# Southeastern Wisconsin Regional Planning Commission



# Hazard Mitigation Plan Update Public Meeting

Washington County May 1, 2024

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Miranda Page – Planner, SEWRPC

Laura Herrick, PE, CFM- Chief Environmental Engineer, SEWRPC

## • • • • Meeting Agenda

- Discuss Purpose of Plan Update
- Review the Work Completed to Date
- Questions & Comments











## •••• 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
- Actions To Reduce The Damages That Result When Disasters Occur
- Mitigation is NOT emergency response, crisis management, disaster preparation and recovery













# 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?

- Disasters Cost Society too Much
- > State and Federal Aid Insufficient
- ➤ Help Prevent Future Damage



- > Reduce Response and Recovery Resource Requirements
- > Fosters Partnerships Among All Levels of Government
- Develop and Strengthen Non-Governmental and Private Partnerships







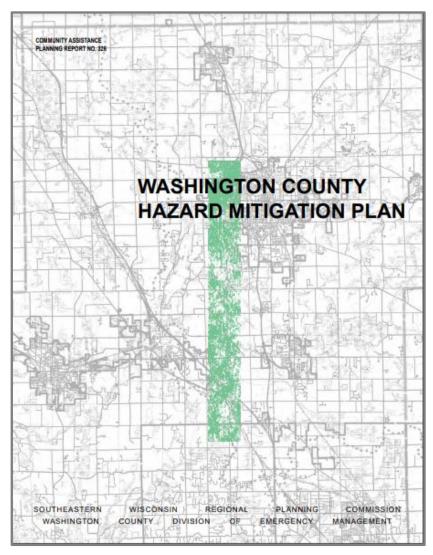






## •••• Hazard Mitigation Planning

- FEMA Requires State, Tribal, and Local Governments <u>Develop</u> and <u>Adopt</u> a HMP to Receive Non-Emergency <u>Disaster Assistance</u>
  - HMGP, FMA, and BRIC Programs
- Plans Must be Updated and Revised Every Five Years













### Washington County Hazard Mitigation Plan

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- > 2018- First Disaster Hazard Mitigation Plan
- > 2024 (Current Plan) First Hazard Disaster Mitigation Plan Update
  - Includes All of the Municipalities in the County
    - Multi-Jurisdictional
    - BRIC Program
  - Provides Strategies and Recommendations for Mitigating the Impacts of Natural Weather Hazards
  - Plan Development and Updating Overseen by a Local Planning Team (LPT) and Staff from County EM and SEWRPC











### Plan Components to Review and Revise

- > Implementation and Outreach Activities (Ch. 1)
- County Natural and Built Features (Ch. 2)
- Reevaluate Identification of Hazards (Ch.3)
- Update and Reevaluate Risk Analysis (Ch.3)
- Revise Mitigation Goals (Ch.4)
- Mitigation Strategies (Ch.5)
- Update Plan Adoption, Implementation, and Maintenance Strategies (Ch.6)











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## Natural Hazards Profiled in the Plan























# ••••• Risk Analysis—Hazard Profiles



#### > Most Profiles Follow A Similar Format

- Definition and Description of the Hazard
- Description of Notable Events that Affected the County
- Assessment of Vulnerabilities to the Hazard and Community Impacts from the Hazard
  - Vulnerability- the likelihood/probability that a hazard event will occur
  - Impact- The consequences that the hazard would have
- Description of Potential Future Changes in Hazard Impacts
  - Potential Impacts related to Climate Change
- Discussion of Any Differences of Potential Risks to Hazards for Communities
  - **Risk-** Potential for Loss (property or life), due to a hazard event











## •••• Flooding

#### **►** Types of Flooding Concerns

- Riverine
- Stormwater Drainage
- Dam Failure
  - DNR Dam Inventory (Map 3.1, Table 3.7)
    - 57 dams in County
    - 2 with "High" hazard potential, 2 with "Significant" hazard potential
- Agricultural
  - 6,965 acres of ag land in 1-percent floodplain in 2015
  - Over \$14.6 million in damages (2021 dollars) from 2001-2021

#### ➤ Recent Events (Table 3.8)

- 11 flood events 2001– 2021
- Over \$27 million in damages (2021 dollars)











## •••• Flooding (continued)

#### **►** Vulnerability and Community Impact Assessment

- Parcel-Based Loss Analysis (Table 3.9)
  - 1,165 structures in 1-percent floodplain
  - \$201 million estimated damages for a 1-percent probability flood
- Communities with Special Flood Considerations (Table 3.10)
  - Structures in 1-percent floodplain
  - Repetitive loss properties
  - Substantial agricultural flood damages
  - Localized stormwater drainage problems











### Severe Weather (Thunderstorm-Related)

#### > Thunderstorm-Related Problems

- Thunderstorm Winds
- Non-Thunderstorm High Winds
- Hail
- Lightning
- **Recent Events** (2011-2021)
  - Table 3.11
  - 127 severe weather events
  - Over \$8 million in damages (2021)
  - No deaths or injuries



#### Vulnerability and Community Impact Assessment

Uniform risk











## Ch. 4 – Hazard Mitigation Goals

- > Preserve life and minimize the potential for injuries.
- ➤ Preserve and enhance the quality of life throughout Washington County by identifying potential property and crop damage risks and recommending appropriate mitigation strategies to minimize potential damages.
- ➤ Promote Countywide coordination, planning, and training that avoids transferring the risk of hazards from one community to an adjacent community, where appropriate.
- ➤ Maintain a spatial distribution of the various land uses that preserves and protects the natural resources of the County, including its soils, inland lakes and streams, groundwater, wetlands, woodlands, wildlife, floodplains, natural areas, and critical species habitats.
- ➤ Increase public awareness of hazards threatening life and property.
- Identify potential funding sources that can assist in implementing mitigation projects and programs.

### Review of Ch. 5

- ➤ Ch. 5 Hazard Mitigation Strategies
  - Identified mitigation strategies
    - Nonstructural
    - Structural
    - Public information and education
  - Reviewed current programs
    - Federal
    - State
    - Local
  - Identified multi-jurisdictional considerations
  - Evaluated alternatives and identified mitigation actions
  - Hazard Risk Analysis and Prioritization: 2022











# Ch. 5 – Mitigation Strategies & Cost-Benefit Analyses

- ➤ Table 5.1 Multi-Hazards
- ➤ Table 5.5 Flood and Associated Stormwater Drainage Problems
- ➤ Table 5.6 Thunderstorm, Non-Thunderstorm High-Winds, Hail, and Lightning
- ➤ Table 5.7 Tornado
- ➤ Table 5.8 Extreme Temperatures
- ➤ Table 5.9 Winter Storms
- ➤ Table 5.10 Drought











## Ch. 6 – Plan Implementation

- >Steps to review, refine, and adopt plan
- > Funding sources for projects
- >Annual review and re-evaluation strategy











## Appendices

- A LPT Members & Meeting Materials (In Progress)
- B Resolution to Adopt (TBD)
- C Social Vulnerability Index
- D Critical Community and Public Safety Facilities & Services
- E Historical Sites & Districts
- F Hazard Mitigation Materials & Related Resources (In Progress)
- G Potential Funding Programs
- H Community Capabilities Assessment (In Progress)











## Approval and Adoption

- ➤To finalize the plan
  - Incorporate comments to this draft
  - Review by Wisconsin Division of Emergency Management: incorporate comments
  - Review and approval by FEMA: incorporate comments
  - The plan will need to be adopted by:
    - Washington County Board
    - Governing bodies of the Cities and Villages in the County within 1 year











## Project Website

#### www.sewrpc.org/HMP

- Draft chapters
- Summary notes from meetings
- Presentations
- Comment Screen
- Comments can also be sent to <u>mshedivy@sewrpc.org</u> and/or <u>mpage@sewrpc.org</u>

Send comments by May 16th













# Thank You

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