



**Tt TETRA TECH**


# Franklin County, Ohio Hazard Mitigation Plan – 2023 Update

**Core Planning Team Kick-Off Meeting**  
November 7, 2022


*Leading with Science®*

2

## Agenda



- Welcome and Introductions
- In-Kind Services Tracking
- Benefits of Hazard Mitigation
- Hazard Mitigation Planning Overview
- Project Organization
- Core Planning Team Responsibilities
- Public and Stakeholder Outreach
- Update Hazards of Concern and Risk Assessment
- Critical Facilities and Lifelines
- Goals and Objectives
- Schedule
- Questions/Next Steps/Wrap Up



**Tt TETRA TECH**

3

3





## Core Planning Team Responsibilities



- Guide the Planning Team (jurisdictions) through the HMP update process
- Oversee the planning process from start to finish
- Actively contribute, review and provide feedback, identify mitigation actions, etc. This includes:
  - Formalizing the natural hazards of concern
  - Updating/developing mitigation goals and objectives
  - Developing a public and stakeholder outreach strategy
  - Assisting with the development of the county-level mitigation strategy
  - Reviewing plan documents

8

## Hazard Mitigation Planning Overview



- **What is hazard mitigation?**
- **How does this support resiliency and recovery?**
- **Why update the plan?**
- **What is the process?**

- ✓ Authorized by the Disaster Mitigation Act of 2000
- ✓ Provides an overview of the impacts of natural hazards on communities
- ✓ Provides a roadmap to reducing the impact of these hazards
- ✓ Requires a FEMA-approved natural hazard mitigation plan to be eligible for Pre-Disaster Mitigation Funding
- ✓ 5 year updates required to maintain eligibility



9

## Hazard Mitigation – What is it?

Mitigation is a sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event

-or-

Any action taken to reduce future disaster losses

“provides the blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and local ability...” (CFR).

10

10

## Hazard Mitigation Works!

- According to the January 2019 National Institute of Building Sciences Natural Hazard Mitigation Saves: 2018 Interim Report, federal mitigation grants save \$6 for every \$1 spent!

National Benefit-Cost Ratio Per Peril <small>*BCR numbers in this study have been rounded</small>		Federally Funded
<b>Overall Hazard Benefit-Cost Ratio</b>		<b>6:1</b>
Riverine Flood	<b>7:1</b>	
Hurricane Surge	Too few grants	
Wind	<b>5:1</b>	
Earthquake	<b>3:1</b>	
Wildland-Urban Interface Fire	<b>3:1</b>	

**More Mitigation Measures, More Savings**

One dollar invested in mitigation = six dollars U.S. saves in future costs

11

11

## Why Update?



- The mitigation plan update will:
  - Help the County prepare for and mitigate the effects of disasters
  - Continue to allow the County and participating partners to be eligible for pre- and post-disaster mitigation funding
  - Support CRS participation/rating of municipalities

Hazard	Losses (1950 – June 2022)
Extreme Cold/Freeze	\$100,000 (property); \$540,000 (crop)
Drought	--
Extreme Heat	--
Flash Flood	\$1.5 million (property)
Flood	\$170,000 (property)
Hail	\$181.2 million (property)
Heavy Rain	--
Lightning	\$21,000 (property)
Tornado	\$58.1 million (property)
Winter Weather	\$1.2 million (property)
Wind	\$138+ million (property)
<b>TOTAL</b>	<b>\$380+ million (property); \$540,000 (crop)</b>

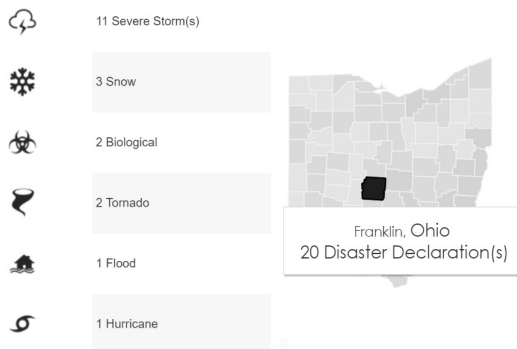
Source: NOAA-NCEI 2022

12

## What's at Risk?



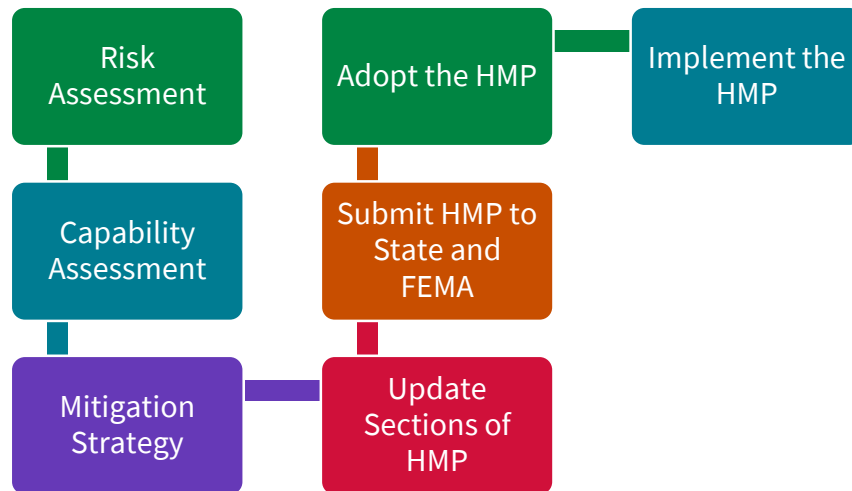
### • FEMA Disaster Declarations



Year of Declaration Date	Declaration Title	Disaster Number
1974	TORNADOES	421
1978	BLIZZARDS & SNOWSTORMS	3055
1989	SEVERE STORMS & FLOODING	831
1990	SEVERE STORMS, TORNADOES & FLOODING	870
1992	SEVERE STORMS, TORNADOES & FLOODING	951
1998	SEVERE STORMS, FLOODING, AND TORNADOES	1227
2002	SEVERE STORMS AND TORNADOES	1444
2003	SEVERE WINTER STORM AND RECORD/NEAR RECORD SNOW	1453
	TORNADOES, FLOODING, SEVERE STORMS, AND HIGH WINDS	1484
2004	SEVERE STORMS AND FLOODING	1556
	SEVERE STORMS, FLOODING, MUDSLIDES, AND LANDSLIDES	1507
2005	HURRICANE KATRINA EVACUATION	3250
	SEVERE WINTER STORMS, FLOODING, AND MUDSLIDES	1580
	SNOW	3198
2008	RECORD SNOW AND NEAR RECORD SNOW	3286
	SEVERE WIND STORM ASSOCIATED WITH TROPICAL DEPRES.	1805
2012	SEVERE STORMS	3346
	SEVERE STORMS AND STRAIGHT-LINE WINDS	4077
2020	COVID-19	3457
	COVID-19 PANDEMIC	4507

13

## What is the process?



14

## Update Risk Assessment



- Update assets
- Examine previous impacts
- Analyze risks
- Review with Core Planning Team and Planning Team
- Risk assessment meeting



15

## Hazards of Concern (2018 HMP)



- Dam/Levee Failure
- Drought
- Earthquake
- Extreme Heat
- Flooding
- Invasive Species
- Karst/Sinkhole
- Severe Summer Weather
- Severe Winter Weather
- Tornadoes

## Hazards of Concern (2023 HMP)



- Dam/Levee Failure
- Disease Outbreak
- Drought
- Earthquake
- Extreme Temperature (heat/cold)
- Flooding (inland, flash, urban/stormwater, ice jam)
- Geologic Hazards (sinkholes, erosion)
- Invasive Species
- Severe Summer Weather
- Severe Winter Weather
- Tornadoes



## EXERCISE – Identifying Hazards of Concern



- **Looking at the hazards included in the 2018 plan...**
  - Have additional hazards impacted the County since 2018?
  - Have hazard been mitigated and no longer cause damage?
  - Should hazards be regrouped to align with the 2019 State HMP?
  - Should additional hazards be included?
- **How have hazards affected the county? Where are your problem areas?**
- **Quick survey!**
  - We will send around a quick online survey to get your input on the hazards of concern for the 2023 HMP – Stay tuned!

## Critical Facilities and Community Lifelines



- **Review 2018 critical facility inventory to ensure complete**
- **Crosswalk and identify lifelines**

**Critical Facilities** are those facilities considered critical to the health and welfare of the population and that are especially important following a hazard. As defined for this HMP, critical facilities include essential facilities, transportation systems, lifeline utility systems, high-potential loss facilities, and hazardous material facilities.

**Essential facilities** are a subset of critical facilities that include those facilities that are important to ensure a full recovery following the occurrence of a hazard event. For the County risk assessment, this category was defined to include police, fire, EMS, schools/colleges, shelters, senior facilities, and medical facilities.

**Lifelines** provide indispensable service that enables the continuous operation of *critical business* and *government functions*, and is critical to *human health and safety*, or *economic security*



## Critical Facilities and Community Lifelines




Emergency Response	Public Services and Utilities	Private/ Commercial	Transportation	Other
<ul style="list-style-type: none"> <li>• Hospitals/Medical Clinics</li> <li>• Communications/Emergency Operations Centers</li> <li>• Other Direction and Control Operations Centers</li> <li>• Essential Government Buildings</li> <li>• Fire Departments/EMS Services</li> <li>• Law Enforcement/Sheriff, Police</li> <li>• Jails/Correction Centers</li> <li>• Emergency Shelters</li> <li>• Disaster Recovery Centers/Disaster Field Offices</li> <li>• Public Health Departments</li> </ul>	<ul style="list-style-type: none"> <li>• Emergency Alert System Stations and Towers: Radio, Television and Cable</li> <li>• Other Radio and Television Stations and Towers</li> <li>• Government Communications Towers and Repeaters</li> <li>• Telephone System Distribution Points and Towers: Land Line, Cellular, Microwave</li> <li>• Sewage Treatment and Plants</li> <li>• Potable Water Distribution Systems, Treatment Plants, and Lift Stations</li> <li>• Electrical Power Generating Plants and Electrical Substations</li> <li>• Major Electrical Distribution Systems/Routes</li> <li>• Essential Public Service Offices</li> </ul>	<ul style="list-style-type: none"> <li>• Private Potable Water Treatment and Distribution Systems</li> <li>• Private Sewage Treatment and Waste Systems</li> <li>• Commercial Distribution Centers</li> <li>• Building/Construction Materials</li> <li>• Potable Water and Ice Suppliers</li> <li>• Food Retailers</li> <li>• Power Generators</li> <li>• Suppliers of Fuels (Gasoline, Diesel, Propane, Natural Gas, etc.)</li> <li>• Suppliers of Light Equipment (Chain Saws, Shovels, Barricades, etc.)</li> <li>• Suppliers of Heavy Equipment (Bulldozers, Forklifts, etc.)</li> <li>• Medical Supply Companies</li> <li>• Food Processing Plants</li> <li>• Restaurants/Cafeterias</li> <li>• Community Centers/Auditoriums</li> <li>• Major Fuel Pipelines and Terminals/Fuel Storage and Tank Farms</li> </ul>	<ul style="list-style-type: none"> <li>• Airports/Heliports</li> <li>• Response Operations Staging Areas</li> <li>• Critical Transportation Routes</li> <li>• High Risk Intersections/Critical Links/Bridges</li> <li>• Railroad Stations</li> </ul>	<ul style="list-style-type: none"> <li>• Churches/Synagogues</li> <li>• Fellowship and Recreation Halls</li> <li>• Colleges/Universities</li> <li>• Public and Private Schools</li> <li>• Motels/Hotels</li> <li>• Nursing/Convalescent/Group Homes</li> <li>• Animal Care/Animal Shelters</li> <li>• Hazardous Materials Facilities</li> <li>• Flood Control Stations and Devices</li> </ul>


20

20








## Critical Facilities and Community Lifelines




- What additional facilities and lifelines should we add?

Types to consider:

- Critical food establishments – food pantries, grocery stores, senior nutrition
- COVID-19 locations – testing and vaccination sites
- Others?


21

21

# Mitigation Strategy

- Goals
  - What outcomes do you want to achieve?
- Actions
  - What specific actions will be taken to reduce risk from hazards?
- Action Plan
  - How will the actions be prioritized and implemented?

TETRA TECH 22

22

# Goals and Objectives – Review and Update

Goal Number	Goal	Modify, Add, or Remove?
1	Integrate goals and action items from the Franklin County Natural Hazard Mitigation Plan into existing and future land-use planning documents, and existing regulatory programs.	
2	Develop inventories of at-risk infrastructure and prioritize preventative measures in areas vulnerable to natural hazards.	
3	Involve watershed and natural resource management, and all other interested parties, in natural hazards mitigation planning to rehabilitate and maintain streams and waterways.	
4	Strengthen partnerships between government agencies and private sector businesses to develop public awareness of and involvement in natural hazards mitigation strategies.	
5	Develop and implement public education programs to increase public awareness and understanding of the risks associated with natural hazards.	
6	Protect buildings in repetitive loss areas through acquisition, elevation or other mitigating activity.	

**Goal**  
 Minimize new development in hazard-prone areas


**Objectives**  
 Reduce the number of vulnerable structures in flood hazard areas.

**Actions**  
 Amend zoning ordinance to permit only open space and uses within floodplains.

TETRA TECH 23

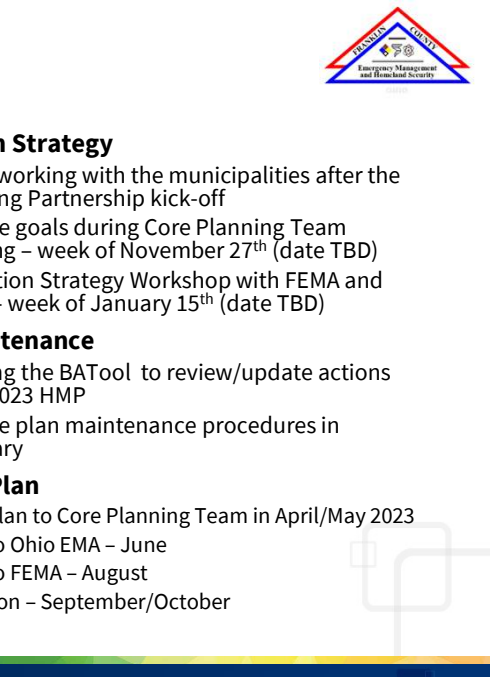
23

# Public and Stakeholder Outreach



- Social Media Posts
- Press Release
- HMP website – in the works...stay tuned!
- Planning Team meetings open to the public and stakeholders
- Stakeholder Survey
- Public Survey
- Neighboring County Outreach
  - Notified of planning process
  - Survey

# Next Steps/Schedule



- **Planning Process**
  - Core Planning Team Kick-Off – TODAY!
  - Planning Team Kick-Off – November 18<sup>th</sup>
- **Update Risk Assessment**
  - Data collection is underway; confirm building and critical facility inventory
  - Confirm hazards of concern; once confirmed, begin vulnerability assessment for each – we will send a survey out to everyone to collect input on hazards
  - Discuss risk assessment results – date TBD
- **Public and Stakeholder Outreach**
  - Ongoing throughout the planning process
- **Capability Assessment**
  - Currently working on reviewing plans, studies, codes, and ordinances
- **Mitigation Strategy**
  - Begin working with the municipalities after the Planning Partnership kick-off
  - Finalize goals during Core Planning Team meeting – week of November 27<sup>th</sup> (date TBD)
  - Mitigation Strategy Workshop with FEMA and State – week of January 15<sup>th</sup> (date TBD)
- **Plan Maintenance**
  - Utilizing the BATool to review/update actions from 2023 HMP
  - Finalize plan maintenance procedures in February
- **Develop Plan**
  - Draft Plan to Core Planning Team in April/May 2023
  - Draft to Ohio EMA – June
  - Draft to FEMA – August
  - Adoption – September/October



26

<b>Franklin County Project Contact</b>	
Connor Robb, Emergency Management Specialist (614) 724-0805   <a href="mailto:connor.robb@franklincountyohio.gov">connor.robb@franklincountyohio.gov</a>	
<b>Tetra Tech Project Contacts</b>	
Doug McIlvain, Project Manager (513) 333-3662   <a href="mailto:douglas.mcilvain@tetrattech.com">douglas.mcilvain@tetrattech.com</a>	Heather Apgar, Lead Planner (973) 630-8046   <a href="mailto:heather.apgar@tetrattech.com">heather.apgar@tetrattech.com</a>

# Thank You!

27