

# Southeastern Wisconsin **Regional Planning Commission**



## **Overview of Hazard Mitigation Planning**

Milwaukee County

Hazard Mitigation Plan Update

April 27, 2023

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# ●●●●● What is Mitigation?

➤ “Mitigation is **Any Sustained Action Taken to Eliminate or Reduce the Long-term Risk** to Human Life and Property from Natural and Technological Hazards” – *FEMA*



# ●●●●● What is Mitigation?

## ➤ Mitigation is Not:

- Emergency Response
- Crisis Management
- Disaster Preparation and Recovery

## ➤ Mitigation focuses on Strategies to Reduce the Potential Impacts of Disasters **BEFORE** They Occur





# Why Do We Mitigate?

## Nationwide Trends:

- \$450 Billion Since 2005 (GAO) Responding to Disasters
- Costs Continue to Rise
- Extreme Weather More Frequent and Intense
- People Continue to Build and Live In High-risk Areas



# Why Do We Mitigate?

## Wisconsin Trends:

- \$20 Billion in Disaster-Related Damages Since 1980
- 12 Federal Disaster Declarations since 2010



# Why Do We Mitigate?

- Disasters Cost Society too Much
- State and Federal Aid Insufficient
- Help Prevent Future Damage
- Promote More Disaster-Resilient and Sustainable Communities
- Reduce Response and Recovery Resource Requirements
- Fosters Partnerships Among All Levels of Government
- Develop and Strengthen Non-Governmental and Private Partnerships



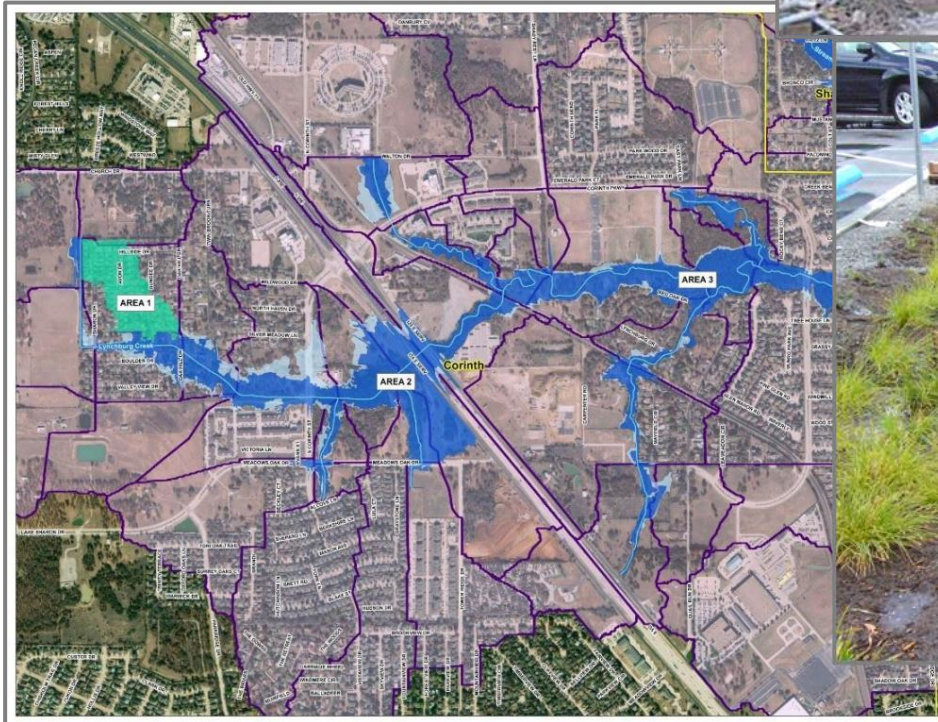
# ●●●●● Benefits of Mitigation Planning

- Protect the Health and Safety of Citizens
- Enhance Recreation and Tourism (Parks, Trails)
- Revitalize an Area
- Protect Future Development and Infrastructure
- Increase Community Pride and Improve Quality of Life
- Attract or Retain Business/Industry
- Preserve or Expand Tax Dollars



# ●●●● Different Mitigation Strategies

- Structural
- Non-Structural
  - Nature-Based
- Educational/Informational Outreach





# ●●●●● Structural Mitigation Strategies:

## Examples Projects:

- Structure Elevation
- Acquisition/Demolition
- Utility Mitigation
- Community Safe Rooms
- Retrofit for Wind Resistance
- Dam Inspection, Maintenance, or Removal



# ●●●●● Non-Structural Mitigation Strategies

- NOAA Weather Radios
- Education and Public Awareness
- Insurance (Flood and Sewer Backup)
- Land Use Planning
- Ordinances, Zoning and Building Codes



# ●●●●● Non-Structural: Nature-Based Strategies

## ➤ Sustainable Practices that Weave Natural Features into the Environment to Build More Resilient Communities

- Green Infrastructure
- Low Impact Development
- Natural Infrastructure
- Engineering with Nature
- Bioengineering



## ➤ Key Benefits Include:

- Economic Growth
- Green Jobs
- Increased Property Values
- Improvements to Public Health



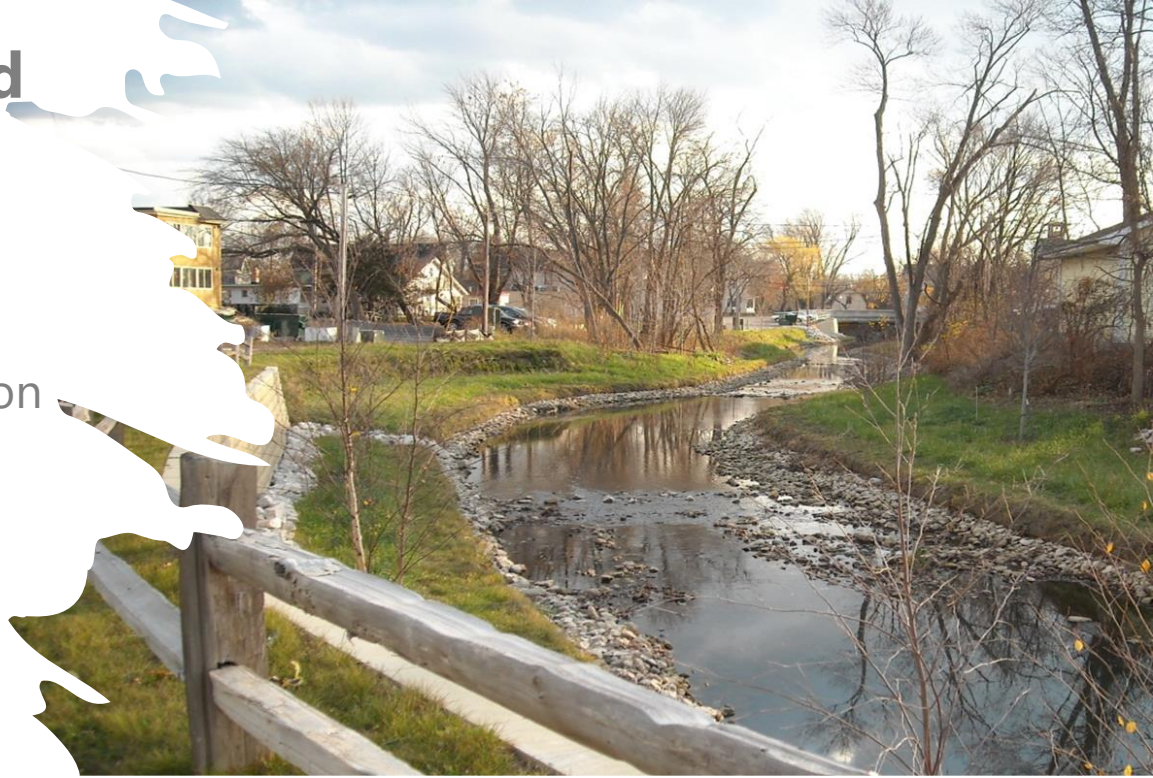
# Example of Nature-Based Mitigation Projects

## ➤ Stormwater Management:

- Stream, Floodplain, and/or Wetland Restoration/Preservation
- Land Conservation
- Greenways
- Stormwater Parks

## ➤ MMSD GreenSeams Program :


- Permanently Keeps Flood-Prone Lands in High-Growth Areas from Being Developed
- Land Restoration/Acquisition Program to Preserve Lands that Naturally hold Stormwater
- 960 acres Restored and 5,305 acres Preserved





# Local Mitigation Planning

- FEMA Requires State, Tribal, and Local Governments Develop and Adopt a HMP to Receive **Non-Emergency Disaster Assistance**
  - HMGP, FMA, and BRIC Programs
- In Accordance with **44 CFR 201** “Mitigation Planning” and **44 CFR 201.6** “Local Mitigation Plans”
- “Local Mitigation Planning Policy Guide” (2022)
  - Planning Components
  - **Multi-Jurisdictional Plans**
- Plans Must be Reviewed and Updated Every **Five** Years




**Local Mitigation Planning  
Policy Guide**

FP 206-21-0002

Released April 19, 2022, Effective April 19, 2023

OMB Collection #1660-0062



FEMA



# ●●●●● Previous Milwaukee County HMPs

- **Initial Plan 2011, Updated in 2016-17**
  - FEMA PDM Grants
  - All Hazard Mitigation Plans
  - Multi-Jurisdictional (not including the City of Milwaukee)
  - MKE Co. OEM, Plan Steering Committees, Other County Depts, and Local Officials, Stakeholders
  
- **Coordinated with other County Plans and Ordinances**



# ●●●●● Previous City of Milwaukee HMPs

- **Initial Plan 2005,**
- **Updated in 2010 and again in 2016**
  - All Hazard Plan
  - City of Milwaukee Only
  - City of Milwaukee Dept. Public Works, Dept. OEM, SEWRPC, Steering Committee/Local Planning Team
  
- **Coordinated with other City and County Plans and Ordinances**

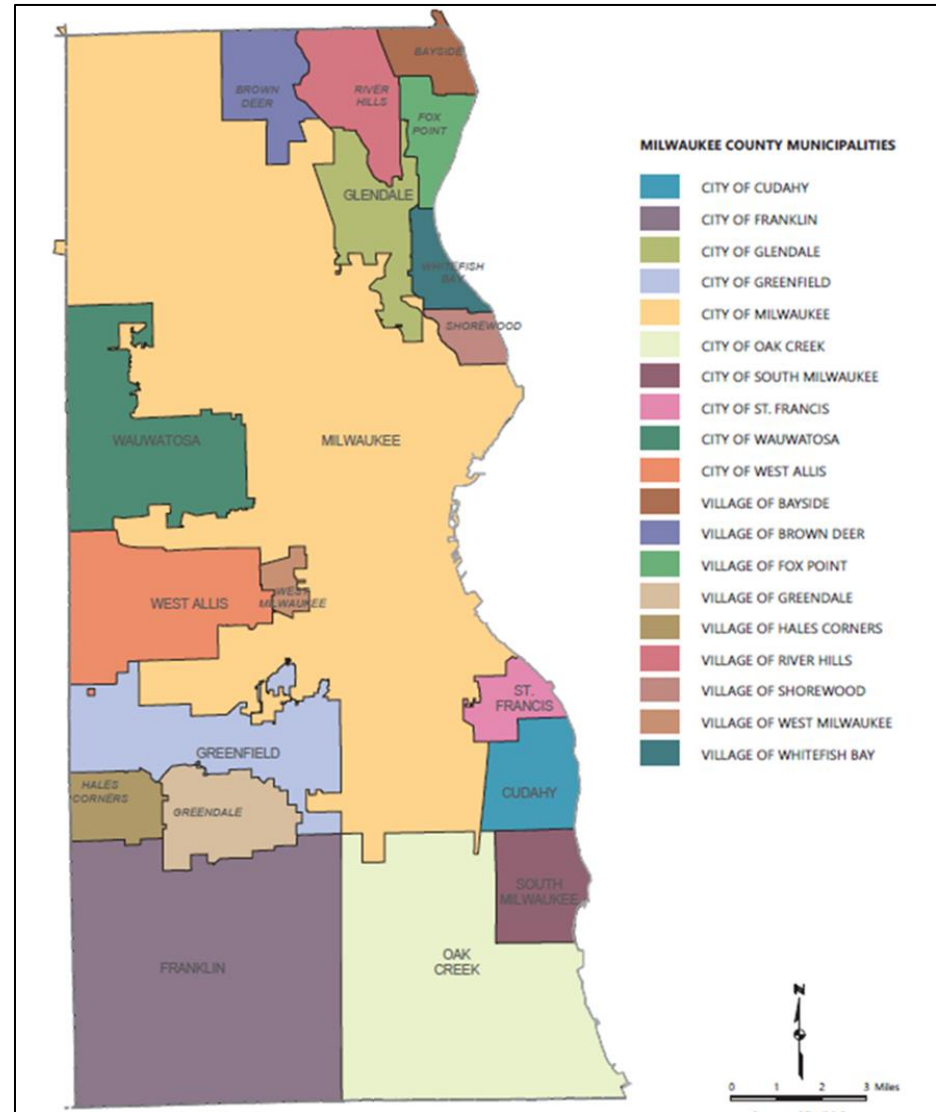


# Milwaukee County HMP Update

- Approved Under **HMPG Program**
- Countywide, **Multi-Jurisdictional Plan**
- Combining Milwaukee City and County Planning Efforts

## ➤ **Natural** Hazards Only:

- Flooding
- Coastal/Bluff Failure
- Tornadoes
- Severe Thunderstorms
- Extreme Temperature Events
- Winter Storms
- Drought





# Milwaukee County HMP Update

## Plan Update Process will Include:

- Updating and Enhancing the Risk and Vulnerability Assessment, Including **Climate Adaptation** and **Nature-based Solutions**
- Strengthening Mitigation Strategies in Accordance with **Community Resiliency**
- Assessing Vulnerabilities of **Underserved Populations** to Certain Hazards
- Facilitate **Stronger** Alignment with **Other FEMA Programs**, Including NFIP, CRS and Flood Risk Mapping
- Continue to Integrate other Planning Efforts
- Evaluate Existing **Building Codes**, Land Use, and Development Ordinances to Improve the Ability to Mitigation Damages from Future Hazards



## Plan Chapters/Components:

1. Introduction and Background
2. Description and Inventory of Study Area
3. Analysis of Hazard Conditions
4. Hazard Mitigation Goals
5. Hazard Mitigation Strategies
6. Plan Adoption, Maintenance and Implementation



## ➤ Attachment 1

### ➤ IMPORTANT DATES:

- **April 27** (LPT KICKOFF MEETING-today)
- **February 2024**, (LPT REVIEW CHs 1-3)
- **December 2024**, (LPT REVIEW CHs 4-6)
- **April 2025** (SUBMIT TO WEM FOR REVIEW)



# ●●●●● Role of Local Planning Team (LPT)

## ➤ Weigh In:

- Weigh in on Hazard Identification

## ➤ Review:

- Review Plan Chapters

## ➤ Help:

- Local Knowledge
  - ✓ Recent/Past Hazard Locations, Occurrences, Damages, etc.
  - ✓ **Recent/Planned Projects**
  - ✓ Inventory Data



- Example of **Hazard Mitigation Activities/Projects** Since Last Plan:
  - Flooded Structure Buyouts
  - Stormwater Management Efforts (Storm Sewer Construction, Wetland Restoration)
  - Tornado Shelters
  - Tornado Siren Installation
  
- Communities to Receive Some Recognition For Work Completed Or Underway Designed To Reduce Property Damage, Injury, And Loss Of Life Due To Natural Hazards





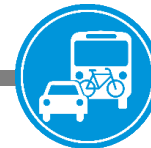
# Previous County Hazard Mit. Planning Goals

Hazard Goals and Objectives	
Hazard Goals	Hazard Objectives
1. To preserve life and minimize the potential for injuries or death.	1. Identify natural and man made hazards that threaten life in Milwaukee County.
2. To preserve and enhance the quality of life throughout Milwaukee County by identifying potential property damage risks and recommending appropriate mitigation strategies to minimize potential property damage.	<ol style="list-style-type: none"> <li>1. Implement programs and projects that assist in protecting lives by making homes, businesses, essential facilities, critical infrastructure, and other property more resistant to losses from all hazards.</li> <li>2. Improve hazard assessment information to make recommendations for discouraging new development and encouraging preventive measures for existing development in areas vulnerable to natural hazards.</li> <li>3. Protect life and property by implementing state-of-the-art standards, codes and construction procedures.</li> </ol>
3. To promote countywide coordination, planning, and training that avoids transferring the risk from one community to an adjacent community, where appropriate.	<ol style="list-style-type: none"> <li>1. Continue developing and strengthening inter-jurisdictional coordination and cooperation in the area of emergency services.</li> <li>2. Continue to support and develop comprehensive mutual aid agreements.</li> <li>3. Continue providing Milwaukee County and municipal emergency services with training and equipment to address all identified hazards.</li> </ol>
4. To identify potential funding sources for mitigation projects and form the basis for FEMA project grant applications.	1. NA
5. Increase public awareness	<ol style="list-style-type: none"> <li>1. Increase public awareness of existing threats and the means to reduce these threats by conducting educational and outreach programs to all the various community groups in the County.</li> <li>2. Provide informational items, partnership opportunities and funding resource information to assist in implementing mitigation activities.</li> </ol>



# Previous City Hazard Mit. Planning Goals

1. A spatial distribution of the various land uses that minimizes hazards and dangers to health, welfare, and safety as well as further enhancing the economic base of the City, and which will result in a compatible arrangement of land uses properly related to the existing and proposed supporting transportation, utility, public safety, and public facility systems.
2. A spatial distribution of the various land uses which maintains biodiversity and which will result in the protection and wise use of the natural resources of the City, including its soils, inland lakes and streams, groundwater, wetlands, woodlands, wildlife, and natural areas and critical species habitats.
3. The provision of facilities necessary to maintain a high-quality of fire and police protection and emergency medical services throughout the City.
4. The development of a stormwater management system, floodplain management system, and sanitary sewer systems which reduce the exposure of people to drainage- and flooding-related inconvenience and to health and safety hazards and which reduces the exposure of real and personal property to damage through inundation and basement backup resulting from flooding, inadequate stormwater drainage, or sewerage system capacity.
5. The identification of high erosion risk Lake Michigan shoreline areas and the development of a coastal erosion management program which reduces the exposure of people and real and personal property to shoreline erosion and bluff recession.
6. The identification and development of programs which complement emergency operations plans from the County and adjacent municipalities, to mitigate the potential exposure to health and safety and the exposure of real and personal property resulting from a broad range of hazards which are unpredictable and not geographically specific in nature.





# Hazard and Vulnerability Assessment Exercise

- Link and QR code on Agenda
- First step in Planning Process (important one!)
- LPT Input on Hazard Rankings:
  - Potential that specific hazards may occur,
  - The likely severity of impacts resulting from these hazards,
  - The extent to which these impacts may be mitigated by current levels of preparedness
  
- Please Complete by **May 10, 2023.**







# Hazard and Vulnerability Assessment Exercise

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➤ Link and QR code:



<https://arcg.is/XuTmP2>



➤ <http://www.sewrpc.org/SEWRPC/communityassistance/Hazard-Mitigation-Planning.htm>

- Agendas and other meeting materials
- Summary notes from meetings
- Presentations
- Draft chapters as they are completed
- Comment screen
- Other ways to send a comment:
  - [mshedivy@sewrpc.org](mailto:mshedivy@sewrpc.org)
  - 262.953.4286

The screenshot shows the SEWRPC website's 'Community Assistance' page. The navigation menu includes 'Home', 'Get Involved', 'Contact Us', 'Land Use', 'Transportation', 'Environment', 'Parks & Open Spaces', 'Housing', 'Community Assistance', and 'Reports & Resources'. The 'Community Assistance' link is circled in red. The main content area features a 'Community Assistance' header with a city skyline image. Below this, there is a section titled 'Community Assistance' with a paragraph describing the program's history and goals. A 'Contact Us' section lists three staff members: Kevin Muhs, Ben McKay, and Joel E. Dietl. There are also several links for further information, including 'List of cities, villages, and towns in the Region', 'Map of cities, villages, and towns in the Region', 'Incorporations and Consolidations in the Region: 1984 through 2020', 'Classes of Cities in the Region: 2020', 'Fact Sheet about classes of cities from the League of Wisconsin Municipalities', and 'City and Village Extraterritorial Authorities'. A 'Comprehensive Plans and Plan Implementation' section is also visible, along with an 'Interactive Mapping Application and Survey Document Search' section. At the bottom, there is a 'Hazard Mitigation Planning' section, which is circled in red and has a red arrow pointing to it. The 'Economic Development' section is also visible at the bottom right.



# Thank You

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