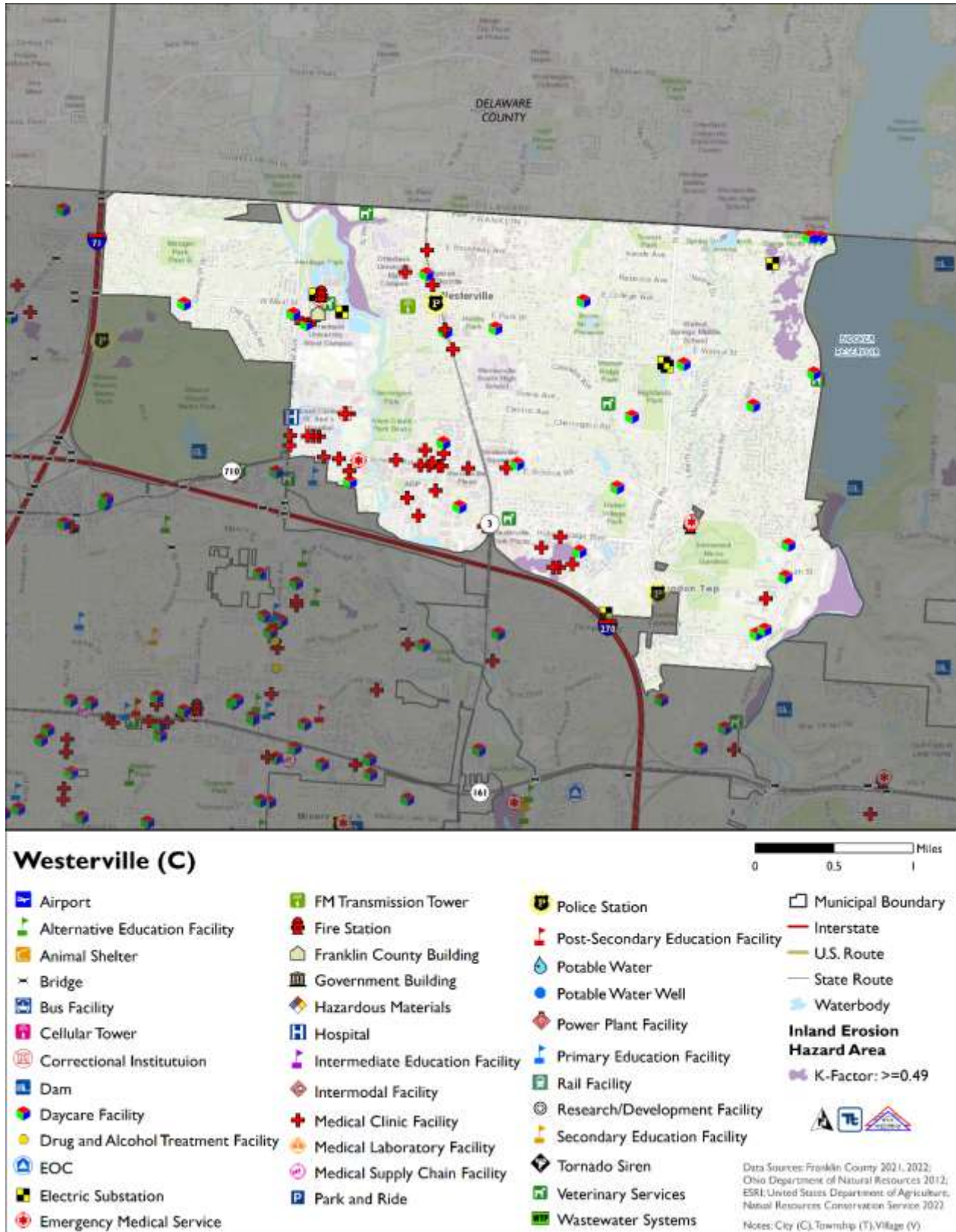
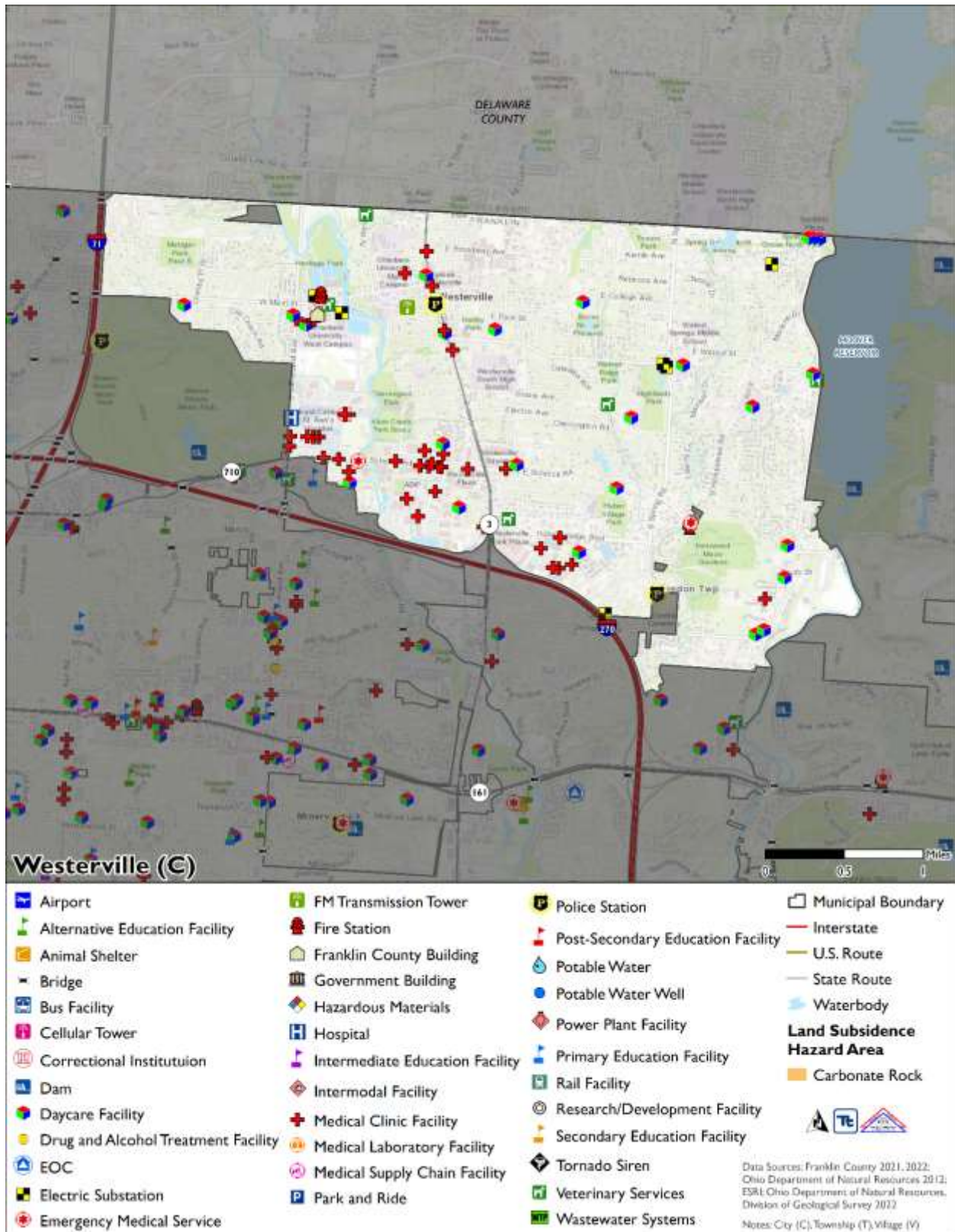


Figure 9.39-3. City of Westerville Hazard Area Extent and Location Map-Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events is provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Westerville’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Westerville experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.39-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|---|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The City of Westerville did not incur any additional losses or damages. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The City of Westerville did not incur any additional losses or damages. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The City of Westerville did not incur any additional losses or damages. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Westerville. The City of Westerville reviewed the County hazard risk/vulnerability risk ranking table and individual

Table 9.39-14. Hazard Ranking Input

| Hazard | Rankings |
|-----------------------|----------|
| Dam/Levee | Medium |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.39-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Westerville

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | 11 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | - | 2 |
| Subsidence (Karst/Carbonate Rock) Hazard Area | 1 | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | 50 |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Westerville identified the following vulnerabilities within its community:

- The City of Westerville does not have generators installed in all of their critical facilities and emergency shelters which hinders them from operating during hazard events.
- There is a lack of public awareness of the magnitude of a potential hazard events. Develop public service announcements (PSAs) about increasing hazard potential.
- The City has experienced an increase in debris present in the streams in public areas, i.e. parks.
- The bridges at Schrock and Main are not up-to-date and are undersized.
- Westerville currently lacks a stormwater utility to assess fees and use the revenue to maintain infrastructure relating to stormwater flooding.
- Knowledge is lacking from City residents about the locations of shelters to be used during a storm event.

- There is a lack of a reliable warning system with total coverage as it relates to lightning especially in public areas like parks and pools. Install lightning prediction and protection systems throughout public areas.
- There is a lack of backups for traffic lights at critical intersections after a storm event. This can create secondary traffic incidents.
- The City experiences issues in relation to winter weather. Snowstorms result in an inability to travel and also in residents not adhering to snow emergency warnings.
- The City experiences communication and utility disruptions both during and after a hazard events. This hinders first responders' ability to respond in a timely fashion.
- The City residents are uneducated in terms of the effects that climate change is having and will have on the hazards of concern.
- Areas like the Huber area, Spring Grove, and areas north of the Franklin County line, currently do not have watercourse easements, which hinders the City from accessing water lines and drainage/water sources.
- Some utility poles within the City are overburdened with utility lines, making them a potential risk to life, safety and property.
- There is a lack of safe spots in public areas, especially parks, when a hazard event strikes the City.
- There is a potential for reduction in revenues due to the after-effects of some hazard events.
- The City has heard of concerns that exist about private use of groundwater for irrigation purposes (tapping of aquifers for sprinkling systems).
- Public education is lacking on the Drought Disaster Plan produced by the Westerville Water Department. PSA on existing Drought Disaster Plan.
- Westerville City has two repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.
- All municipalities need to work with FCEMHS and MORPC to educate residents on the effect of climate change on infrastructure that was not built to handle the intensity of storms now occurring more frequently. What used to be a 100, 250, 500 year storm level is now happening more regularly. Residents don't seem to understand what is going on and their need to better prepare as a result of it.*

**This issue was identified as a specific area of concern based on resident response to the Franklin County Hazard Mitigation public survey.*

9.39.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the ‘Capability Assessment’ earlier in this annex.

Table 9.39-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|-------------------|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Install generators for critical infrastructure and emergency shelters | City | Ongoing | Yes | We continue to add Emergency Generators in City Buildings and Schools which can be used as emergency shelters. | City Departments and Westerville City Schools. |
| Spring Run and County Line Run have erosion issues due to extreme rainfall events. Study mitigation alternatives. | City | Complete | No | - | - |
| There is a net loss of the floodplain due to increased development. Discourage development that creates a net loss of the floodplain. | Mayor's Office | Complete | No | - | - |
| There is a lack of public awareness of the magnitude of a potential flood event. Develop public service announcements (PSAs) about flooding potential. | Mayor's Office | Ongoing | Yes | Continue to use Social Media to create disaster preparedness. | Community Affairs |
| There is debris present in the streams in public areas, i.e., parks. Develop a preventative maintenance program. | Mayor's Office | Ongoing | Yes | - | Parks and Recreation/Service Department |
| Critical facilities exist in the floodplain. Seek funding to relocate or floodproof structures within the floodplain. (\$5,000) | Mayor's Office | Ongoing | Yes | Continue to monitor flood maps for changes. | Planning and Development |
| The bridges at Schrock and Main are not up-to-date and are undersized. Undertake an engineering study to determine adequate floodway size. | Mayor's office | No Progress | Yes | Floodwaters have reached the bottom of the bridge | Service Department/Franklin County Engineer |
| Westerville currently lacks a stormwater utility. Develop a stormwater utility. | Mayor's office | No Progress | Yes | - | Service Department |
| Knowledge is lacking about the locations of shelters to be used during a storm event. Establish and identify a shelter network. Develop a PSA regarding the location of pre- and post storm shelters. (\$5,000) | Mayor's office | No Progress | Yes | Continue to work with Schools and American Red Cross to identify shelters. | Fire Division and Community Affairs |



| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|-------------------|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| There is a lack of a reliable warning system with total coverage as it relates to lightning especially in public areas like parks and pools. Install lightning prediction and protection systems throughout public areas. | Mayor's office | No Progress | Yes | Continue to monitor effectiveness of the system and consider expansion of the system in parks. | Parks and Recreation |
| There is a lack of backups for traffic lights at critical intersections after a storm event. Install backup sources for critical intersection lights. (\$100,000) | Mayor's office | No Progress | Yes | Continue to explore options for signals | Electric Division |
| Snowstorms result in an inability to travel and also in residents not adhering to snow emergency warnings. Develop a plan to address transportation issues and research the potential for intelligent traffic systems. Increase enforcement during snow emergencies. (\$7,500) | Mayor's office | Ongoing | Yes | Explore use of Opticom for snowplows | Service Department |
| Communications and utilities are disrupted both during and after a tornado. Bury utility lines and evaluate the possibility of a wireless network. (\$20,000,000) | Mayor's office | Ongoing | Yes | Continue to provide Fiber infrastructure | WeConnect |
| Severe storms have the potential to cause power outages across the city. Explore the following possibilities: backup generators, fuel cell network, alternative energy sources, burying utility lines, undertaking an assessment of mechanical load on aboveground utilities (i.e. poles). | Mayor's office | Ongoing | Yes | Continue to bury electric lines in new residential developments. Continue to add Generators to City Facilities and Schools. | Electric, All City Departments, and Westerville City Schools. |
| Bradford pear trees are an issue throughout the city each time that there is a storm event due to damage by wind, lightning, hail, etc. Implement a replacement program for Bradford pear trees for both public and private property and update the tree assessment. (\$35,000/year) | Mayor's office | Ongoing | No | 800 trees left in the City Expect to have mitigated over the next 20 years. Current Trees are stable and do not pose an immediate threat | Parks and Recreation |
| There is a need to implement watercourse easements citywide. Areas like the Huber area, Spring Grove, and areas north of the Franklin County line, currently do not have watercourse | Mayor's office | No Progress | Yes | Tried to purchase easements from residents through Federal Funding. Residents denied selling easements. | Planning and Development |



| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|-------------------|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| easements. Develop a citywide watercourse protection ordinance. | | | | | |
| Some utility poles within the city are overburdened with utility lines. Undertake a vulnerability assessment on utility poles. (\$175,000) | Mayor's office | Ongoing | Yes | Electric Division continues to Monitor the Electric Poles. | Electric Division |
| There is a lack of safe spots in public areas, especially parks. Build shelters and establish a shelter network. Seek funding for multi-use facilities in public places. (\$600,000) | Mayor's office | Ongoing | Yes | Add shelters as needed. | Parks and Recreation |
| There is a potential for reduction in revenues due to the after-effects of tornadoes. Work with the Chamber of Commerce for business continuity for smaller businesses. | Mayor's office | Ongoing | Yes | Continue to work with the Chamber to identify areas where businesses can get back up and running after a disaster. | Economic Development |
| Concerns exist about private use of groundwater for irrigation purposes (tapping of aquifers for sprinkling systems). Investigate groundwater usage | Mayor's office | Ongoing | Yes | - | Water Department |
| Public education is lacking on the Drought Disaster Plan produced by the Westerville Water Department. PSA on existing Drought Disaster Plan. Use existing tools to provide public education: magazine, calendar, water quality report, website. Seek funding to enhance billing system to educate the public on the plan. | Mayor's Office | Ongoing | Yes | - | Water Department |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Westerville identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, the City of Westerville has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.39-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | X | - | X | - | - | X | - | X | X |
| Disease Outbreak | X | X | - | X | - | - | X | - | - | X |
| Drought | X | X | - | X | - | - | X | - | - | X |
| Earthquake | X | X | - | X | X | - | X | - | X | X |
| Extreme Temp | X | X | - | X | X | - | X | - | X | X |
| Flood | X | X | X | X | X | X | X | X | X | X |
| Geologic | X | X | - | X | X | - | X | - | X | X |
| Invasive Species | X | X | - | X | - | - | X | - | - | X |
| Severe Summer Weather | X | X | - | X | X | X | X | - | X | X |
| Severe Winter Weather | X | X | - | X | X | X | X | - | X | X |
| Tornado | X | X | - | X | X | - | X | - | X | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.39-17)
 Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Westerville will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.39-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|------------------------------------|--|---|-----------|--------------------|---|------------------------------|--|--------------------------|----------|---------------------|--------------|
| 2023-City of Westerville-001 | Generators | <p>Problem: The City of Westerville does not have generators installed in all of their critical facilities and emergency shelters which hinders them from operating during hazard events.</p> <p>Solution: The City will continue to install generators for critical infrastructure and emergency shelters after conducting a generator study.</p> | Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic Invasive Species Severe Summer Weather Severe Winter Weather Tornado | 2 | Less than 5 years | City Departments and Westerville City Schools | FMA, BRIC, HMGP, City Budget | The City will be able to perform continuity of operations during hazard events | >\$100,000 per generator | High | SIP | ES |
| 2023-City of Westerville-002 | Social Media Disaster Preparedness | <p>Problem: There is a lack of public awareness of the magnitude of a potential hazard events. Develop public service announcements (PSAs) about increasing hazard potential.</p> <p>Solution: The City will continue to use Social Media to create disaster preparedness and ensure it is distributed</p> | Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic Invasive Species | 5 | Ongoing | Community Affairs | City Budget | The City residents will become more knowledgeable about hazards | Staff time | High | EAP | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|----------------------------|--|---|-----------|--------------------|-----------------------------------|------------------------------------|---|-----------------------|----------|---------------------|--------------|
| | | | Severe Summer Weather Severe Winter Weather Tornado | | | | | | | | | |
| 2023-City of Westerville-003 | Debris Maintenance Program | Problem: The City has experienced an increase in debris present in the streams in public areas, i.e., parks. Solution: The City will develop a preventative debris maintenance program as well as a routine stream debris cleanout program. | Flood | 3 | Ongoing | City Administration | City Budget, FMA | The City should experience reduced flooding. | \$30,000/yr | High | NSP | NR |
| 2023-City of Westerville-004 | Bridge Study | Problem: The bridges at Schrock and Main are not up-to-date and are undersized. Solution: The City will undertake an engineering study to determine adequate floodway size and will install properly sized bridges. | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Less than 5 years | City Administration | City Budget, FMA, CDBG, HMGP, BRIC | The city will have useable and reliable bridges that are up to date | TBD by Engineer Study | High | SIP | SP |
| 2023-City of Westerville-005 | Stormwater Utility | Problem: Westerville currently lacks a stormwater utility to assess fees and use the revenue to maintain infrastructure relating to stormwater flooding. Solution: The City will develop a stormwater utility to levee fees to control stormwater related flooding. | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Less than 5 years | Service Department | City Budget, FMA | The City will have better stormwater infrastructure | Staff Time | High | LPR | PR |
| 2023-City of Westerville-006 | Shelter Network | Problem: Knowledge is lacking from City residents about the locations of shelters to be used during a storm event. | Dam/Levee Disease Outbreak Drought Earthquake | 5 | 2 Years | Mayors office, Service Department | City Budget | City residents will become more knowledgeable | \$5,000 | High | EAP | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|-----------------------------|--|--|-----------|--------------------|---------------------------|---------------------------|---|----------------------|----------|---------------------|--------------|
| | | Solution: The City will establish and identify a shelter network. The City will also develop a PSA regarding the location of pre- and post-storm shelters. | Extreme Temp Flood Geologic Invasive Species Severe Summer Weather Severe Winter Weather Tornado | | | | | about shelter options | | | | |
| 2023-City of Westerville-007 | Lightning Protection System | Problem: There is a lack of a reliable warning system with total coverage as it relates to lightning especially in public areas like parks and pools. Install lightning prediction and protection systems throughout public areas. Solution: The City will install a lightning warning system to alert residents of incoming storms that may contain lightning. | Severe Summer Weather | 5 | Less than 5 years | Service Department | HMGP, City Budget | City residents will be more prepared against lightning | \$1,000 per detector | High | EAP | PI |
| 2023-City of Westerville-008 | Traffic Light Generators | Problem: There is a lack of backups for traffic lights at critical intersections after a storm event. This can create secondary traffic incidents. Solution: The City will conduct a study to evaluate the correct sized generators needed and will install backup sources for critical intersection lights. | Dam/Levee Earthquake Extreme Temp Flood Geologic Severe Summer Weather Severe Winter Weather | 6 | Less than 5 years | Electric Division | HMGP, BRIC, City Budget | City residents will be able to travel safely during power outages | \$100,000 | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|-----------------------------|--|--|-----------|--------------------|---------------------------|---------------------------|--|-----------------|----------|---------------------|--------------|
| | | | Tornado | | | | | | | | | |
| 2023-City of Westerville-009 | Winter Weather Preparedness | <p>Problem: The City experiences issues in relation to winter weather. Snowstorms result in an inability to travel and also in residents not adhering to snow emergency warnings.</p> <p>Solution: The City will develop a plan to address transportation issues and research the potential for intelligent traffic systems and will increase enforcement during snow emergencies.</p> | Severe Winter Weather | 5 | Less than 5 Years | City Administration | HMGP, City Budget | City residents will be able to travel safely during winter weather | \$7,500 | High | EAP | PR |
| 2023-City of Westerville-010 | Utility Study | <p>Problem: The City experiences communication and utility disruptions both during and after a hazard events. This hinders first responders' ability to respond in a timely fashion.</p> <p>Solution: The City will conduct a study to see if burying utility lines or evaluating the possibility of a wireless network is a possibility.</p> | Earthquake Extreme Temp Flood Geologic Severe Summer Weather Severe Winter Weather Tornado | 6 | Less than 5 years | City Administration | HMGP, BRIC, City Budget | The City will be able to keep up communication during hazard events. | \$20,000,000 | High | SIP | SP |
| 2023-City of Westerville-011 | Climate Change Education | <p>Problem: The City residents are uneducated in terms of the effects that climate change is having and will have on the hazards of concern.</p> <p>Solution: The City will create informative social media posts, website updates and work towards implementing a climate</p> | Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic | 5 | Less than 3 years | City Administration | City Budget | The City residents will be more knowledgeable about climate change impacts | Staff Time | High | LPR | PI |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|---------------------------------------|--|--|-----------|--------------------|--------------------------------------|-------------------------------|--|-----------------|----------|---------------------|--------------|
| | | change ordinance/plan to educate the residents. | Invasive Species Severe Summer Weather Severe Winter Weather Tornado | | | | | | | | | |
| 2023-City of Westerville-012 | Watercourse Easements | <p>Problem: Areas like the Huber area, Spring Grove, and areas north of the Franklin County line, currently do not have watercourse easements, which hinders the City from accessing water lines and drainage/water sources.</p> <p>Solution: The City will implement watercourse easements citywide. Additionally, the City will develop a citywide watercourse protection ordinance.</p> | Flood, Severe Summer Weather, Severe Winter Weather | 4, 6 | Less than 4 years | Property owners, City Administration | City Budget | The City will have access to water courses on other properties | \$1,000 | High | LPR | PP |
| 2023-City of Westerville-013 | Utility Pole Vulnerability Assessment | <p>Problem: Some utility poles within the City are overburdened with utility lines., making them a potential risk to life, safety, and property.</p> <p>Solution: The City will undertake a vulnerability assessment on all utility poles and determine which need to be replaced with the help of an engineer.</p> | Earthquake Extreme Temp Flood Geologic Severe Summer Weather Severe Winter Weather Tornado | 6 | Less than 5 years | City Administration | CDBG, BRIC, HMGP, City Budget | The City will have safe utility poles that can safely hold utility lines up. | \$175,000 | High | SIP | PR |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|----------------------------|--|---|-----------|--------------------|--|-------------------------------|--|-----------------|----------|---------------------|--------------|
| 2023-City of Westerville-014 | Shelter Network | <p>Problem: There is a lack of safe spots in public areas, especially parks, when a hazard event strikes the City.</p> <p>Solution: The City will build shelters and establish a shelter network. The City will seek funding for multi-use facilities in public places.</p> | Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic Invasive Species Severe Summer Weather Severe Winter Weather Tornado | 5 | Less than 5 years | City Administration | CDBG, BRIC, HMGP, City Budget | The City will have an extensive shelter network to protect residents | \$600,000 | High | SIP | SP |
| 2023-City of Westerville-015 | Business Continuity | <p>Problem: There is a potential for reduction in revenues due to the after-effects of some hazard events.</p> <p>Solution: The City will work with the Chamber of Commerce for business continuity for smaller businesses to develop a plan for how small businesses should handle the after effects of a hazard event.</p> | Dam/Levee Disease Outbreak Drought Earthquake Extreme Temp Flood Geologic Invasive Species Severe Summer Weather Severe Winter Weather Tornado | 4 | Less than 4 years | City Administration, Chamber of Commerce | City Budget | The City will have a plan for continuity of operations for small businesses. | Staff Time | High | EAP | PI |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|-----------------------------------|--|---|-----------|--------------------|--|---------------------------|--|-------------------------|----------|---------------------|--------------|
| 2023-City of Westerville-016 | Groundwater Study | Problem: The City has heard of concerns that exist about private use of groundwater for irrigation purposes (tapping of aquifers for sprinkling systems). Solution: The City will investigate and document groundwater usage so that residents are aware of available water. | Drought | 3 | Less than a year | City Administration | City Budget | The City will have an inventory of groundwater usage. | Staff time | High | LPR | PI |
| 2023-City of Westerville-017 | Drought Education and Development | Problem: Public education is lacking on the Drought Disaster Plan produced by the Westerville Water Department. PSA on existing Drought Disaster Plan. Solution: The City will use existing tools to provide public education: magazine, calendar, water quality report, website. Seek funding to enhance billing system to educate the public on the plan. | Drought | 5 | Less than a year | City Administration | HMGP, City Budget | The City will be more knowledgeable about the drought disaster plan. | Staff time | High | LPR | PI |
| 2023-City of Westerville-018 | Repetitive Loss Mitigation | Problem: Westerville City has two repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage. Solution: The City will conduct outreach to the RL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information, and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Less than 5 Years | NFIP Floodplain Administrator, Property Owners | HMGP, FMA, BRIC, CDBG | The Repetitive loss structures will no longer flood as frequently. | >\$100,000 per property | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|--|---|--|-----------|--------------------|---|------------------------------|--|-----------------|----------|---------------------|--------------|
| | | areas that experience frequent flooding (high risk areas). | | | | | | | | | | |
| 2023-City of Westerville-019 | Power Outage Prevention | Problem: Severe storms have the potential to cause power outages across the city. Solution: Explore the following possibilities: backup generators, fuel cell network, alternative energy sources, burying utility lines, undertaking an assessment of mechanical load on aboveground utilities (i.e., poles). | Severe Summer Weather, Severe Winter Weather | 6 | 5 years | Electric, All City Departments, and Westerville City Schools. | HMGP, FMA, BRIC, City Budget | Facilities will experience fewer or no power outages due to storms. | High | High | SP | PP |
| 2023-City of Westerville-020 | Critical Lifeline Facilities in the Floodplain | Problem: Critical lifeline facilities exist in the floodplain. Solution: Seek funding to relocate or floodproof structures within the floodplain. | Flood | 6 | 5 years | Planning and Development | HMGP, FMA, BRIC, City Budget | This action will mitigate the flood risk to critical facilities in the floodplain. | High | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline
Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.

- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.39-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|------------------------------|------------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-City of Westerville-001 | Generators | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-City of Westerville-002 | Social Media Disaster Preparedness | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-City of Westerville-003 | Debris Maintenance Program | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 12 | High |
| 2023-City of Westerville-004 | Bridge Study | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-City of Westerville-005 | Stormwater Utility | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 11 | High |



| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|------------------------------|---------------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-City of Westerville-006 | Shelter Network | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-City of Westerville-007 | Lightning Protection System | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-City of Westerville-008 | Traffic Light Generators | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-City of Westerville-009 | Winter Weather Preparedness | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 12 | High |
| 2023-City of Westerville-010 | Utility Study | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-City of Westerville-011 | Climate Change Education | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-City of Westerville-012 | Watercourse Easements | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 12 | High |
| 2023-City of Westerville-013 | Utility Pole Vulnerability Assessment | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-City of Westerville-014 | Shelter Network | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-City of Westerville-015 | Business Continuity | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2023-City of Westerville-016 | Groundwater Study | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2023-City of Westerville-017 | Drought Education and Development | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | High |
| 2023-City of Westerville-018 | Repetitive Loss Mitigation | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 11 | High |
| 2023-City of Westerville-019 | Power Outage Prevention | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 10 | High |
| 2023-City of Westerville-020 | Critical Facilities in the Floodplain | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.40 CITY OF WHITEHALL

This section presents the jurisdictional annex for the City of Whitehall that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Whitehall participated in the planning process, an assessment of the City of Whitehall’s risk and vulnerability, the different capabilities used in the City of Whitehall, and an action plan that will be implemented to achieve a more resilient community.

9.40.1 Hazard Mitigation Planning Team

The City of Whitehall identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Whitehall departments, including the Mayor. The Mayor represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.40-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|--|----------------------------|---|
| Name/Title: | Kim Maggard/Mayor/ExComm | Name/Title: | - |
| Address: | 21 S. State Street Westerville, Ohio 43081 | Address: | - |
| Phone Number: | 614-901-6400 | Phone Number: | - |
| Email: | kim.maggard@whitehall-oh.us | Email: | - |
| NFIP Floodplain Administrator | | | |
| Name/Title: | Zachary Woodruff, Economic Dev and Public Service Director | | |
| Address: | 360 South Yearling Road, Whitehall OH, 43213 | | |
| Phone Number: | 614-338-3103 | | |
| Email: | | | |
| Additional Contributors: | | | |
| Name/Title: | No additional contributions | | |
| Method of Participation: | | | |

9.40.2 Municipal Profile

The City of Whitehall is in the eastern center of Franklin County. The City is surrounded by the City of Columbus in entirety. It is in close proximity to John Glenn Columbus International Airport. The 338th Army Band is stationed there at the Defense Supply Center, Columbus.

According to the American Community Survey, the 2021 population for the City was 20,004, a 10.75 percent increase from the 2010 Census population of 18,062. Data from the 2021 American Community Survey indicates that 7.4 percent of the population is 5 years of age or younger and 10.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.40.3 Jurisdictional Capability Assessment and Integration

The City of Whitehall performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Whitehall to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Whitehall and provides information as to how the capability integrates hazard mitigation and risk reduction.

Table 9.40-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Part 13-2014 | Local | Building Department |
| <i>How does this reduce risk?</i> Plans shall be required for any and all buildings having more than 200 square feet of floor or foundation area. All plans shall be drawn to scale with enough clarity to indicate the nature and extent of the work proposed and show in detail that it shall conform to the provisions of this Code and all relevant laws, ordinances, rules and regulations. | | | | |
| Zoning/Land Use Code | Yes | Part 11-1995 | Local | Zoning and Planning |
| <i>How does this reduce risk?</i> When interpreting and applying the provisions of this Zoning Code, they shall be held to be the minimum requirements adopted for the promotion of the public health, safety, comfort, convenience and general welfare. | | | | |
| Subdivision Ordinance | Yes | Chapter 1101-1966 | Local | |
| <i>How does this reduce risk?</i> "Subdivision" means the division of a tract or parcel of land shown as a unit or as contiguous units on the last preceding tax roll, into two or more lots, plots or other divisions of land, any of which is less than five acres, for the purpose, whether immediate or future, of transfer of ownership or building development. The following divisions of land shall not be construed to be a subdivision: (a) Partition of land into parcels of more than five acres not involving any new streets or easements of access. (b) The sale or exchange of parcels between adjoining lot owners, where such sale or exchange does not create additional building sites. (c) The improvement of one or more parcels of land for residential, commercial or industrial structures or group structures involving the divisions or allocations of land for the opening, widening or extension of any street or streets or as easements for extensions and maintenance of public sewers, water, storm drainage or other public facilities. (d) The dedication of streets or easements without the division of land. However, such dedication for street or easement purposes must be approved by the Planning Commission before any plot is accepted or approved. | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| Climate Change Ordinance <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Planning Documents | | | | |
| Comprehensive/Master Plan <i>How does this reduce risk?</i> Discourages development in hazard areas. | Yes | July 2016 | Local | Planning |
| Capital Improvement Plan <i>How does this reduce risk?</i> Allocates money towards various projects. | Yes | 2022-2026 | Local | Finance |
| Disaster Debris Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Floodplain Management or Watershed Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Stormwater Management Plan <i>How does this reduce risk?</i> The City of Westerville maintains the storm water collection system through a series of Best Management Practices. These BMPs are listed as a part of the NPDES Stormwater Management Plan. The storm water collection system consists of the curb inlets, catch basins, manholes, channels, and retention/detention basins that convey the rain water runoff throughout the City of Westerville. Flood level control is managed by a cooperative effort between the City of Westerville's Engineering Department and Department of Public Service, The Office of the Franklin County Engineer, the Office of the Delaware County Engineer, the City of Columbus and the United States Corp of Engineers. | Yes | 2021-2025 | Local | Planning |
| Open Space Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Urban Water Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Habitat Conservation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Economic Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Shoreline Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of the City of Whitehall to oversee and track development.

Table 9.40-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---------------------|
| Do you issue development permits? • If yes, what department is responsible? | Yes | Building Department |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | N/A | - |
| Do you have a buildable land inventory? • If yes, please describe | N/A | - |

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|--|--------|----------|
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Whitehall and their current responsibilities that contribute to hazard mitigation.

Table 9.40-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|---------------------|---|
| Administrative Capability | | |
| Planning Board | Yes | The Planning Commission is empowered to “conduct studies and surveys, and prepare plans, reports, and maps relative to the overall planning of the growth, development, redevelopment, rehabilitation, and renewal of the City...” |
| Zoning Board of Adjustment | Yes | The Board of Zoning and Building Appeals (BZBA) is charged with hearing and deciding appeals for exceptions to and variances in the City’s Planning and Zoning Code and Building Code. |
| Planning Department | Yes | The Planning and Development Department is responsible for all aspects of development of the physical environment within the City of Westerville. The department consists of the Building, Engineering, Enforcement and Planning & Zoning divisions which through the development review process ensure that changes to the physical environment conform to adopted plans, laws, policies, professional standards, community expectations, and Board or Commission approvals. |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | Yes | The Development Department is here to help give businesses of all sizes the opportunity to minimize costs and maximize growth. |
| Public Works/Highway Department | No | - |
| Construction/Building/Code Enforcement Department | Yes | Code Enforcement is the prevention, detection, investigation and enforcement of violations of statutes or ordinances regulating public health, safety, and welfare, public works, business activities and consumer protection, building standards, land-use, or municipal affairs. |
| Emergency Management/Public Safety Department | Yes | The director of Public Safety is the administrative head of the public safety forces in Whitehall. |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | IPAWS |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | The Public service department runs numerous maintenance programs. |
| Mutual aid agreements | No | - |
| Human Resources Manual | No | - |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | - | - |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Engineers or professionals trained in building or infrastructure construction practices | - | - |
| Planners or engineers with an understanding of natural hazards | - | - |
| Staff with expertise or training in benefit/cost analysis | - | - |
| Professionals trained in conducting damage assessments | - | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | - | - |
| Environmental scientist familiar with natural hazards | - | - |
| Surveyor(s) | - | - |
| Emergency Manager | - | - |
| Grant writer(s) | - | - |
| Resilience Officer | - | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | - | - |

Fiscal Capability

The table below summarizes financial resources available to the City of Whitehall.

Table 9.40-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | - |
| Capital improvements project funding | - |
| Authority to levy taxes for specific purposes | - |
| User fees for water, sewer, gas or electric service | - |
| Impact fees for homebuyers or developers of new development/homes | - |
| Stormwater utility fee | - |
| Incur debt through general obligation bonds | - |
| Incur debt through special tax bonds | - |
| Incur debt through private activity bonds | - |
| Withhold public expenditures in hazard-prone areas | - |
| Other federal or state Funding Programs | - |
| Open Space Acquisition funding programs | - |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | - |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Whitehall.

Table 9.40-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|------------------|
| Public information officer or communications office | - | - |
| Personnel skilled or trained in website development | - | - |
| Hazard mitigation information available on your website | Yes | Fire information |
| Social media for hazard mitigation education and outreach | - | - |

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|---------------------|----------|
| Citizen boards or commissions that address issues related to hazard mitigation | - | - |
| Warning systems for hazard events | - | - |
| Natural disaster/safety programs in place for schools | - | - |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | - | - |

Community Classifications

The table below summarizes classifications for community programs available to the City of Whitehall.

Table 9.40-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.40-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

9.40.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Whitehall.

Table 9.40-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|---------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Whitehall (C) | 51 | 66 | \$235,185.19 | 3 | 0 |

Sources: ^a BureauNet 2022 (<https://nfipservices.floodsmart.gov/reports-flood-insurance-data>)

^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA’s HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Whitehall.

Table 9.40-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | - |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | - |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | - |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | According to 44 CFR 59.1, Substantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Likewise, substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. SI/SD requirements are also triggered |

| NFIP Topic | Comments |
|---|---|
| | when any combination of costs to repair and improvements to a structure in an SFHA equals or exceeds 50 percent of the structure’s market value (excluding land value). |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded? | - |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why. | - |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | - |
| Are any certified floodplain managers on staff in your jurisdiction? | - |
| Do you have access to resources to determine possible future flooding conditions from climate change? | - |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed? | - |
| Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability) | - |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | - |
| What are the barriers to running an effective NFIP program in the community, if any? | - |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | - |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | - |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | - |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | - |
| Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | - |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | - |

9.40.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.40-11. Number of Building Permits for New Construction

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | - | - | - | - | - | - | - | - | - | - |
| Multi-Family | - | - | - | - | - | - | - | - | - | - |
| Other (commercial, mixed-use, etc.) | - | - | - | - | - | - | - | - | - | - |
| Total Permits Issued | - | - | - | - | - | - | - | - | - | - |

Table 9.40-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.40.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Whitehall’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Whitehall has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.40-1. City of Whitehall Hazard Area Extent and Location Map-Flood

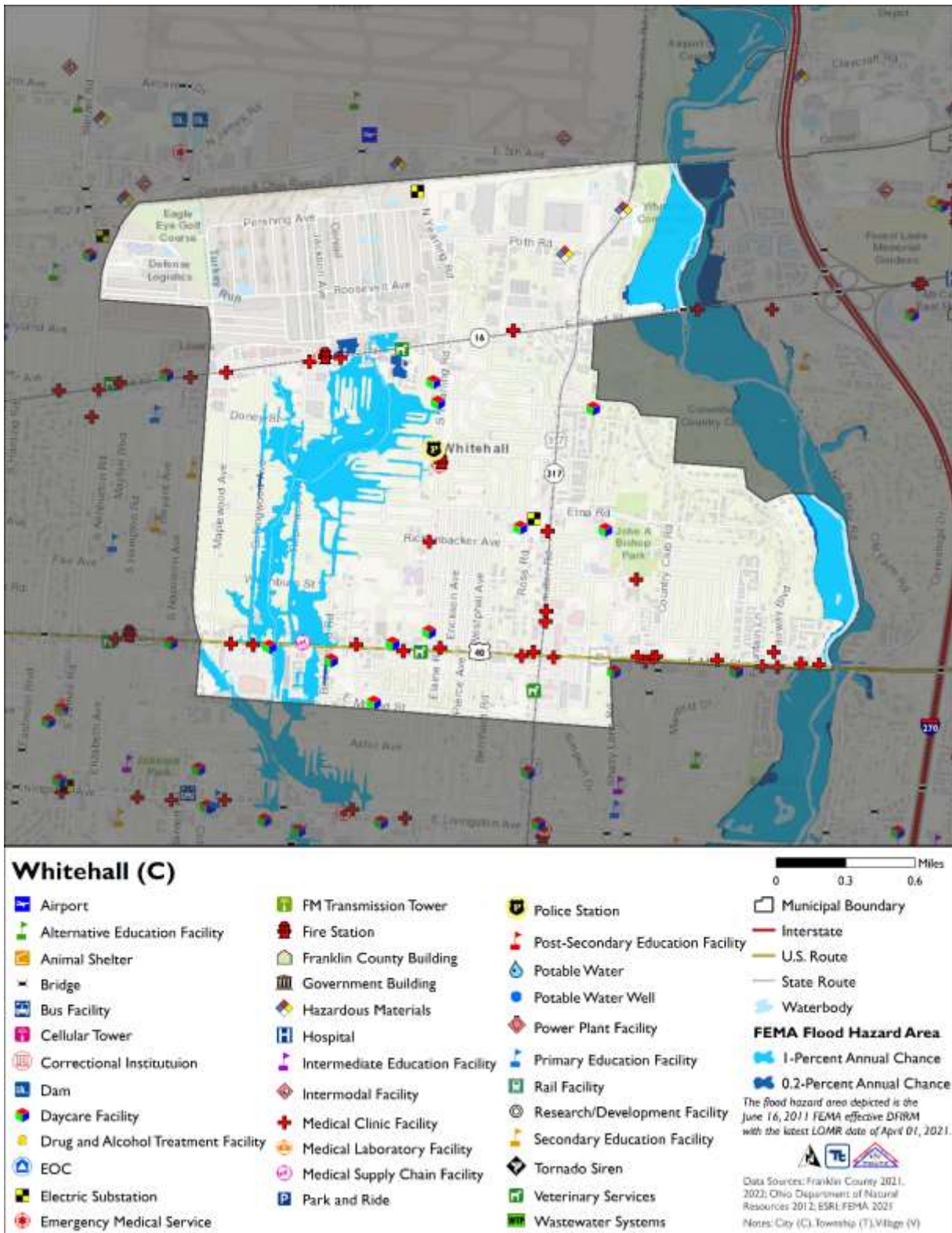


Figure 9.40-2. City of Whitehall Hazard Area Extent and Location Map-Inland Erosion

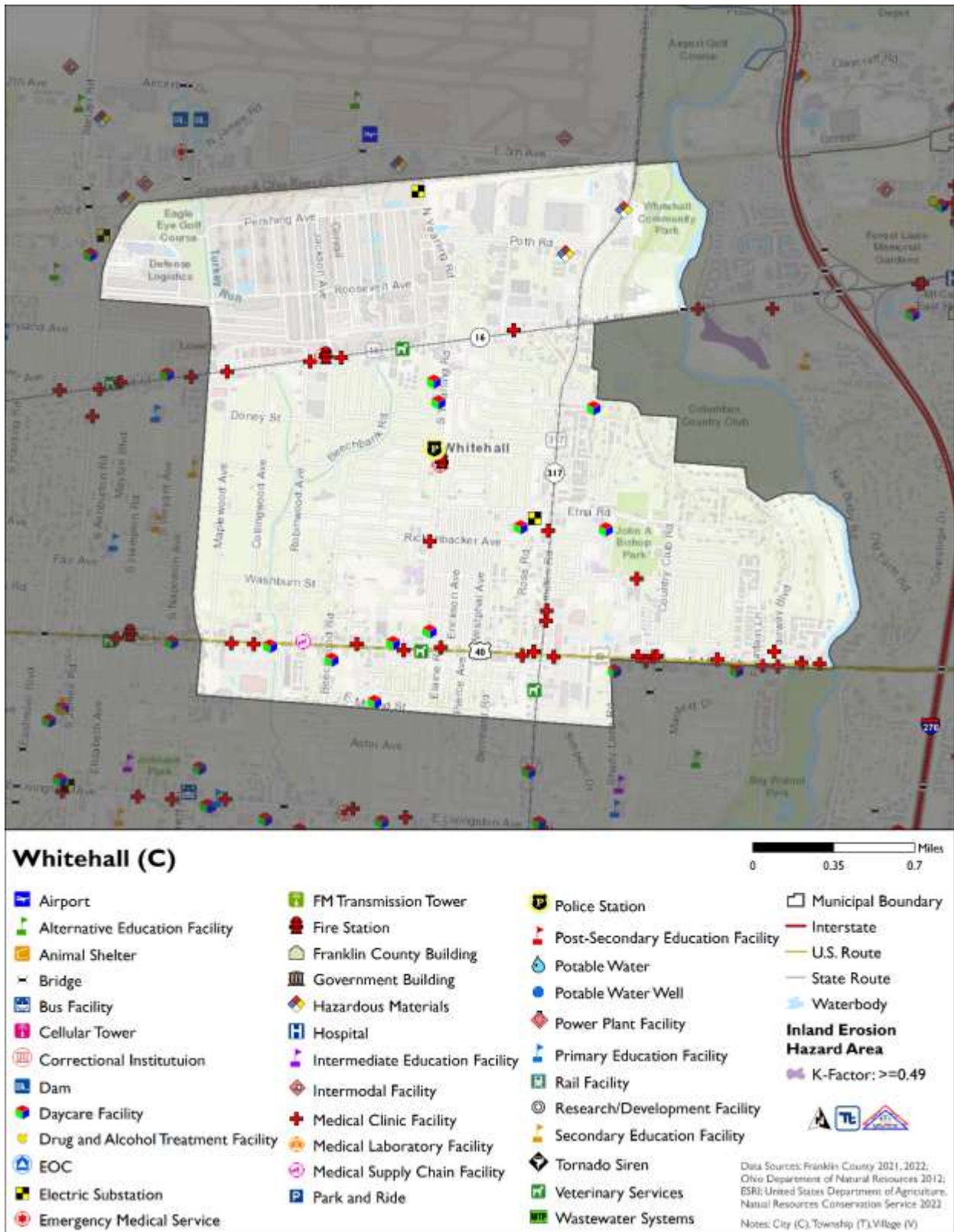
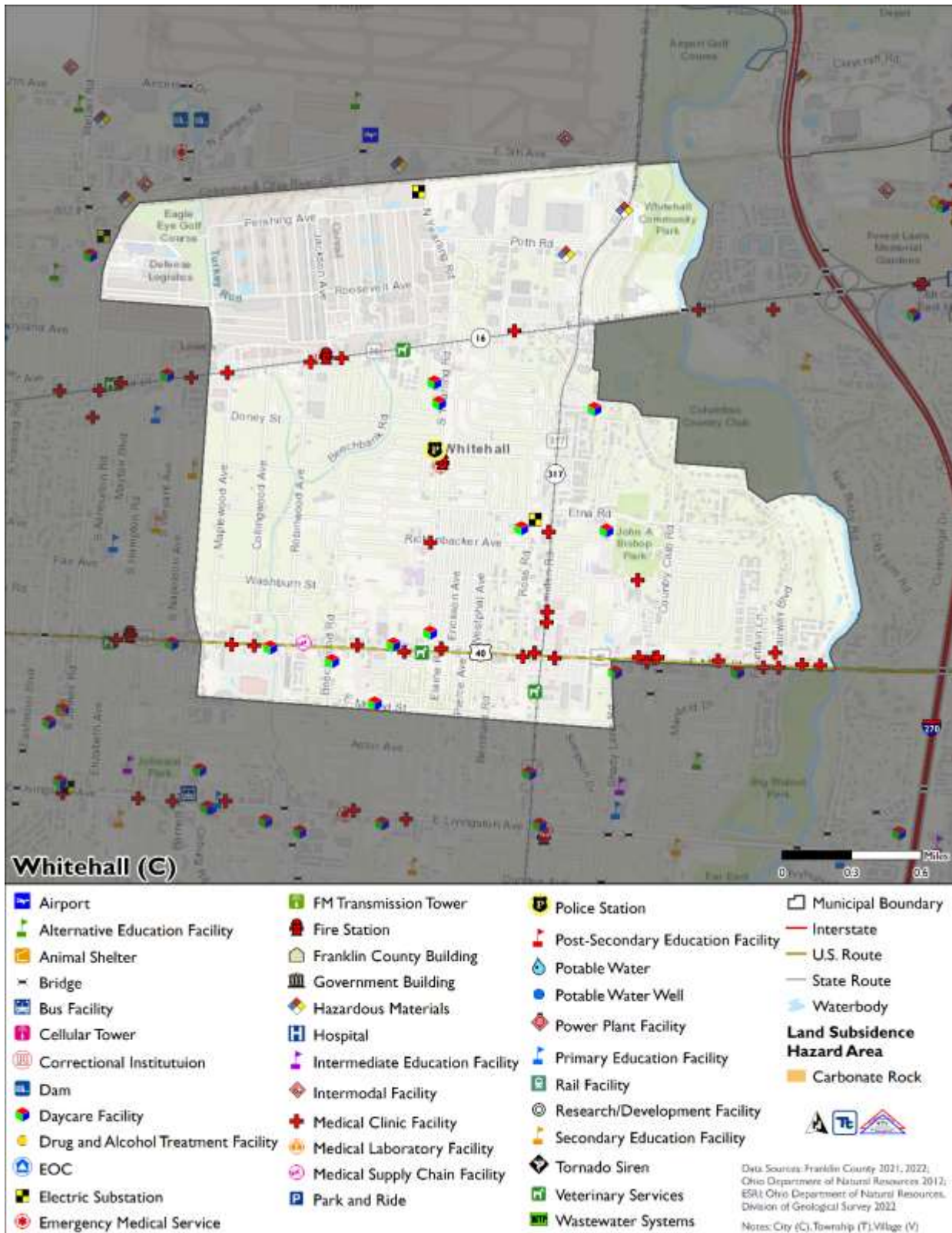


Figure 9.40-3. City of Whitehall Hazard Area Extent and Location Map- Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

The City of Whitehall’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Whitehall experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.40-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The City did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The City did not experience any notable damages or losses. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The City did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Whitehall.

The City of Whitehall reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.40-14. Hazard Ranking Input

| Hazard | Rankings |
|-----------------------|----------|
| Dam/Levee | Low |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.40-15. Number of Critical Facilities and Community Lifelines in Hazard Areas in the City of Whitehall

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | 2 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 11 | 2 |
| Inland Erosion (K-Factor: >= 0.49) Hazard Area | 2 | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | 55 | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Whitehall identified the following vulnerabilities within its community:

- Whitehall City has three repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.
- The following critical facilities are municipally owned and located in the special flood hazard area:
 - BIOMAT USA, INC.
 - Today's Child Learning Center

9.40.7 Mitigation Strategy and Prioritization

This section discusses past mitigation actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.40-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|-------------------|---|--|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Seek funding to evaluate and potentially resolve areas of concern with continuous localized flooding. (1 known property est. at 150,000 / 4 years) * | Mayor's office | No Progress | Yes | Whitehall City has three repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage. | NFIP Floodplain Administrator, Property Owners |
| Seek funding and coordinate with Franklin County Emergency Management and Homeland Security on the problem area near Hamilton Road railroad underpass which continuously floods. (120,000 / 1 year) | Mayor's office | No Progress | No | - | - |
| Conduct hazard mitigation activities related to Mason Run and Turkey Run. (500,000 / 2 year) | Mayor's office | No Progress | No | - | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Whitehall identified the following mitigation efforts completed since the last HMP:

- None Identified

Since the adoption of the County’s first HMP, the City of Whitehall has made significant mitigation progress in the following areas:

- None Identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The County hosted a mitigation action workshop in April 2023 and provided each participant the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.40-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | - | - | - | - | - | - | - | - | - | - |
| Disease Outbreak | - | - | - | - | - | - | - | - | - | - |
| Drought | - | - | - | - | - | - | - | - | - | - |
| Earthquake | - | - | - | - | - | - | - | - | - | - |
| Extreme Temp | - | - | - | - | - | - | - | - | - | - |
| Flood | - | X | - | - | - | - | - | - | X | - |
| Geologic | - | - | - | - | - | - | - | - | - | - |
| Invasive Species | - | - | - | - | - | - | - | - | - | - |
| Severe Summer Weather | - | X | - | - | - | - | - | - | X | - |
| Severe Winter Weather | - | X | - | - | - | - | - | - | X | - |
| Tornado | - | - | - | - | - | - | - | - | - | - |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.40-17)
 Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Whitehall will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.40-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|-------------------------|--------------------------------|--|-------------------------|---|-----------|--------------------|--|---------------------------|--|----------------------------------|----------|---------------------|--------------|
| 2023-Whitehall City-001 | Repetitive Loss Mitigation | <p>Problem: Whitehall City has three repetitive loss properties. Many of these structures were built with a limited flood design standard. These properties require mitigation to prevent future losses and prevent loss of life and property damage.</p> <p>Solution: The City will conduct outreach to the RL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information, and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).</p> | Existing | Flood, Severe Summer Weather, Severe Winter Weather | 6 | Less than 5 Years | NFIP Floodplain Administrator, Property Owners | HMGP, FMA, BRIC, CDBG | The Repetitive loss structures will no longer flood as frequently. | >\$100,000 per property | High | SIP | SP |
| 2023-Whitehall City-002 | Flood Vulnerability Evaluation | <p>Problem: The following critical facilities are municipally owned and located in the special flood hazard area:</p> <ul style="list-style-type: none"> • BIOMAT USA, INC. • Today's Child Learning Center | Existing | Flood | 6 | Less than 5 Years | NFIP Floodplain Administrator, Property Owners | HMGP, FMA, BRIC, CDBG | Critical facilities will be able to continue to operate and will not flood as often. | TBD after feasibility assessment | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|----------------------------|---|-------------------------|---------------------------|-----------|--------------------|---------------------------|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | <p>Solution: The City will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the facilities to protect each to the 500-year flood level. Options include:</p> <ul style="list-style-type: none"> Elevation of facility Floodproofing of facility Mobile flood barriers <p>Once the most cost-effective option is identified, the City will carry out the option.</p> | | | | | | | | | | | |

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.40-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-------------------------|--------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-Whitehall City-001 | Repetitive Loss Mitigation | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 11 | High |
| 2023-Whitehall City-002 | Flood Vulnerability Evaluation | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 11 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEXES

9.41 CITY OF WORTHINGTON

This section presents the jurisdictional annex for the City of Worthington that provides resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Worthington participated in the planning process, an assessment of the City of Worthington’s risk and vulnerability, the different capabilities used in the City of Worthington, and an action plan that will be implemented to achieve a more resilient community.

9.41.1 Hazard Mitigation Planning Team

The City of Worthington identified the hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City departments, including Service & Engineering and the Fire Department. The Director of Service & Engineering represented the community on the Franklin County Hazard Mitigation Plan Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.41-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------------------|---|----------------------------|---|
| Name/Title: | John Moorehead, Director of Service & Engineering | Name/Title: | Mark Zambito, Fire Chief |
| Address: | 380 Highland Ave, Worthington, Ohio 43085 | Address: | 6500 N High Street, Worthington, Ohio 43085 |
| Phone Number: | 614-431-2425 | Phone Number: | 614-885-7640 |
| Email: | John.moorehead@worthington.org | Email: | Mark.zambito@worthington.org |
| NFIP Floodplain Administrator | | | |
| Name/Title: | John Moorehead, Director of Service & Engineering | | |
| Address: | 380 Highland Ave, Worthington, Ohio 43085 | | |
| Phone Number: | 614-431-2425 | | |
| Email: | John.moorehead@worthington.org | | |
| Additional Contributors: | | | |
| Name/Title: | Don Phillips, Chief Building Inspector, Division of Building Regulation | | |
| Method of Participation: | Provided data on permits and new development | | |

| Primary Point of Contact | Alternate Point of Contact |
|--------------------------|---|
| Name/Title: | Christopher Craig, Assistant Fire Chief |
| Method of Participation: | Provided information on issues, solutions, and capabilities |

9.41.2 Municipal Profile

The City of Worthington is in the northern part of Franklin County and is bordered by and Perry Township to the west. Other than that border, the City is completely surrounded by Columbus. The cities of Worthington and Riverlea form an enclave of Columbus.

According to the American Community Survey, the 2021 population for the City of Worthington was 15,047, a 10.84 percent increase from the 2010 Census population of 13,575. Data from the 2021 American Community Survey indicates that 7.5 percent of the population is 5 years of age or younger and 20.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.41.3 Jurisdictional Capability Assessment and Integration

The City of Worthington performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of City capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the City of Worthington to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Worthington and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.41-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Part Thirteen-Building Code; Part Fifteen-Fire Prevention Code | Local, State | Chief Building Official |
| <i>How does this reduce risk?</i> New construction and alterations are designed and built-in accordance with Ohio Building Code. | | | | |
| Zoning/Land Use Code | Yes | Part Eleven – Planning and Zoning Code | Local | Planning and Building |
| <i>How does this reduce risk?</i> Local review of development proposals by staff and elected officials considers whether developments are compatible with their surroundings. Development is discouraged within natural areas such as floodplains, floodways, wetlands, and other sensitive areas. | | | | |
| Subdivision Ordinance | Yes | Part Eleven – Title One – Subdivision Platting Regulations | Local | Planning and Building |
| <i>How does this reduce risk?</i> The Municipal Planning Commission may request environmental impact studies for the property to be subdivided and may request and receive reports and studies from any agency having jurisdiction over the property, indicating whether any issues relating to or involving hazardous substances or environmental laws exist which may impact or affect the Subdivision. | | | | |
| Site Plan Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Ordinance | Yes | Worthington Codified Ordinances 923, 927, 1103, | Local | Service and Engineering with Planning and Building |
| <i>How does this reduce risk?</i> The purpose of this ordinance is to establish minimum stormwater management requirements and controls for major development. Stormwater management measures for major development shall be designed to provide erosion control, groundwater recharge, stormwater runoff quantity control, and stormwater runoff quality treatment. | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Real Estate Disclosure | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Growth Management | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Environmental Protection Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Flood Damage Prevention Ordinance | Yes | 1105.12-Floodplain Land | Local | Service and Engineering |
| <i>How does this reduce risk?</i> Regulates land uses and construction within floodplain areas, reducing the risk of losses related to flooding. | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Emergency Management Ordinance | Yes | Part Five – Chapter 507 – Civil Disorders | Local | City Manager's Office |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> | | | | |
| Empowers local officials to implement extra measures to protect life and property during a proclaimed state of emergency. | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Other | Yes | Article XII, the Village Green | Local | City Manager |
| <i>How does this reduce risk?</i> | | | | |
| This ordinance preserves the heritage and character of the Village Green and limits its use to the enjoyment of the public. | | | | |
| Planning Documents | | | | |
| Comprehensive/Master Plan | Yes | Comprehensive Plan Update & Strategic Plan for Worthington | Local | Planning Department |
| <i>How does this reduce risk?</i> | | | | |
| Provides long term planning for the City, including expected areas of future development. | | | | |
| Capital Improvement Plan | Yes | Comprehensive Capital Improvement Plan | Local | Department Director Team |
| <i>How does this reduce risk?</i> | | | | |
| A Comprehensive Capital Improvement Plan enables Worthington to budget for the systematic replacement of outdated equipment, infrastructure, and facilities. This practice improves the City's readiness for natural hazards. | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Stormwater Management Plan | Yes | Worthington SWMP for MS4 State General Permit | Local | Service & Engineering |
| <i>How does this reduce risk?</i> | | | | |
| Since 2003, the City of Worthington has been continually developing and following a Stormwater Management Plan. The plan uses six minimum control measures mandated by the Environmental Protection Agency to execute the plan. These six measures are: | | | | |
| <ul style="list-style-type: none"> • Good housekeeping - Taking measures within City maintenance operations to protect waterways from pollution, erosion, and sedimentation through programs such as leaf collection and street sweeping • Illicit discharge detection and elimination - Making sure that only rain goes down the drain • Post-construction - Making sure structures for controlling run-off and pollution are maintained • Pre-construction - Reviewing site plans on construction projects to make sure the waterways will be protected from sediment, excessive run-off, and other pollution • Public education - Seminars, newsletters and websites explaining stormwater issues • Public involvement - Programs, such as rain garden projects, stream cleanup days and events, that help people get involved in stormwater management | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Economic Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Community Wildfire Protection Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Community Forest Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Transportation Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Agriculture Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Climate Action/ Resiliency/Sustainability Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Tourism Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Business/ Downtown Development Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Continuity of Operations Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Strategic Recovery Planning Report <i>How does this reduce risk?</i> | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) <i>How does this reduce risk?</i> | No | - | - | - |
| Post-Disaster Recovery Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Public Health Plan <i>How does this reduce risk?</i> | No | - | - | - |
| Other <i>How does this reduce risk?</i> | No | - | - | - |

Development and Permitting Capability

The table below summarizes the capabilities of the City of Worthington to oversee and track development.

Table 9.41-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--|
| Do you issue development permits? If yes, what department is responsible? | Yes | Planning and Building, Service and Engineering |
| If you do not issue development permits, what is your process for tracking new development? | N/A | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | SFHA |
| Do you have a buildable land inventory? If yes, please describe | No | - |
| Describe the level of build-out in your jurisdiction. | N/A | The City of Worthington is a pre-dominantly built out community with limited potential for growth by annexation. |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Worthington and their current responsibilities that contribute to hazard mitigation.

Table 9.41-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|----------------------------------|------------------------|--|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | Yes | The five-member Board of Zoning Appeals (BZA) hears requests for variance from the City's Planning and Zoning Code as well as certain requests for variance from the City's Building Code. The BZA serves as a quasi-judicial body and appeals from the BZA are taken to the Franklin County Court of Common Pleas. |
| Planning Department | Yes | The responsibilities of the Planning Division are carried out by the Planning Coordinator, who acts as the City's staff contact and support person for the following boards: <ul style="list-style-type: none"> • Architectural Review Board • Board of Zoning Appeals • Municipal Planning Commission <p>The Municipal Planning Commission (MPC) performs a variety of functions related to planning and zoning activities in the City. The MPC hears applications for conditional use permits; makes recommendations to the City Council on rezoning, subdivision, and development plan requests; recommends Master Plan updates and amendments to the zoning map and ordinances; and performs interpretations of the City's Planning and Zoning Code</p> |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | Yes | The Green Team works to increase sustainability practices in the City. |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| | | The Parks and Recreation Commission is made up of seven resident volunteers who are appointed by City Council. The purpose of the commission is to give input, guidance, and recommendations to the Parks and Recreation Staff concerning topics that affect the residents of the City. |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | Yes | The Department of Service and Engineering is responsible for providing efficient and high-quality maintenance services to the residents of Worthington, as well as the installation, maintenance and repair of City-owned utilities and infrastructure. The Department consists of 2 divisions, Public Service and Engineering. A crew of 12 full time staff are available for 24/7 emergency call out to clear snow and ice, assist in flood mitigation, and storm damage clearing and clean up. |
| Construction/Building/Code Enforcement Department | Yes | One Chief Building Official and one building inspector. Both provide support to conducting damage assessments. |
| Emergency Management/Public Safety Department | Yes | Selected staff serve as an emergency operations command team. |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | Franklin County ALERT emergency notification system |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Annual storm and sanitary sewer maintenance programs, annual bridge inspections. Public trees are routinely inspected, trimmed, and removed when needed. |
| Mutual aid agreements | Yes | Automatic aid – Columbus, franklin co/del co. |
| Human Resources Manual | Yes | Anything pertaining to Hazard Mitigation would be included in a job title or job description. |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | Staff in the Planning and Building / Service and Engineering department fill this role. |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | Two professional Engineers (Chief Building Official and City Engineer) |
| Planners or engineers with an understanding of natural hazards | Yes | The City Engineer serves as the Flood Damage Prevention Administrator. |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | Two full time GIS professionals |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | Yes | City Manager |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

The table below summarizes financial resources available to the City of Worthington.

Table 9.41-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements project funding | Yes |
| Authority to levy taxes for specific purposes | Yes |
| User fees for water, sewer, gas, or electric service | Yes |
| Impact fees for homebuyers or developers of new development/homes | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | No |
| Incur debt through special tax bonds | No |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | Yes |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Worthington.

Table 9.41-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|--|
| Public information officer or communications office | Yes | The public information and communications office manages community relations and public information functions for the City of Worthington and oversees communications with citizens, businesses, visitors, community partners and the media through the City website, social media, publications, and other communication methods. |
| Personnel skilled or trained in website development | Yes | Public information and communications office |
| Hazard mitigation information available on your website | Yes | Information on covid-19, stormwater |
| Social media for hazard mitigation education and outreach | Yes | Facebook, Twitter, YouTube, Instagram, LinkedIn |
| Citizen boards or commissions that address issues related to hazard mitigation | Yes | The Green Team |
| Warning systems for hazard events | Yes | Franklin County ALERT emergency notification system, Notify Me, and social media |
| Natural disaster/safety programs in place for schools | Yes | The Ohio Fire Code has requirements for a fire safety and evacuation plan that are enabled in Ohio Building Code Chapter 10, and plans were required for the 3 middle schools recently added to, the detached building for Evening St., and will be required for the high school. The Ohio Department of Education also has requirements for plans being in place. In relation to the schools offering natural disaster/safety programs for the students themselves, there are no programs currently available. |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe. | No | - |

Community Classifications

The table below summarizes classifications for community programs available to the City of Worthington.

Table 9.41-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|---|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | Yes | Residential – Class 9 Commercial – Class 3 | September 28, 2010* |
| Public Protection (ISO Fire Protection Classes 1 to 10) | Yes | Class 3 | March 1, 2020 |
| StormReady Certification | No | (Franklin County is StormReady) | - |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.41-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee | Moderate |
| Disease Outbreak | Strong |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temp | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornado | Moderate |

- The City has noted that long-term response capabilities are weak overall. After 48-hours, the City acknowledges they would rely on outside resources for the drought, extreme temperature, flood, and severe weather, severe winter weather, and tornado hazards.
- The City’s response to the COVID-19 pandemic was strong. The City has a multitude of resources, including being involved in the Department of Homeland Security’s BioWatch Program, having access to reports and guidelines from Columbus Public Health, and employing individuals with an

understanding of communicable diseases. For these reasons, the City increased its adaptive capacity from 'Moderate' to 'Strong' for the disease outbreak hazard.

9.41.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The following table summarizes NFIP statistics for the City of Worthington.

Table 9.41-9. NFIP Summary

| Municipality | Policies in Force ^a | Number of Paid Claims ^a | Amount of Paid Claims ^a | Number of NFIP RL Properties ^b | Number of NFIP SRL Properties ^b |
|-----------------|--------------------------------|------------------------------------|------------------------------------|---|--|
| Worthington (C) | 24 | 55 | \$271,451.85 | 5 | 1 |

Sources: ^a BureauNet 2022 (<https://nfip-services.floodsmart.gov/reports-flood-insurance-data>)
^b State of Ohio 2023

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Ohio and from FEMA's HUDEX Report.

RL Repetitive Loss

SRL Severe Repetitive Loss

NFIP Summary

The following table provides a summary of NFIP information for the City of Worthington.

Table 9.41-10. NFIP Summary

| NFIP Topic | Comments |
|--|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> Do you maintain a list of properties that have been damaged by flooding? | Yes |
| <ul style="list-style-type: none"> Do you maintain a list of property owners interested in flood mitigation? How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | No |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| <ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? | None have been declared for recent flood events SD/SI requirements are enforced by the local floodplain administrator and monitored by the Ohio Department of Natural Resources (ODNR) Floodplain Management Program during Community Assistance Visits. If a local floodplain administrator is overwhelmed by the number of SD/SI inspections after a large event, ODNR has developed a network of building code officials that are trained in conducting SD/SI field determinations. Help with SD/SI |

| NFIP Topic | Comments |
|--|--|
| | inspections can be requested through the county emergency management agency director. |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded? | Unknown |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why. | Yes |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Service and Engineering |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed? | No |
| Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability) | Permit review, engineering support, education/outreach, inspections, GIS mapping, FEMA and ODNR coordination. |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Through a review of the appraised value of structures on the property and reported value of proposed improvements. |
| What are the barriers to running an effective NFIP program in the community, if any? | None |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | Unknown |
| • What is the local law number or municipal code of your flood damage prevention ordinance? • What is the date that your flood damage prevention ordinance was last amended? | 1105.12, this code was last updated on 4-12-1999. |
| Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways? | Yes |
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | Unknown |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | Unknown |

9.41.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.41-11. Number of Building Permits for New Construction

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|-----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 13 | 0 | 6 | 0 | 3 | 0 | 1 | 0 | 2 | 0 |
| Multi-Family | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other (commercial, mixed-use, etc.) | 2 | 0 | 0 | 0 | 6 | 0 | 1 | 0 | 3 | 0 |
| Total Permits Issued | 15 | 0 | 6 | 0 | 9 | 0 | 2 | 0 | 5 | 0 |

Table 9.41-12. Recent and Expected Future Development

| Property or Development Name | Type (e.g. Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|-------------------------|-------------------------|------------------------------------|----------------------|--|
| Recent Major Development from 2018 to Present | | | | | |
| Worthington Gateway | Commercial | 6 structures | 100-006792, 100-006791, 100-006793 | None | Mixed use redevelopment / Under Construction |
| Tilton's Automotive | Commercial | 1 structure | 100-002184 | None | Automotive repair center / Under Construction |
| Worthingway Middle School | Commercial | 1 structure | 100-003968 | None | Renovation and expansion of an existing middle school / Complete |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| High North | Commercial | Pending | 100-006788 | None | Mixed use redevelopment / Planning Stage |
| Thomas Worthington High School | Commercial | Pending | 100-006617 | Floodplain | Renovation and expansion of an existing High school / Planning Stage |

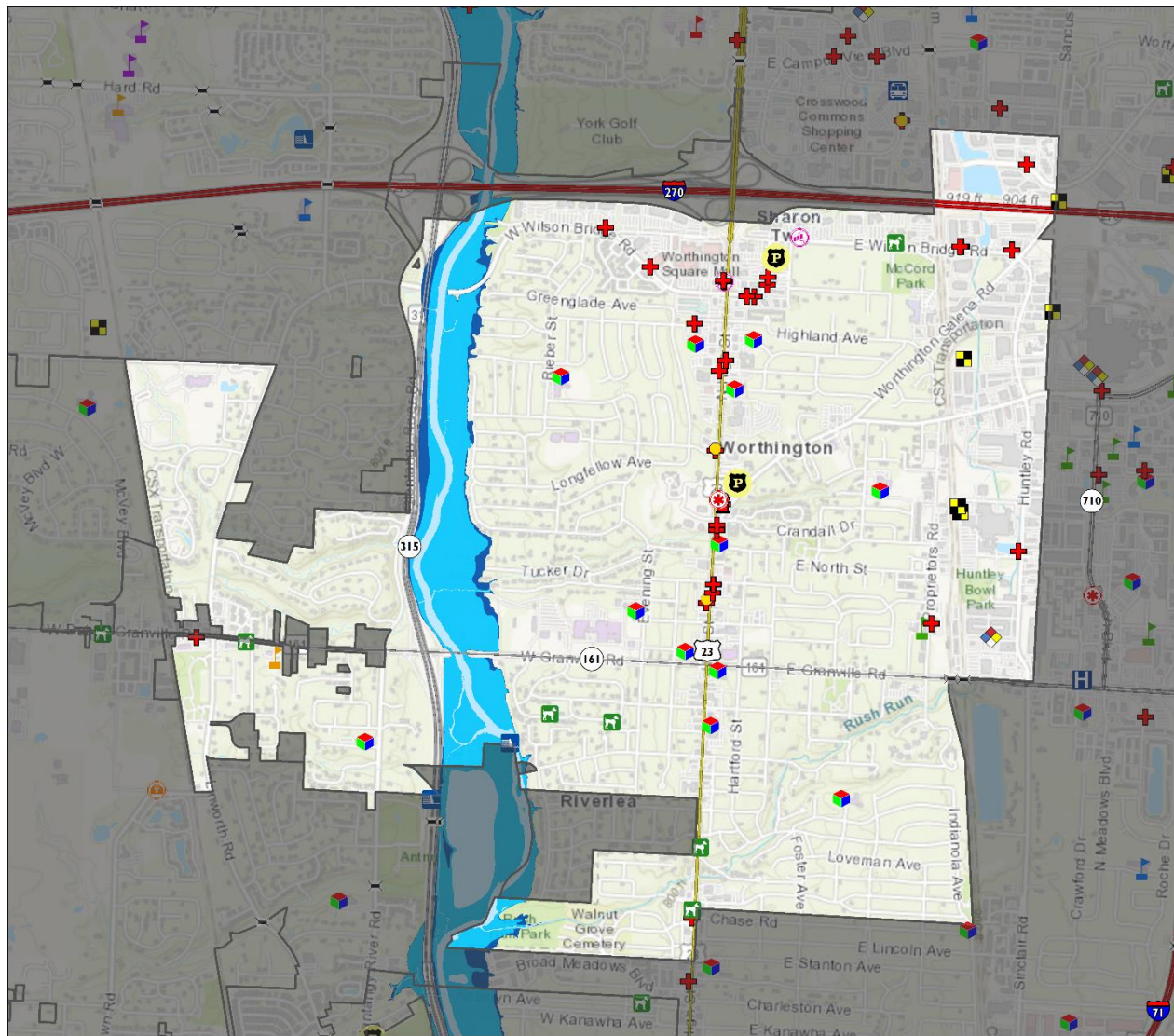
Source: Franklin County Assessor; Blendon Township; City of Canal Winchester; City of Dublin, Planning Division; City of Gahanna; City of Groveport; City of New Albany, Administrative Services Department; City of Obetz; City of Upper Arlington Fire Department; Jefferson Township; Prairie Township; Truro Township; Village of Lockbourne

9.41.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the City of Worthington's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Worthington has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.41-1. City of Worthington Hazard Area Extent and Location Map - Flood



Worthington (C)

- Airport
- Alternative Education Facility
- Animal Shelter
- Bridge
- Bus Facility
- Cellular Tower
- Correctional Institution
- Dam
- Daycare Facility
- Drug and Alcohol Treatment Facility
- EOC
- Electric Substation
- Emergency Medical Service
- FM Transmission Tower
- Fire Station
- Franklin County Building
- Government Building
- Hazardous Materials
- Hospital
- Intermediate Education Facility
- Intermodal Facility
- Medical Clinic Facility
- Medical Laboratory Facility
- Medical Supply Chain Facility
- Park and Ride

- Police Station
- Post-Secondary Education Facility
- Potable Water
- Potable Water Well
- Power Plant Facility
- Primary Education Facility
- Rail Facility
- Research/Development Facility
- Secondary Education Facility
- Tornado Siren
- Veterinary Services
- Wastewater Systems

Miles
0 0.3 0.6

- Municipal Boundary
- Interstate
- U.S. Route
- State Route
- Waterbody

FEMA Flood Hazard Area

- 1-Percent Annual Chance
- 0.2-Percent Annual Chance

The flood hazard area depicted is the June 16, 2011 FEMA effective DFIRM with the latest LOMR date of April 01, 2021.

Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; FEMA 2021
Notes: City (C), Township (T), Village (V)

Figure 9.41-2. City of Worthington Hazard Area Extent and Location Map – Land Subsidence

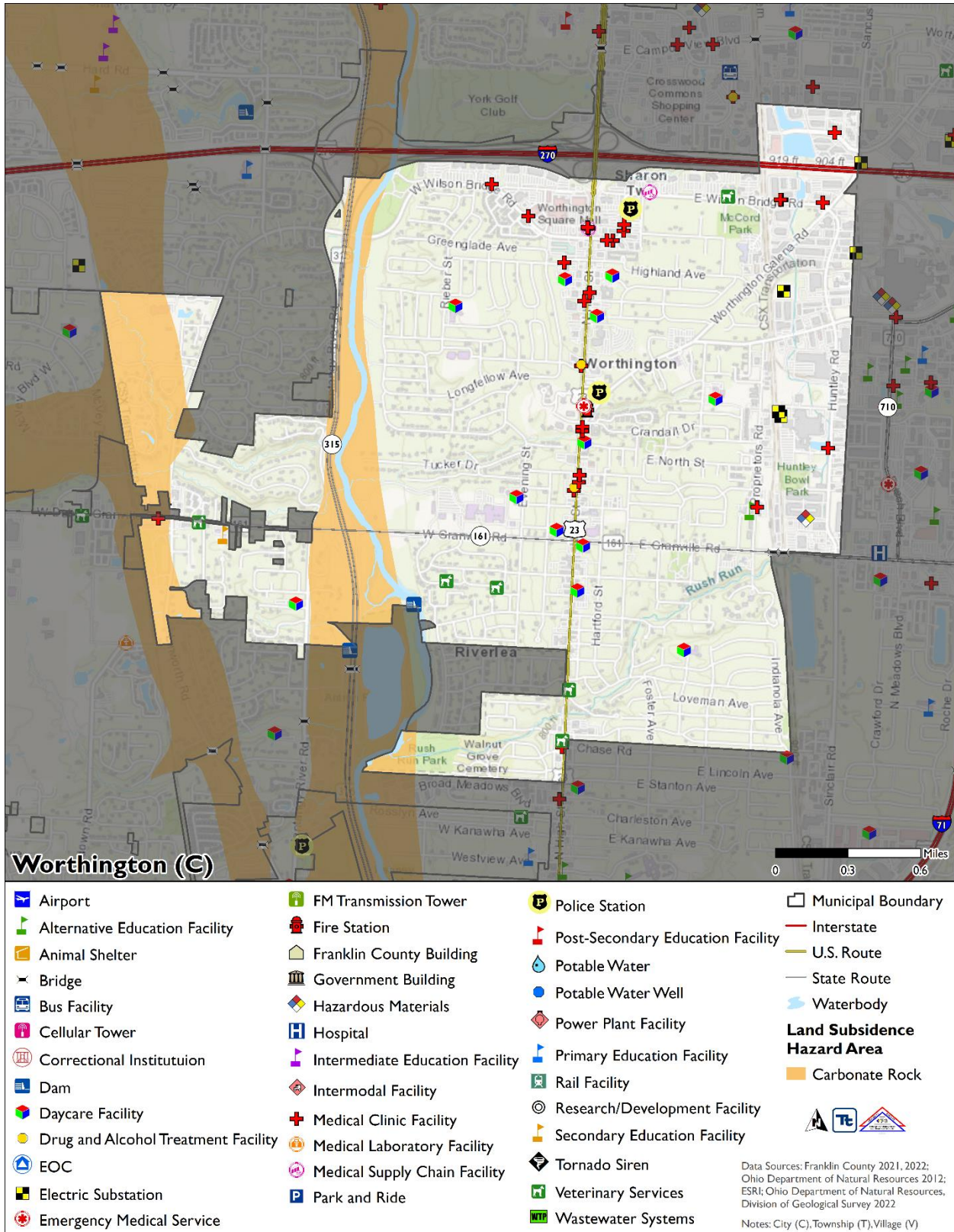
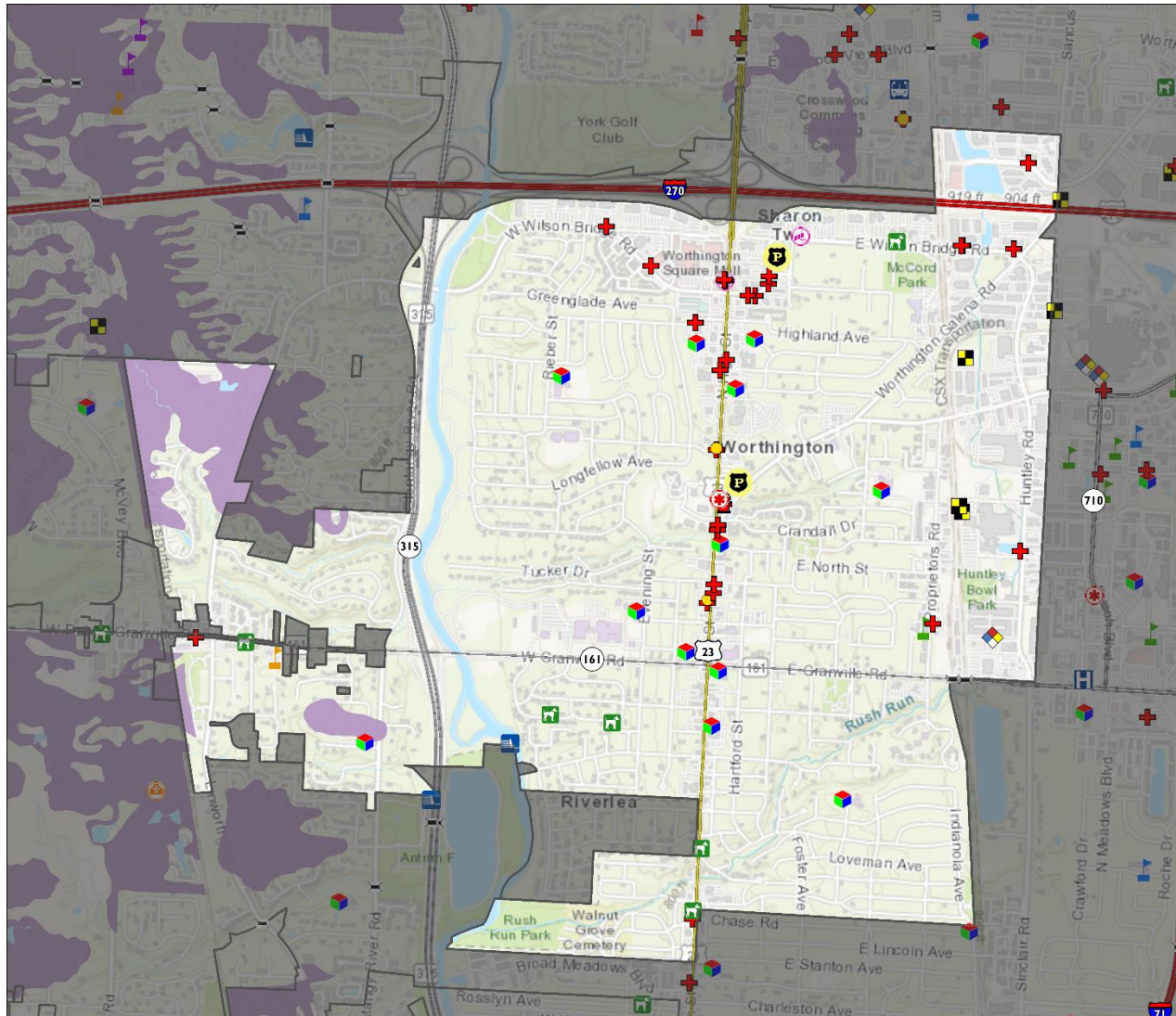


Figure 9.41-3. City of Worthington Hazard Area Extent and Location Map – Inland Erosion



Worthington (C)

0 0.3 0.6 Miles

- | | | | |
|-------------------------------------|---------------------------------|-----------------------------------|--|
| Airport | FM Transmission Tower | Police Station | Municipal Boundary |
| Alternative Education Facility | Fire Station | Post-Secondary Education Facility | Interstate |
| Animal Shelter | Franklin County Building | Potable Water | U.S. Route |
| Bridge | Government Building | Potable Water Well | State Route |
| Bus Facility | Hazardous Materials | Power Plant Facility | Waterbody |
| Cellular Tower | Hospital | Primary Education Facility | Inland Erosion Hazard Area |
| Correctional Institution | Intermediate Education Facility | Rail Facility | K-Factor: >=0.49 |
| Dam | Intermodal Facility | Research/Development Facility | Tetra Tech |
| Daycare Facility | Medical Clinic Facility | Secondary Education Facility | Data Sources: Franklin County 2021, 2022; Ohio Department of Natural Resources 2012; ESRI; United States Department of Agriculture, Natural Resources Conservation Service 2022 |
| Drug and Alcohol Treatment Facility | Medical Laboratory Facility | Tornado Siren | Notes: City (C), Township (T), Village (V) |
| EOC | Medical Supply Chain Facility | Veterinary Services | |
| Electric Substation | Park and Ride | Wastewater Systems | |
| Emergency Medical Service | | | |

Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume 1, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The City of Worthington’s history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the City of Worthington experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.41-13. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| April 3-4, 2018 | EF-1 Tornado | N/A | Severe thunderstorms and tornados developed in the area. Between one to three inches of rain fell across the region. A tornado touched down in Grove City causing approximately \$120,000 in property damage. | Although the County was impacted, the City did no report major damages. |
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | Although the County was impacted, the City did no report major damages. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | Although the County was impacted, the City did no report major damages. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The City was subject to closures and social distancing/masking requirements. |
| May 18-19, 2020 | Thunderstorms | No | Heavy rains in Worthington caused Water In Basement Flooding events in areas close to the Olentangy parklands. 51 households experienced some level of water damage in their basements. Rainfall intrusion to sanitary sewers contributed to sewer backups in the affected households. | City staff closed roads on Tucker Drive and Whitney Avenue due to rising floodwaters. Service employees worked overtime responded to downed trees, floodwater, and sewage backups. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each

hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), the participating jurisdictions all have differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Worthington. The City of Worthington reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Worthington indicated the following:

- The City is approximately 20 miles downstream from the Delaware Dam, a high hazard dam located in Delaware County on the Olentangy River. The City requested the 'Low' ranking for Dam/Levee be increased to 'Medium'.

Table 9.41-14. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee | Medium |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temp | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornado | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.41-15. Number of Critical Facilities and Community Lifelines in Hazard Areas

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | 3 | 1 |
| 0.2-Percent Annual Chance Flood Event Hazard Area | 3 | 1 |
| Inland Erosion (K-Factor: ≥ 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | 3 |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | 2 |

Source: Franklin County; Hazus v5.1

Identified Issues

In addition to the risk assessment, the City of Worthington identified the following vulnerabilities within its community:

- Some roadways need to be closed due to flood waters.
- Residents have experienced basement flooding in areas close to the Olentangy parklands.
- Residents have experienced sewage back-ups due to rainfall intrusion to sanitary sewers.
- The City is approximately 20 miles downstream from the Delaware Dam, a high hazard dam located in Delaware County on the Olentangy River.
- The Griswold Senior Center and the City Hall, both critical facilities, do not have emergency back-up power.
- The City acknowledged familiarity with the identified hazards is fairly limited.
- The emergency operations plan for the City is outdated.
- The Olentangy River has issues with erosion.
- The City is not aware of the complete inventory Franklin County has available for emergency responses.
- Areas of the City are susceptible to pooling waters.
- The City relies on the City of Columbus for its water supply.
- Many critical facilities and community lifelines do not have Continuity of Operations Plans.
- The City has the resources for short-term emergency responses but relies on outside resources for most events which surpass 48-hours.
- Public outreach about each hazard is limited and should be increased.

9.41.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.

Table 9.41-16. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|-------------------|--|---|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Retrofit public buildings and critical facilities with generator service | Public Safety | Complete | No | - | - |
| Retrofit structures in the Haymore Avenue Area. (1,500,000 / 1 year | Mayor's office | No Progress | No | - | - |
| Seek funding for repetitive loss structures within the jurisdiction to permanently reduce damages to these structures*(4 known properties est. at 900,000 /4 years) | Mayor's office | No Progress | No | - | - |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the City of Worthington identified the following mitigation efforts completed since the last HMP:

- None identified

Since the adoption of the County’s first HMP, the City of Worthington has made significant mitigation progress in the following areas:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The City of Worthington participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.41-17. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee | X | X | - | X | - | X | X | - | - | X |
| Disease Outbreak | - | - | - | X | - | - | X | - | - | X |
| Drought | X | X | - | X | - | X | X | - | - | X |
| Earthquake | - | - | - | X | - | - | X | - | - | X |
| Extreme Temp | - | X | - | X | - | X | X | - | - | X |
| Flood | - | X | X | X | - | X | X | X | - | X |
| Geologic | - | - | X | X | - | - | X | X | - | X |
| Invasive Species | - | - | X | X | - | - | X | X | - | X |
| Severe Summer Weather | - | X | - | X | - | X | X | X | - | X |
| Severe Winter Weather | - | X | - | X | - | X | X | - | - | X |
| Tornado | - | X | - | X | - | X | X | X | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.41-17)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the City of Worthington will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.41-18. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goal(s) Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|----------------------------|---|--|-------------|--------------------|---|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-City of Worthington-001 | Resource Coordination | <p>Problem: The City has the resources for short-term emergency responses but relies on outside resources for most events which surpass 48-hours. The City also has limited resources for preparedness activities.</p> <p>Solution: Coordinate with Franklin County to understand the resources available for emergency response and preparedness activities.</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 4 | <1 year | Worthington OEM, Franklin County EM&HS | Staff Time | High | Low | High | - | ES |
| 2023-City of Worthington-002 | Dam Response Plan | <p>Problem: The City is approximately 20 miles downstream from the Delaware Dam, a high hazard dam, located in Delaware County on the Olentangy River; the City also has the State Route 161 Dam located within its jurisdiction.</p> <p>Solution: Discuss with both Franklin and Delaware County the possible inundation impacts</p> | Dam/Levee | 4 | 3 to 4 years | Worthington OEM, Franklin County EM&HS, Delaware County OEM | BRIC, NDSP, EMPG | Medium | Medium | Medium | LPR | ES |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goal(s) Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|--|--|--|-------------|--------------------|---|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | and formulate a Dam Response Plan. | | | | | | | | | | |
| 2023-City of Worthington-003 | Emergency Generators at Critical Facilities* | <p>Problem: The Griswold Senior Center and the City Hall, both critical facilities, do not have emergency back-up power.</p> <p>Solution: Work with an engineer to determine the appropriately sized generator for each facility and install the generators.</p> | Dam/Levee, Drought, Extreme Temperatures, Flood, Severe Summer Weather, Severe Winter Weather, Tornado | 6 | 2 to 3 years | Department of Service & Engineering, Griswold Senior Center, City Administrator | BRIC, HMGP, Capital Funds | High | Medium | Medium | SIP | PP |
| 2023-City of Worthington-004 | Update of the Emergency Operations Plan | <p>Problem: The City's Emergency Operations Plan is outdated.</p> <p>Solution: Update the City's Emergency Operations Plan.</p> | Dam/Levee, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornado | 1 | 1 to 2 years | Worthington OEM | EMPG | High | Low | High | - | ES |
| 2023-City of Worthington-005 | Hazard Mitigation Consultant | <p>Problem: The City is unfamiliar with all the risks associated with potential hazards and how to mitigate the hazards.</p> <p>Solution: Hire a consultant to educate City officials and assist in the identification of</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic | 1, 4, 5 | 2 to 3 years | Worthington OEM, City Administrator | BRIC, HMGP | High | High | Medium | EAP | PI |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goal(s) Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|--------------------------------|---|--|-------------|--------------------|--|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| | | additional actions to mitigate impacts from hazards. | Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | | | | | | | | | |
| 2023-City of Worthington-006 | Continuity of Operations Plans | <p>Problem: Critical facilities and community lifelines within the City do not have Continuity of Operations Plans.</p> <p>Solution: Assist in the development of Continuity of Operations Plans for critical facilities and community lifelines within the City.</p> | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Severe Summer Weather, Severe Winter Weather, Tornado | 4 | 3 to 4 years | Worthington OEM, Various City Departments | BRIC, EMPG | High | Medium | High | - | ES |
| 2023-City of Worthington-007 | Water Supply Reduction Point | <p>Problem: The City's water supply is sourced from the City of Columbus. In the event of a drought, there is no known marker for when the water supply would be reduced.</p> <p>Solution: In partnership with the City of Columbus, identify at which point would the City of Worthington's water supply be impacted during a drought.</p> | Drought | 1, 4 | 1 to 2 years | Worthington OEM, Worthington Department of Service & Engineering, City of Columbus Division of Water | N/A | High | Low | Medium | LPR | - |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goal(s) Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|-----------------------------|---|--|-------------|--------------------|---|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-City of Worthington-008 | Standing Water Maintenance* | Problem: Areas of the City are susceptible to standing and pooling waters. Solution: Implement a maintenance program to reduce the amount of standing or pooling water by grading soil and/or addressing potholes. | Disease Outbreak, Invasive Species | 1 | 2 to 3 years | Worthington Department of Service & Engineering | Capital Funds | High | Low | Low | - | - |
| 2023-City of Worthington-009 | Hazard Education Campaign | Problem: Public outreach regarding preparedness, prevention, and mitigation for hazards is limited and should be increased. Solution: Partner with State, County, and Local public health and safety departments to create guidance and educational pamphlets on how to prepare for, prevent, and mitigate the hazards in the City of Worthington. | Dam/Levee, Disease Outbreak, Drought, Earthquake, Extreme Temperatures, Flood, Geologic Hazards, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornado | 4, 5 | 1 to 2 years | Worthington OEM, Franklin County EM&HS, OEMA | BRIC, HMGP, Capital Funds | High | Low | High | EAP | PI |
| 2023-City of Worthington-010 | Olentangy Erosion Study | Problem: The Olentangy River has been experiencing increased amounts of erosion. Solution: Conduct a study on the impacts of erosion to the Olentangy River and its floodplain. | Flood, Geologic Hazards | 2, 3 | 3 to 4 years | Worthington Department of Service & Engineering | BRIC, HMGP | Medium | Medium | Low | NSP | NR |

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goal(s) Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|------------------------------|------------------------------------|---|------------------------------|-------------|--------------------|--|---|--|--------------------------|----------|---------------------|--------------|
| 2023-City of Worthington-011 | Olentangy Parklands Culvert Study* | Problem: Residents in the Olentangy parklands have experienced flooded basements and sewage back-ups due to rainfall intrusion to sanitary sewers. Solution: Conduct a study to identify the correct sizing of culverts in the Olentangy parklands. | Flood, Severe Summer Weather | 2, 3, 6 | 1 to 2 years | Worthington Department of Service & Engineering | BRIC, HMGP, Capital Funds | Medium | Medium | Low | SIP | NR |
| 2023-City of Worthington-012 | Tree Maintenance and Inspection | Problem: The City of Worthington conducts tree maintenance and inspections to assess impacts from invasive species and remove affected trees. Solution: Update the tree maintenance and inspection program to include preventative methods such as insecticides. | Invasive Species | 1 | 1 to 2 years | Worthington Department of Service & Engineering | Capital Funds | High | Low | Low | NSP | NR |
| 2023-City of Worthington-013 | Repetitive Loss Area Mitigation | Problem: Portions of the City experienced repetitive flooding. Solution: Conduct mitigation activities in repetitive loss areas through acquisition, elevation, or other mitigating activity. | Flood | 6 | 4 years | Worthington Township, Franklin County, and Federal Emergency Management Agency | FEMA HMGP, FMA, and BRIC, Township budget, Homeowners | Reduction in repetitive losses due to floods | >\$100,000 per structure | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

NFIP National Flood Insurance Program

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- *Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.41-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|------------------------------|-----------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-City of Worthington-001 | Resource Coordination | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 12 | High |
| 2023-City of Worthington-002 | Dam Response Plan | 1 | 1 | 1 | 1 | 1 | 1 | -1 | 1 | 0 | 0 | -1 | 0 | 1 | 0 | 6 | Medium |

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|------------------------------|---|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-City of Worthington-003 | Emergency Generators at Critical Facilities | 1 | 1 | 1 | 1 | 1 | 0 | 0 | -1 | 0 | 0 | 1 | 0 | 1 | 0 | 6 | Medium |
| 2023-City of Worthington-004 | Update of the Emergency Operations Plan | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 10 | High |
| 2023-City of Worthington-005 | Hazard Mitigation Consultant | 1 | 1 | 1 | 1 | 1 | 1 | -1 | 1 | 0 | -1 | 1 | 0 | 1 | 0 | 7 | Medium |
| 2023-City of Worthington-006 | Continuity of Operations Plans | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 10 | High |
| 2023-City of Worthington-007 | Water Supply Reduction Point | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | -1 | 1 | 1 | 0 | 8 | Medium |
| 2023-City of Worthington-008 | Standing Water Maintenance | 0 | -1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | Low |
| 2023-City of Worthington-009 | Hazard Education Campaign | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 12 | High |
| 2023-City of Worthington-010 | Olentangy Erosion Study | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | -1 | 0 | 0 | 0 | 0 | 4 | Low |
| 2023-City of Worthington-011 | Olentangy Parklands Culvert Study | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | -1 | 0 | 0 | 0 | 0 | 4 | Low |
| 2023-City of Worthington-012 | Tree Maintenance and Inspection | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | -1 | 0 | 0 | 0 | 4 | Low |
| 2023-City of Worthington-013 | Repetitive Loss Area Mitigation | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 9 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

SECTION 9. JURISDICTIONAL ANNEX

9.42 THE OHIO STATE UNIVERSITY

This section presents the jurisdictional annex for the Ohio State University that provides resources and information to assist public and private sectors in reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Ohio State University participated in the planning process, an assessment of the Ohio State University’s risk and vulnerability, the different capabilities used in the Ohio State University, and an action plan that will be implemented to achieve a more resilient community.

9.42.1 Hazard Mitigation Planning Team

The Ohio State University identified hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Ohio State University departments, including Department of Emergency Management and Fire Prevention and the Byrd Polar and Climate Research Center. The Director of Emergency Management and the Education and Outreach Coordinator for the Byrd Polar and Climate Research Center represented the University on the Franklin County Hazard Mitigation Plan Core Planning Team and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials who participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Team meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.42-1. Hazard Mitigation Planning Team

| Primary Point of Contact | | Alternate Point of Contact | |
|--------------------------|---|----------------------------|--|
| Name/Title: | Bob Armstrong, Director of Emergency Management | Name/Title: | Karina Peggau, Education & Outreach Program Coordinator - Byrd Polar and Climate Research Center |
| Address: | Michael Blankenship Hall, 901 Woody Hayes Dr., Columbus, OH 43210 | Address: | Scoot Hall, 1090 Carmack Rd Columbus, OH 43210 |
| Phone Number: | (614) 247-4276 | Phone Number: | (614) 688-8279 |
| Email: | armstrong.349@osu.edu | Email: | peggau.1@osu.edu |

9.42.2 Municipal Profile

The Ohio State University, a public land-grant research university, is located in Columbus, east from Clinton Township and is commonly called Ohio State or OSU. The University was founded in 1870 as the state’s land grant university. The University is located beside the Olentangy River which separates the University from Clinton Township. There was a total of 67,772 people enrolled at The Ohio State University in Autumn 2021.

9.42.3 Jurisdictional Capability Assessment and Integration

The Ohio State University performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment addresses the following types of University capabilities:

- Planning, legal and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The development of an updated mitigation strategy provided an opportunity for the Ohio State University to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Ohio State University and provides information as to how each capability integrates hazard mitigation and risk reduction.

Table 9.42-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Municipal capabilities like code and zoning enforcement and NFIP participation are not applicable at a university level. | | | | |
| Planning Documents | | | | |
| Comprehensive/Master Plan | No | - | - | - |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> N/A | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Stormwater Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Open Space Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Economic Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Shoreline Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Transportation Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Climate Action/ Resiliency/Sustainability Plan | Yes | Climate Action Plan (April 2020) | The Ohio State University | The Ohio State University |
| <i>How does this reduce risk?</i> The Ohio State University today released a plan to cut its carbon emissions in half within this decade. This accelerates the university's ability to achieve full carbon neutrality by 2050. | | | | |
| Tourism Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Business/ Downtown Development Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Other | Yes | The Ohio State University Framework Plan (August 2010) | The Ohio State University | Administration and Planning |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| <p><i>How does this reduce risk?</i> The Framework is a structure for guiding change over time, connecting ideas and information to implementation. It touches the full spectrum of university activity: academics and research, residential life, the medical center, arts and culture, athletics and recreation, the river and open space, transportation and parking, energy, infrastructure, and sustainability. Stakeholders representing these topics collaborated extensively in the planning process; numerous university and community constituents contributed to ensure a rich context informed the Framework.</p> | | | | |
| Other | Yes | Sustainable Design and Construction Policy (February 2021) | The Ohio State University | Facilities Operations and Development |
| <p><i>How does this reduce risk?</i> The university has set ambitious sustainability goals to develop and demonstrate durable solutions to complex and pervasive environmental challenges. These goals include achieving carbon neutrality, reducing building energy use, conserving water, improving ecosystems services, and diverting landfill waste. To align the university's physical environment with these goals, this policy incorporates sustainability requirements into all qualifying university projects.</p> | | | | |
| Other | Yes | Building Emergency Action Plan(s) Template (Update and Revision) (October 2020) | The Ohio State University | Environmental Health and Safety, Public Safety |
| <p><i>How does this reduce risk?</i> The BEAP correlates with the larger Ohio State University Comprehensive Emergency Management Plan (CEMP) for campus operations during large scale or campus-wide emergencies and departmental specific business continuity plans for departmental operations during departmental or campus emergencies. The evacuation of university facilities presents unique situations and challenges. Some facilities may house only one department or college office whereas other facilities may contain business space for numerous departments. Additionally, the space occupied in university facilities may contain a wide range of uses including administrative office space, classroom space, lecture halls, conference rooms, laboratories, academic office space, etc. A major challenge for the successful evacuation of university facilities is the population of the facility changes every hour. It is difficult to know at any given time the exact number of occupants in any university facility. Timely and responsible evacuation often becomes the responsibility of a few key individuals. This plan is designed to address these concerns and as a resource to provide important information and assist in the safe evacuation of campus facilities.</p> | | | | |
| Other | Yes | Framework 3.0 (Update and Revision) (2023) | The Ohio State University | Planning, Architecture and Real Estate |
| <p><i>How does this reduce risk?</i> The Ohio State University is embarking on a study to update the campus master plan, Framework 2.0. The next iteration of the university's long-term vision for its physical environment, Framework 3.0, will begin with a refresh of baseline facility data and take into consideration, academic and research excellence and facilities strategies, student housing, dining and recreation, campus landscapes and streetscapes, connectivity and mobility, post-pandemic space needs, academic core backfill opportunities, as well as facility condition, deferred maintenance planning and energy targets. The study is expected to be completed by late 2023.</p> | | | | |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | Yes | Comprehensive Emergency Management Plan (Update and Revision) (October 2017) | The Ohio State University | Public Safety, Emergency Management |
| <p><i>How does this reduce risk?</i> The Comprehensive Emergency Management Plan (CEMP) addresses The Ohio State Universities planned response to emergencies associated with natural, technological, and man-made incidents/disasters. This document is the underlying framework for protection of health, safety, and property of students, staff, faculty, and visitors during incidents/disasters at The Ohio State University. It is intended to facilitate multiple agency/jurisdiction coordination; specifically, between the University and Local, State, and Federal governments operating under a national incident management framework.</p> | | | | |
| Continuity of Operations Plan | No | - | - | - |
| <p><i>How does this reduce risk?</i> N/A</p> | | | | |
| Strategic Recovery Planning Report | No | - | - | - |
| <p><i>How does this reduce risk?</i> N/A</p> | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | - | - | - |



| | Jurisdiction has this? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---|---|--|
| <i>How does this reduce risk?</i> N/A | | | | |
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Public Health Plan | No | - | - | - |
| <i>How does this reduce risk?</i> N/A | | | | |
| Other | No | - | - | - |
| <i>How does this reduce risk?</i> | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of the Ohio State University to oversee and track development.

Table 9.42-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|---|
| Do you issue development permits? • If yes, what department is responsible? | No | The Ohio State University is not structured along the lines of a political jurisdiction. Municipal capabilities like code and zoning enforcement and NFIP participation are not applicable at a university level. |
| If you do not issue development permits, what is your process for tracking new development? | N/A | Coordination with the City of Columbus and the University Impact District Review Board. |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | - |
| Do you have a buildable land inventory? • If yes, please describe | No | - |
| Describe the level of build-out in your jurisdiction. | N/A | - |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Ohio State University and their current responsibilities that contribute to hazard mitigation.

Table 9.42-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|---------------------|--|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustment | No | - |
| Planning Department | No | - |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |



| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| Public Works/Highway Department | Yes | Facilities and Operations Development (FOD) Operations team performs building and roadway maintenance, snow removal, and landscaping services for the university and the Wexner Medical Center. The FOD is also responsible for campus custodial, sustainability and energy services, offering an integrated service model that provides customers with a single point of contact and around-the-clock service. |
| Construction/Building/Code Enforcement Department | No | - |
| Emergency Management/Public Safety Department | Yes | Ohio State's Emergency Management provides preparedness planning, training and exercises, incident management and coordination, emergency warnings and public information, policy formulation, and resource allocation and prioritization before, during, and after disasters and incidents on our campuses. |
| Warning Systems / Services (mass notification system, outdoor warning signals, etc.) | Yes | In the event of severe weather, Ohio State's Department of Public Safety actively monitors and shares significant updates with the university community. If a tornado warning is identified for the Columbus campus, the Buckeye Alert System automatically sends severe weather alerts to students, faculty, and staff. This system can be used for any mass notification needs. |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | Facilities and Operations Development (FOD) Operations team performs building and roadway maintenance, snow removal, and landscaping services for the university and the Wexner Medical Center. The FOD is also responsible for campus custodial, sustainability and energy services, offering an integrated service model that provides customers with a single point of contact and around-the-clock service. |
| Mutual aid agreements | Yes | The Ohio State University has mutual aid agreements in place with the City of Columbus for various needs. |
| Human Resources Manual | Yes | Consider the following: Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? No. |
| Other | No | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | - |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | - |
| Planners or engineers with an understanding of natural hazards | Yes | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | - |
| Environmental scientist familiar with natural hazards | Yes | - |
| Surveyor(s) | No | - |
| Emergency Manager | Yes | - |
| Grant writer(s) | Yes | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|------------------------|---|
| How do your administrative/technical capabilities contribute to risk reduction in your community? | | |
| The combined efforts and knowledge of administrative and technical personnel, groups, and committees make it possible to identify and implement policies, plans, and actions to assist in the reduction of risk across the Ohio State University's campuses. | | |

Fiscal Capability

The table below summarizes financial resources available to the Ohio State University.

Table 9.42-5. Fiscal Capabilities

| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|---|--|
| Community development Block Grants (CDBG, CDBG-DR) | - |
| Capital improvements project funding | - |
| Authority to levy taxes for specific purposes | - |
| User fees for water, sewer, gas, or electric service | - |
| Impact fees for homebuyers or developers of new development/homes | - |
| Stormwater utility fee | - |
| Incur debt through general obligation bonds | - |
| Incur debt through special tax bonds | - |
| Incur debt through private activity bonds | - |
| Withhold public expenditures in hazard-prone areas | - |
| Other federal or state Funding Programs | Yes |
| Open Space Acquisition funding programs | - |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | Operational Funds |

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Ohio State University.

Table 9.42-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|--|------------------------|---|
| Public information officer or communications office | Yes | Office of Marketing and Communications |
| Personnel skilled or trained in website development | Yes | The Ohio State University has employees who manage and update the University's website. |
| Hazard mitigation information available on your website | Yes | The Emergency Management and Fire Prevention webpage. |
| Social media for hazard mitigation education and outreach | Yes | The Ohio State University has accounts on Twitter, Instagram, Facebook, and TikTok |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Warning systems for hazard events | Yes | In the event of severe weather, Ohio State's Department of Public Safety actively monitors and shares significant updates with the university community. If a tornado warning is identified for the Columbus campus, the Buckeye Alert System automatically sends severe weather alerts to students, faculty, and staff. This system can be used for any mass notification needs. |
| Natural disaster/safety programs in place for schools | No | Other than those within the educational tracts, there are no natural disaster/safety programs at the University. |
| Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens | Yes | The Ohio State University will utilize its social media platforms and Buckeye Alert System during an active event to inform students, faculty, and staff how to stay safe during the event. |

| Outreach Resources | Available? (Yes/No) | Comment: |
|---|------------------------|----------|
| on natural hazards, risk, and ways to protect themselves during such events? <ul style="list-style-type: none"> If yes, please describe. | | |

Community Classifications

The table below summarizes classifications for community programs available to the Ohio State University.

Table 9.42-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Storm Ready Certification | Yes | - | 2015 |
| Firewise Communities classification | No | - | - |
| Other | No | - | - |

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.42-8. Adaptive Capacity

| Hazard | Adaptive Capacity – Strong/Moderate/Weak |
|-----------------------|--|
| Dam/Levee Failure | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temperature | Moderate |
| Flood | Moderate |
| Geologic | Moderate |
| Invasive Species | Moderate |
| Severe Summer Weather | Strong |
| Severe Winter Weather | Moderate |
| Tornadoes | Moderate |

9.42.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The Floodplain Administrator, listed in the Hazard Mitigation Planning team table at the beginning of this annex, is responsible for maintaining this information.

NFIP Statistics

The Ohio State University does not participate in the NFIP; therefore, NFIP statistics and summary are not available for the University.

9.42.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. The tables below summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.42-9. Number of Building Permits for New Construction Since the Previous HMP

| Type of Development | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|-------------------------------------|---|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | The University does not issue building permits. | | | | | | | | | |
| Multi-Family | | | | | | | | | | |
| Other (commercial, mixed-use, etc.) | | | | | | | | | | |
| Total Permits Issued | | | | | | | | | | |

Table 9.42-10. Recent and Expected Future Development

| Property or Development Name | Type (e.g., Res., Comm.) | # of Units / Structures | Address and Parcel ID | Known Hazard Zone(s) | Description/Status of Development |
|--|--------------------------|-------------------------|-----------------------|----------------------|-----------------------------------|
| Recent Major Development from 2018 to Present | | | | | |
| None Identified | | | | | |
| Known or Anticipated Major Development in the Next Five (5) Years | | | | | |
| None Identified | | | | | |

9.42.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Ohio State University’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. These maps are based on the best available data at the time of the preparation of this plan



and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Ohio State University has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.42-1. Ohio State University Hazard Area Extent and Location Map - Flood

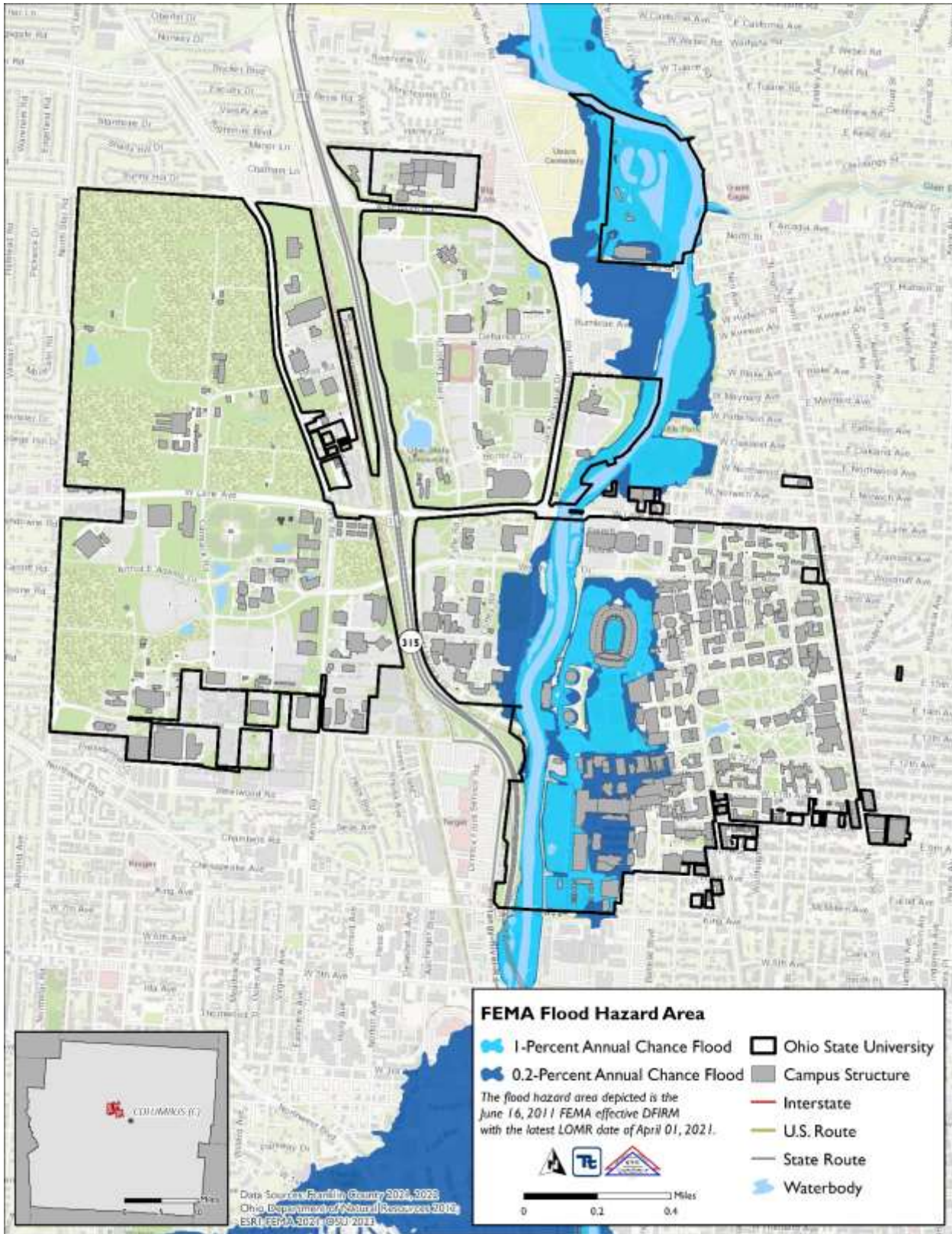


Figure 9.42-2. Ohio State University Hazard Area Extent and Location Map – Erosion

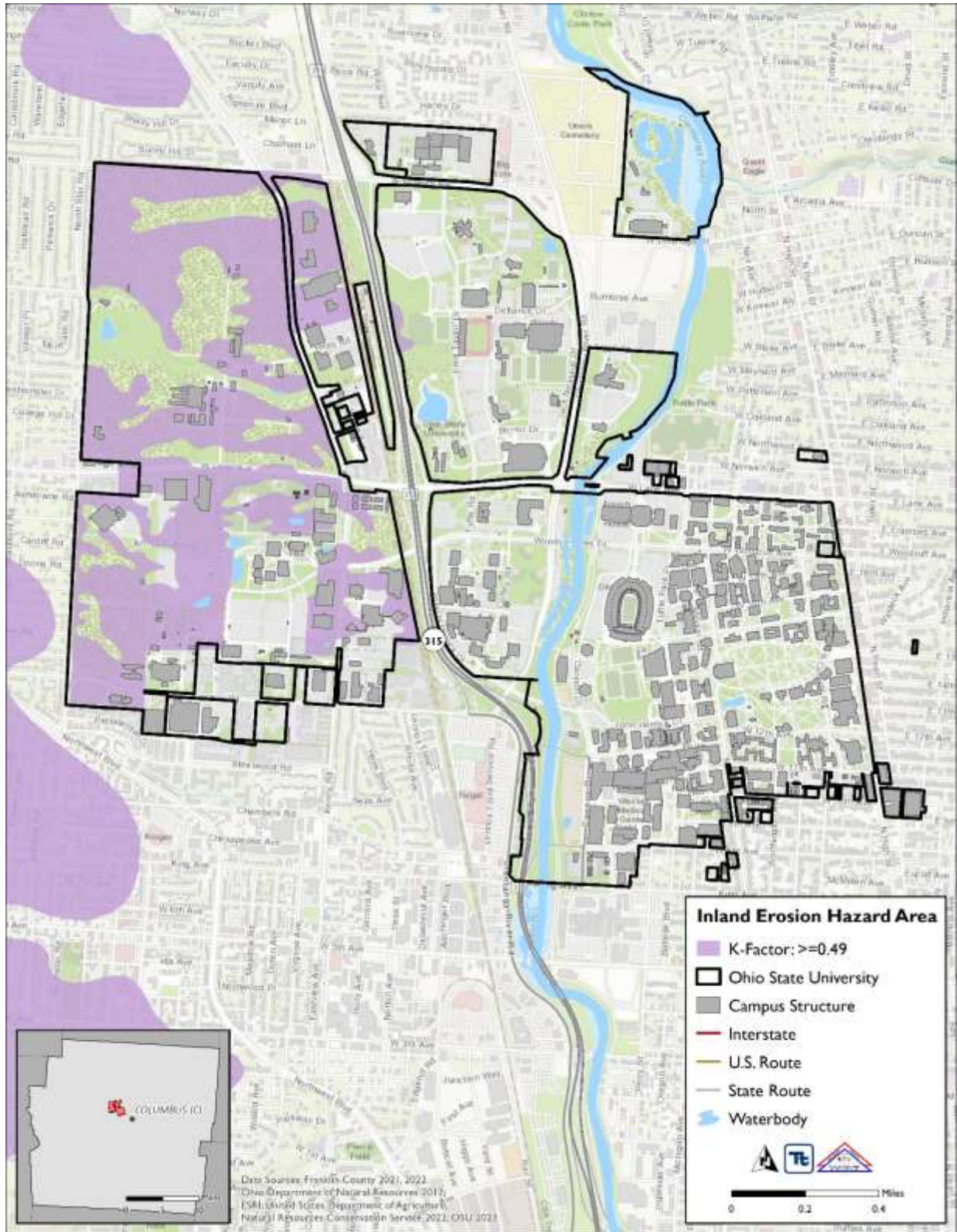
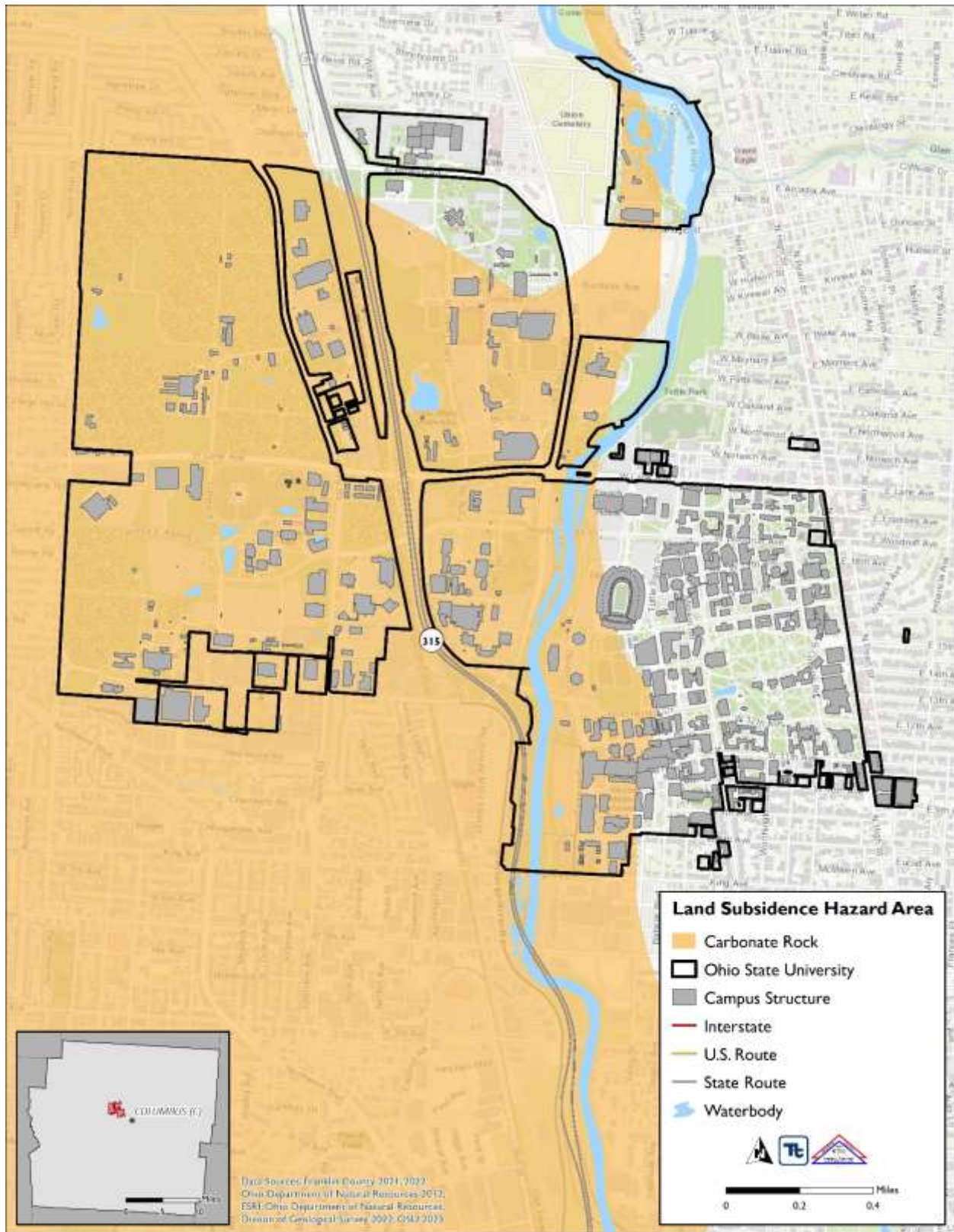


Figure 9.42-3. Ohio State University Hazard Area Extent and Location Map – Land Subsidence



Hazard Event History

Franklin County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events provided in each of the hazard profiles includes a chronology of events that have affected the County and its municipalities.

The Ohio State University history of federally declared disasters (as presented by FEMA) and significant hazard events (as presented by the NOAA National Centers for Environmental Information) is consistent with that of the County. The table below provides details regarding municipal-specific losses and damage the Ohio State University experienced during significant (e.g., disaster declaration and/or losses greater than \$10,000) hazard events since the last hazard mitigation plan update. Information provided in the table below is based on input provided by the jurisdiction. Refer to Section 4.3 (Hazard Profiles) for details on hazard events.

Table 9.42-11. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|--------------------|---|--------------------|--|--|
| September 26, 2018 | EF-1 Tornado | N/A | Showers and thunderstorms moved east across the region. A weak tornado began in the Olde Towne neighborhood of Columbus. Approximately \$750,000 in property damage. | The University did not experience any notable damages or losses. |
| April 14, 2019 | Thunderstorms | N/A | Thunderstorms developed ahead of a strong low-pressure system that was approaching the area. A building housing a pharmaceutical company on Rickenbacker Parkway received substantial damage, as a wall collapsed with more than 100 employees inside. Several people received minor injuries. Approximately \$100,000 in property damage. | The University did not experience any notable damages or losses. |
| March 2020-present | Covid-19 Pandemic (DR-4507) | Yes | As of November 16, 2022, 347,221 reported cases and 2,721 reported deaths. | The University did not experience any notable damages or losses. |

Hazard Ranking

This section provides the community specific identification of the primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), each participating jurisdiction has differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to its own community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Ohio State

University. The Ohio State University reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

Table 9.42-12. Hazard Ranking Input

| Hazard | Hazard Ranking |
|-----------------------|----------------|
| Dam/Levee Failure | Medium |
| Disease Outbreak | Medium |
| Drought | Low |
| Earthquake | Low |
| Extreme Temperature | Medium |
| Flood | Medium |
| Geologic | Low |
| Invasive Species | Low |
| Severe Summer Weather | High |
| Severe Winter Weather | Medium |
| Tornadoes | Medium |

Critical Facilities and Community Lifelines

The table below identifies the number of critical facilities/community lifelines in the community located within the hazards areas of concern. Refer to Section 3 (County Profile) and Section 4.3 (Hazard Profiles) for details on the facilities and the potential impacts hazards can have on those facilities.

Table 9.42-13. Number of Critical Facilities and Community Lifelines in Hazard Areas in the Ohio State University

| | Critical Facilities | Lifelines |
|---|---------------------|-----------|
| 1-Percent Annual Chance Flood Event Hazard Area | - | - |
| 0.2-Percent Annual Chance Flood Event Hazard Area | - | - |
| Inland Erosion (K-Factor: >= 0.49) Hazard Area | - | - |
| Subsidence (Karst/Carbonate Rock) Hazard Area | - | - |
| Alum Creek Dam Inundation (MH Breach) Hazard Area | - | - |
| Delaware Dam Inundation (MH Breach) Hazard Area | - | - |

Source: Franklin County; Hazus 5.1

Identified Issues

In addition to the risk assessment, the Ohio State University identified the following vulnerabilities within its community:

- Critical facilities on campus, including hospital and research facilities, do not have an emergency back-up system.
- There are no written guidelines on how to prepare various sites on campus for impending storms.
- Staff and students on campus may be unaware of the University’s hazard risks or how to prepare and react to those hazards.
- Hazards have impacted the structural and mechanical integrity of buildings in previous events.
- Debris from trees has cause power outages and other damages following storm events with high winds.
- The lightning systems on campus are outdated.

- Increased occurrences of winter weather have caused an increase in demand on the salt usage to create safe driving conditions and walking paths.

9.42.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update. Previous actions that are now on-going programs and capabilities are indicated as such and are presented in the 'Capability Assessment' earlier in this annex.



Table 9.42-14. Status of Previous Mitigation Actions

| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|--|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Continue to conduct an annual exercise for pandemic /epidemic response | Student Life, Director of Risk and Emergency Management; Safety and Emergency Preparedness Director, Wexner Medical Center | Completed Operating Budget Refer to Responsible Party Column | No | - | - |
| Provide staff education and outreach concerning health related emergencies | Assistant Vice President and Director of Public Safety | Completed Operating Budget Refer to Responsible Party Column | No | - | - |
| Conduct annual updates to the Ohio State WMC Master Pandemic Plan | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management; Safety and Emergency Preparedness Director, Wexner Medical Center | Completed Operating Budget Refer to Responsible Party Column | No | - | - |
| Evaluate current building standards and evaluate changes to increase resilience to seismic events | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management; Safety and Emergency Preparedness Director, Wexner Medical Center | Discontinued | No | - | - |
| Install leak detection systems on utility infrastructure | Associate VP of Facilities, Operations and Development | Discontinued | No | - | - |
| Develop a public education campaign to be delivered throughout the university conveying seismic risk | Assistant Vice President and Director of Public Safety | In Progress | Yes | The students and staff on the University campus may be unaware of the risks associated with seismic hazards. | Assistant Vice President and Director of Public Safety |
| Evaluate current building design standards and evaluate changes to increase resilience | Associate VP of Facilities, Operations and Development | In Progress | Yes | Floods can impact the structural integrity of buildings. | Associate VP of Facilities, Operations and Development |
| Develop and implement infrastructure improvements to existing storm and sanitary sewers | Associate VP of Facilities, Operations and Development | In Progress | Yes | Storm and sanitary sewer pipes become impacted during heavy rains and contribute to the flooding hazard experienced by the University. | Associate VP of Facilities, Operations and Development |



| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|---|---|--|--|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Develop a public education campaign to be delivered throughout the university conveying flood risk and actions | Assistant Vice President and Director of Public Safety | In Progress | Yes | The students and staff on the University campus may be unaware of the risks associated with the flood hazard. | Assistant Vice President and Director of Public Safety |
| Achieve StormReady Certification from NWS | Emergency Management/Fire Prevention | Completed Operating Budget Refer to Responsible Party Column | No | - | - |
| Expansion of tornado siren system on campus | Assistant Vice President and Director of Public Safety | Discontinued | No | - | - |
| Evaluate current building standards to ensure tornado safety for occupants | Associate VP of Facilities, Operations and Development | In Progress | Yes | Tornadoes can impact the structural integrity of buildings, causing danger to those inside it. | Associate VP of Facilities, Operations and Development |
| Evaluation of installation of tornado safe rooms on campus | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management | Discontinued | No | - | - |
| Evaluate possibility of enhanced IT warning system for tornadic events (Message scroll on university computer systems) | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management | Completed Operating Budget Refer to Responsible Party Column | No | - | - |
| Retrofit buildings to allow for communications from public safety dispatchers to building occupants | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management | Discontinued | No | - | - |
| Develop a public education campaign to be delivered throughout the university. | Assistant Vice President and Director of Public Safety | In Progress | Yes | The students and staff on the University campus may be unaware of the risks associated with tornadic and wind hazards. | Assistant Vice President and Director of Public Safety |
| Achieve StormReady Certification from NWS | Emergency Management/Fire Prevention | Completed Operating Budget Refer to Responsible Party Column | No | - | - |



| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|---|--|--|---|---|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Develop site preparation plans for known storm events | Assistant Vice President and Director of Public Safety; Associate VP of Facilities, Operations and Development | In Progress | Yes | There is no written guide on how to prepare the various structures and building on campus for storm events. | Assistant Vice President and Director of Public Safety; Associate VP of Facilities, Operations and Development |
| Evaluate current building standards and evaluate changes to increase resilience | Assistant Vice President and Director of Public Safety | In Progress | Yes | Summer storms can impact the structural integrity of buildings. | Assistant Vice President and Director of Public Safety |
| Conduct a tree-trimming program on campus | Facilities Operations and Development /Grounds | In Progress | Yes | High winds from summer and winter storms cause tree limbs to snap which can impact infrastructure. | Facilities Operations and Development /Grounds |
| Upgrade and improve lightning systems on buildings | Various (Operations (incl. Med Center), Student Life, Athletics, Business Advancement) | In Progress | Yes | Current lighting systems on buildings are outdated and may be ineffective. | Various (Operations (incl. Med Center), Student Life, Athletics, Business Advancement) |
| Purchase and install an outdoor lightning warning system | Assistant Vice President and Director of Public Safety | Discontinued | No | - | - |
| Undertake structural projects to increase resilience of buildings to the effects of summer storms | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management | In Progress | Yes | Summer storms can impact the structural integrity of buildings. | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management |
| Develop a public education campaign to be delivered throughout the university conveying summer storm risk | Assistant Vice President and Director of Public Safety | In Progress | Yes | The students and staff on the University campus may be unaware of the risks associated with summer storms. | Assistant Vice President and Director of Public Safety |
| Use GIS to determine priority areas to clear snow/deposit snow | Director, Facilities Information Technologies Services (FITS) | Completed Operating Budget, FEMA HMA Programs Refer to Responsible Party Column | No | - | - |



| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|---|---|---|--|--|---|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| Evaluate current building standards and evaluate changes to increase resilience | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management | In Progress | Yes | Winter storms can impact the structural integrity of buildings. | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management |
| Integrate existing ground sensors into building automation systems | Director, Landscape Services | Discontinued | No | - | - |
| Develop a live monitoring system of snow removal equipment (similar to the City of Columbus Snow Warrior tracker) | Director, Landscape Services | Discontinued | No | - | - |
| Undertake infrastructure improvements to install roadway heating/roof heating elements | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management | Discontinued | No | - | - |
| Increase salt storage capacity to 2,000 tons | Director, Landscape Services | In Progress | Yes | Heavier snowfall and ice accumulations with winter storms cause the University's salt storage to deplete rapidly due to the increased needs. | Director, Landscape Services |
| Undertake structural projects to increase resilience of buildings to the effects of winter storms | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management | In Progress | Yes | Winter storms can impact the structural integrity of buildings. | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management |
| Purchase additional generators for emergency power (research facilities, hospital facilities, other identified critical infrastructure) at structures | Various – Depending on ownership of building | In Progress | Yes | Critical facilities do not have back-up emergency generators. | Various – Depending on ownership of building |



| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|---|---|--|--|---|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| that are not already equipped with backup power | | | | | |
| Develop a public education campaign to be delivered throughout the university conveying winter storm risk | Assistant Vice President and Director of Public Safety | In Progress | Yes | The students and staff on the University campus may be unaware of the risks associated with winter storms. | Assistant Vice President and Director of Public Safety |
| Evaluate infrastructure for the use of gray water | Associate VP of Facilities, Operations and Development | Discontinued | No | - | - |
| Evaluate building plumbing systems to reduce water flow/usage | Associate VP of Facilities, Operations and Development | Discontinued | No | - | - |
| Evaluate the use of secondary sources of natural water sources | Associate VP of Facilities, Operations and Development | Discontinued | No | - | - |
| Develop a public education campaign to be delivered throughout the university conveying drought risk | Assistant Vice President and Director of Public Safety | In Progress | Yes | The students and staff on the University campus may be unaware of the risks associated with drought. | Assistant Vice President and Director of Public Safety |
| Evaluate mechanical system and building envelope improvements in buildings to increase resilience to extreme cold temperatures | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management | In Progress | Yes | Extreme Temperature can impact the mechanical and structural integrity of buildings. | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management |
| Develop and asset management system to track infrastructure integrity | Associate VP of Facilities, Operations and Development | Discontinued | No | - | - |
| Ensure infrastructure system redundancy | Associate VP of Facilities, Operations and Development | Discontinued | No | - | - |
| Evaluate building design standards for Extreme Temperature | Associate VP of Facilities, Operations and Development | Discontinued | No | - | - |
| Develop a public education campaign to be delivered | Associate VP of Facilities, Operations and Development; Student Life, Director of | In Progress | Yes | The students and staff on the University campus | Associate VP of Facilities, Operations and |



| Project | Responsible Party | What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing. | If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)? | | |
|--|--|--|--|---|--|
| | | | Yes/No | If Yes, please describe the original problem (i.e., hazard, location, historic losses) | If Yes, identify the responsible department/person to implement the project. |
| throughout the university conveying extreme temperature risk | Risk and Emergency Management; Safety and Emergency Preparedness Director, Wexner Medical Center | | | may be unaware of the risks associated with Extreme Temperature. | Development; Student Life, Director of Risk and Emergency Management; Safety and Emergency Preparedness Director, Wexner Medical Center |
| Cannon Drive Relocation – Phase 2 | Associate VP of Facilities, Operations and Development | In Progress | Yes | Portions of the Ohio State University campus, particularly along John Herrick Drive and Woody Hayes Drive, is within the .2 percent or 500-year flood zone. | Associate VP of Facilities, Operations and Development |

Additional Mitigation Efforts

In addition to the mitigation actions completed in the table above, the Ohio State University identified the following mitigation efforts completed since the last HMP:

- No additional initiatives identified.

Since the adoption of the County’s first HMP, the Ohio State University has made significant mitigation progress in the following areas:

- No additional mitigation progress identified.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Ohio State University participated in a mitigation action workshop in April 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards:

- Selecting Appropriate Mitigation Measures for Floodprone Structures (FEMA 551, March 2007)
- Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (FEMA, January 2013)

The table below indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and six CRS mitigation action categories listed in the table demonstrate the wide range of activities and mitigation measures selected.

Table 9.42-15. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|-----------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/Levee Failure | X | X | - | X | X | X | X | - | - | X |
| Disease Outbreak | - | X | - | X | - | X | X | - | - | X |
| Drought | - | X | - | X | - | X | X | - | - | X |
| Earthquake | X | X | - | X | X | X | X | - | - | X |
| Extreme Temperature | X | X | - | X | X | X | X | - | - | X |
| Flood | X | X | - | X | X | X | X | - | X | X |
| Geologic | X | X | - | X | X | X | X | - | - | X |
| Invasive Species | - | X | - | X | - | X | X | - | - | X |
| Severe Summer Weather | X | X | - | X | X | X | X | X | - | X |
| Severe Winter Weather | X | X | - | X | X | X | X | X | - | X |
| Tornadoes | X | X | - | X | X | X | X | X | - | X |

Note: Mitigation categories are described below the Mitigation Initiatives (Table 9.42-15)
Hazards are color-coded based on risk ranking: yellow = low, orange = medium, red = high

The table below summarizes the mitigation actions the Ohio State University will pursue in the future to reduce the effects of hazards. Acronyms used in the table are defined in notes that follow the table. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.42-16. Proposed Hazard Mitigation Initiatives

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|------------------------------------|--|--|-----------|--------------------|---|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-OSU-001 | Design Standards Evaluation | <p>Problem: Natural hazards can impact the structural integrity of buildings.</p> <p>Solution: Evaluate current building and mechanical design standards and evaluate changes to increase resilience and safety.</p> | Dam/Levee Failure, Earthquake, Extreme Temperature, Flood, Geologic, Severe Summer Weather, Severe Winter Weather, Tornadoes | 1 | 5 years | Associate VP of Facilities, Operations and Development; Assistant Vice President and Director of Public Safety; Student Life, Director of Risk and Emergency Management | University Funding | High | High | High | LPR | PR, PP |
| 2023-OSU-002 | Sewer Infrastructure Improvements* | <p>Problem: Storm and sanitary sewer pipes become impacted during heavy rains and contribute to the flooding hazard experienced by the University.</p> <p>Solution: Develop and implement infrastructure improvements to existing storm and sanitary sewers.</p> | Flood | 2 | 5 years | Associate VP of Facilities, Operations and Development | University Funding, BRIC | High | High | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|--|---|---|-----------|--------------------|--|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-OSU-003 | All Hazards Public Education Campaign | <p>Problem: The students and staff on the University campus may be unaware of the risks associated with natural hazards.</p> <p>Solution: Develop a public all hazards education campaign to be delivered throughout the university, to both students and staff, conveying risks and actions.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 5 | 5 years | Student Life, Director of Risk and Emergency Management; Associate VP of Facilities, Operations and Development; Safety and Emergency Preparedness Director, Wexner Medical Center; Assistant Vice President and Director of Public Safety | University Funding, HMGP | High | High | Medium | EAP | PI |
| 2023-OSU-004 | Site Preparation Plans for Storm Events* | <p>Problem: There is no written guide on how to prepare the various structures and building on campus for storm events.</p> <p>Solution: Develop site preparation plans for known storm events.</p> | Severe Summer Weather, Severe Winter Weather, Tornado | 1 | 5 years | Assistant Vice President and Director of Public Safety; Associate VP of Facilities, Operations and Development | University Funding | Medium | Low | Medium | LPR | PR |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|------------------------------|--|---|-----------|--------------------|---|---------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-OSU-005 | Tree Maintenance Program | Problem: High winds from summer and winter storms cause tree limbs to snap which can impact infrastructure. Solution: Conduct a tree trimming program on campus. | Severe Summer Weather, Severe Winter Weather, Tornado | 1 | 5 years | Facilities Operations and Development /Grounds | University Funding | High | High | Medium | LPR | PR, NR |
| 2023-OSU-006 | Lightning System Upgrades | Problem: Current lighting systems on buildings are outdated and may be ineffective. Solution: Upgrade and improve lightning systems on buildings. | Severe Summer Weather | 6 | 5 years | Various (Operations (incl. Med Center), Student Life, Athletics, Business Advancement) | University Funding | Medium | Medium | Low | SIP | PP |
| 2023-OSU-007 | Increase Building Resilience | Problem: Summer and winter storms can impact the structural integrity of buildings. Solution: Undertake structural projects to increase resilience of buildings to the effects of severe summer and winter weather. | Severe Summer Weather, Severe Winter Weather | 6 | 5 years | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management | University Funding, BRIC | High | High | Low | SIP | PP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|---|--|---|-----------|--------------------|--|--------------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-OSU-008 | Emergency Generators for Critical Facilities* | <p>Problem: The University has numerous facilities that are deemed critical that do not have backup power.</p> <p>Solution: Purchase additional generators for emergency power (research facilities, hospital facilities, other identified critical infrastructure) at structures that are not already equipped with backup power.</p> | Dam/Levee Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geologic, Invasive Species, Severe Summer Weather, Severe Winter Weather, Tornadoes | 6 | 5 years | Associate VP of Facilities, Operations and Development; Student Life, Director of Risk and Emergency Management; Safety and Emergency Preparedness Director, Wexner Medical Center | University Funding, BRIC, HMGP | High | High | Medium | SIP | PP, ES |
| 2023-OSU-009 | Salt Storage Capacity | <p>Problem: The Ohio State University is heavily impacted by winter weather and needs to increase capacity for salt storage to treat roadways and walkways to protect its students, staff, visitors, and personnel.</p> <p>Solution: Increase salt storage capacity to 2,000 tons.</p> | Severe Winter Weather | 2 | 5 years | Director, Landscape Services | University Funding | High | High | Low | SIP | ES |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Priority | Mitigation Category | CRS Category |
|----------------|-----------------------------------|---|---------------------------|-----------|--------------------|--|--------------------------------|--------------------|-----------------|----------|---------------------|--------------|
| 2023-OSU-010 | Cannon Drive Relocation – Phase 2 | <p>Problem: Portions of the Ohio State University campus, particularly along John Herrick Drive and Woody Hayes Drive, is within the .2 percent or 500-year flood zone.</p> <p>Solution: Rebuild the roadway between John Herrick Drive and Woody Hayes Drive at its current elevation and construct a certified ODNR flood protection levee. When complete, the project will add up to 500-year flood protection for the Columbus campus. Work also includes a new signalized intersection at Woody Hayes Drive and the continued expansion of the river park.</p> | Flood | 6 | 5 years | Associate VP of Facilities, Operations and Development | University Funding, BRIC, HMGP | High | High | High | SIP | SP |

*Mitigation initiative is related to a critical facility and/or community lifeline

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS Community Rating System
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program
 BRIC Building Resilient Infrastructure and Communities Program

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.



- *Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)*—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*—These actions include public activities to reduce hazard losses or actions that involve modification of existing buildings or structures to protect them from a hazard or removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Volume 1, Section 6 (Mitigation Strategy) identifies 14 evaluation criteria for prioritizing mitigation actions. For each mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as high, medium, or low. The table below provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.42-17. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------|---------------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-OSU-001 | Design Standards Evaluation | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 11 | High |
| 2023-OSU-002 | Sewer Infrastructure Improvements | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 9 | High |
| 2023-OSU-003 | All Hazards Public Education Campaign | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 8 | Medium |



| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2023-OSU-004 | Site Preparation Plans for Storm Events | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 8 | Medium |
| 2023-OSU-005 | Tree Maintenance Program | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 6 | Medium |
| 2023-OSU-006 | Lightning System Upgrades | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | Low |
| 2023-OSU-007 | Increase Building Resilience | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 4 | Low |
| 2023-OSU-008 | Emergency Generators for Critical Facilities | 1 | 1 | 1 | 1 | 1 | 0 | 0 | -1 | 0 | 0 | 1 | 1 | 0 | 0 | 6 | Medium |
| 2023-OSU-009 | Salt Storage Capacity | 0 | 0 | 1 | 1 | 0 | 1 | 0 | -1 | 0 | 1 | 0 | 1 | 0 | 0 | 4 | Low |
| 2023-OSU-010 | Cannon Drive Relocation – Phase 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 11 | High |

Note: Volume 1, Section 6 (Mitigation Strategy) describes the process for prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).