

# Overview of Hazard Mitigation Planning Process

(Agenda Item #2)

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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 definition
- Constructive actions to reduce damages prior to the next disaster



# What is Mitigation?

- Mitigation is not
  - Emergency response
  - Crisis management
  - Disaster preparation and recovery
- Mitigation focuses on reducing the impacts of disasters when they occur





# Why Do We Mitigate?

- Disasters cost society too much
- State and federal aid insufficient
- Can prevent future damages
- Reduce impacts of disaster and speed response and recovery process
- Mitigation happens at the local level



# 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?

## In Wisconsin

- \$20 billion in disaster-related damages since 1980
- 12 Federal Disaster Declarations since 2010



# Value of Mitigation

- In 2019, the National Institute of Building Sciences found that for every \$1 spent on mitigation, \$6 are saved in avoided future damages
- Increases to \$7 saved for FEMA-funded flood mitigation projects





# Examples of Mitigation Measures





# Acquisition/Demolition



Communities acquire land, demolish structures, and keep the land in open space.

Images from Darlington, WI

# Community Safe Room



➤ Community safe rooms built to FEMA-361 standards can withstand winds up to 250 MPH.



# Stormwater Management



Stream restoration allows watersheds to better manage flooding.

Image from Thiensville, WI



# Other Projects



NOAA Weather Radios



Mobile Home Tie-Downs

Raise appliances and utilities

Install back-flow valves

Retrofit for wind resistance

Education and public awareness

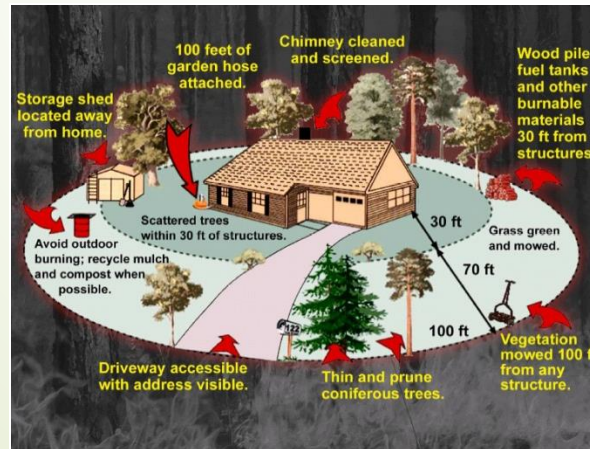
Insurance (flood and sewer backup)

Land use planning



Wind Retrofit Guide for Residential Buildings

FEMA P-804 / December 2010



Proper Landscaping



# Benefits of Mitigation



Enhance  
recreation  
and tourism

Parks  
Trails



Darlington, WI



Increase  
community pride  
and quality of life



Chaseburg, WI



Save tax dollars

A night scene of a flooded street in front of a building. The street is covered in water, reflecting the lights from the building and the cars. A dark SUV is parked in the middle of the street, and a red pickup truck is on the right. A person is standing near an orange pickup truck on the left. The building in the background has a white facade with dark trim and a balcony. The sky is dark, and the overall atmosphere is somber and urgent.

# Updating Hazard Mitigation Plans



# Disaster Mitigation Act of 2000

- Established a national disaster mitigation program
- **Communities must have an approved hazard mitigation plan to be eligible to receive Federal funds through:**
  - Hazard Mitigation Grant Program (HMGP)
  - Pre-disaster Mitigation Program (PDM)
  - Flood Mitigation Assistance Program (FMA)
- Plans must be reviewed and updated every five years

- Vision of the Disaster Mitigation Act of 2000
- Communities will have hazard mitigation plans that identify and prioritize cost-effective mitigation measures that can be implemented prior to a disaster or quickly after a disaster
- Having a plan would speed up the recovery process

# Disaster Mitigation Act of 2000



# Plan Components

Documentation  
of the planning  
process

Description of  
study area

Hazard  
mitigation goals  
and objectives

Analysis of  
hazard  
conditions

Hazard  
mitigation  
strategies

Plan adoption,  
implementation,  
and  
maintenance

# Background on 4<sup>th</sup> Edition

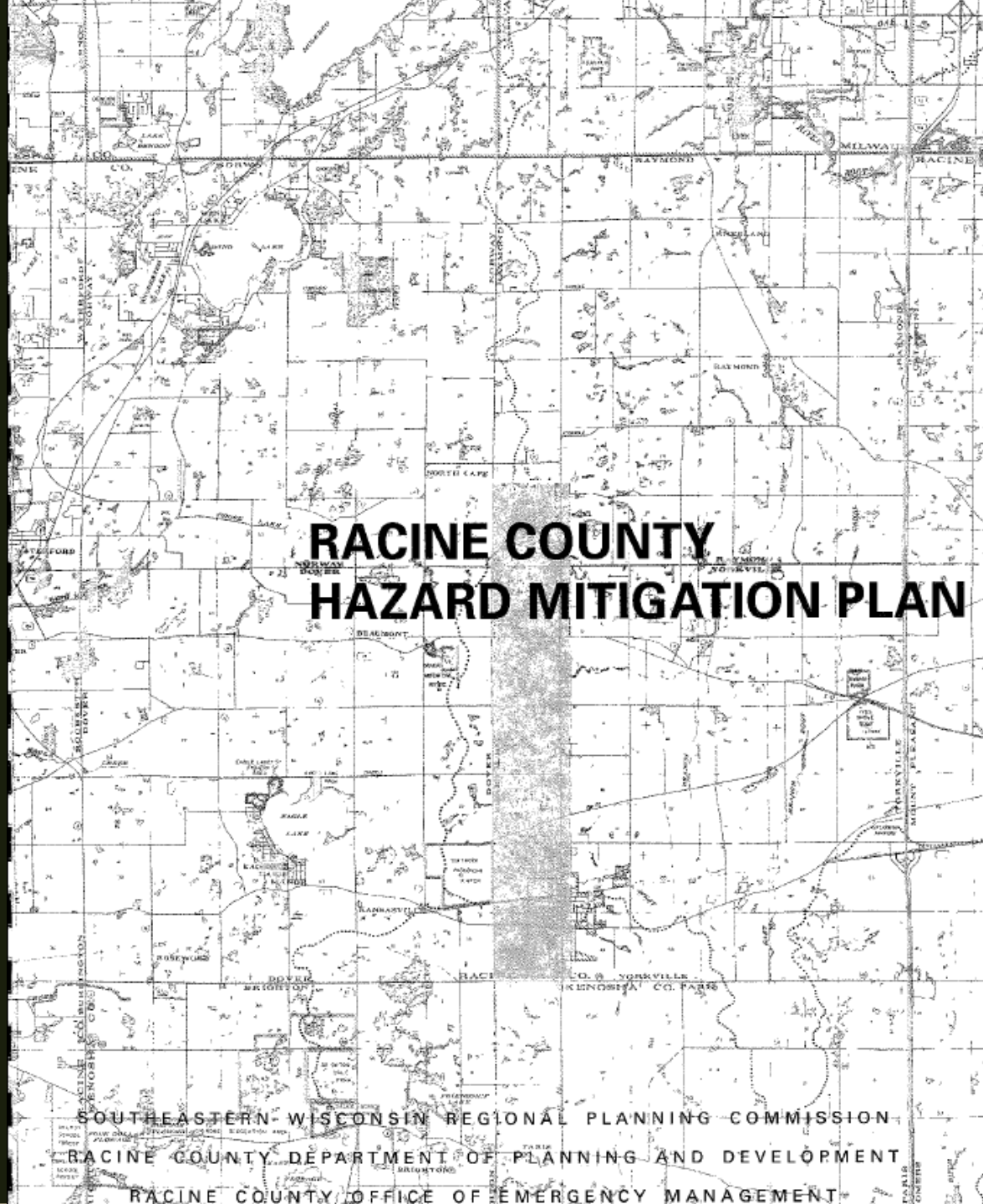
(Agenda Item #3)

Racine County  
Hazard Mitigation  
Plan Update



# Initial Plan (1<sup>st</sup> Edition)

- Study conducted 2001-2004
- Report published 2004





# 2<sup>nd</sup> Edition Update

- Study conducted 2009/2010
- Coordinated with development of the County comprehensive plan
- Reviewed and revised
  - Goals
  - Vulnerability and risk analysis
  - Mitigation strategies
- Report published 2010





# 3<sup>rd</sup> Edition Update (Current Plan)

- Study conducted 2015-2017
- Coordinated with development of the County comprehensive plan
- Reviewed and revised
  - Goals
  - Vulnerability and risk analysis
  - Mitigation strategies
- Report published 2017

# Plan Components to Review and Revise for 4<sup>th</sup> Edition

- Review implementation activities
- Update inventories – only natural hazards
- Review and reevaluate identification of hazards
- Update and reevaluate risk analysis
- Review and revise mitigation goals
- Review and revise mitigation strategies
- Update plan implementation and maintenance



# Tentative Schedule

Task	Estimated Completion Timeframe
Hire Contractor to Develop Updated Plan	February 2022
Update Planning Team Membership	March 2022
Kickoff Meeting	April 2022
Initial Public Participation and Outreach	April-October 2022
Survey Management Agencies Regarding Status of Initial Plan	April-November 2022
Develop Updated Community Profile	April-December 2022
Review and Update Identification and Description of Hazards	May 2022-February 2023
Update Risk and Vulnerability Assessments	June 2022-April 2023
Public Meeting to Review Hazard Identification and Risk Assessment	April 2023
Revise Draft Plan Based on Public Comment	May 2023
Review and Update Established Hazard Mitigation Goals and Objectives	November 2022-August 2023
Develop Updated Mitigation Actions	December 2022-October 2023
Develop Updated Plan Maintenance Process	July 2023-December 2023
Public Meeting to Review Draft Plan	December 2023
Revise Draft Plan Based on Public Comment	January 2024
Submit Draft Plan Update to WEM for Review	February 2024
Revise Plan Based on State Review	March 2024
Submit to FEMA for Approval	April 2024
Formal Adoption	May 2024

- ▶ Local Planning Team Meetings
  - ▶ April 2022, October 2022, February 2023
- ▶ Public Meetings
  - ▶ April 2023, December 2023
- ▶ Submit for Review – Wisconsin Emergency Management
  - ▶ February 2024
- ▶ County Adoption
  - ▶ May 2024

Key Dates  
*(all tentative)*



# Local Planning Team Role

Weigh in

Weigh in on hazard identification



Review

Review the plan chapters



Help

Help us get needed information

- Recent and historical problems with hazards Location, occurrence, damages
- Recent projects, planned and contemplated projects, recent hazard-related outreach
- Inventory data

A photograph of a flooded residential street. In the background, a two-story light blue house with green shutters and a porch is partially obscured by trees. The street is completely submerged in dark water, which reflects the surrounding environment. On the right side of the image, a street signpost is visible. It has two green street name signs: '60TH' and '248TH'. Below these is a white octagonal sign with a black border and a red circle with a diagonal line through it, containing a black silhouette of a person. Below this symbol, the word 'WARNING' is printed in bold. Further down, the text 'NEIGHBORHOOD WATCH' is visible, followed by smaller text that reads: 'NEIGHBORHOOD WATCH IS A COMMUNITY PROGRAM THAT ENCOURAGES NEIGHBORS TO WATCH FOR AND REPORT SUSPICIOUS ACTS TO THE POLICE. IT IS A VOLUNTARY PROGRAM. FOR MORE INFORMATION, CONTACT THE POLICE DEPARTMENT AT 911 OR 311.'

# Review of Hazard Mitigation Goals

(Agenda Item #4)

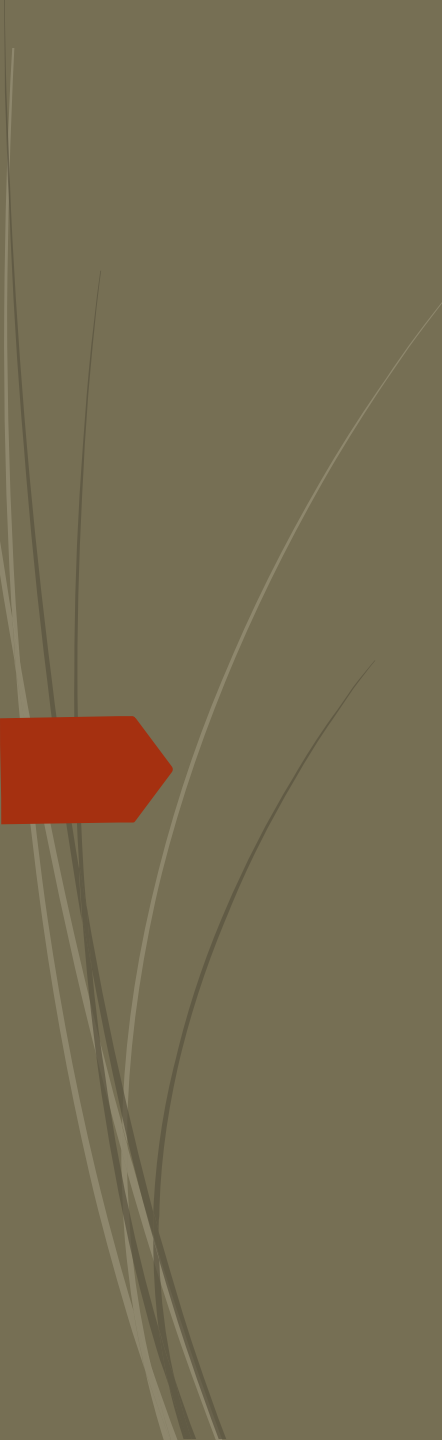


# Hazard Mitigation Goals

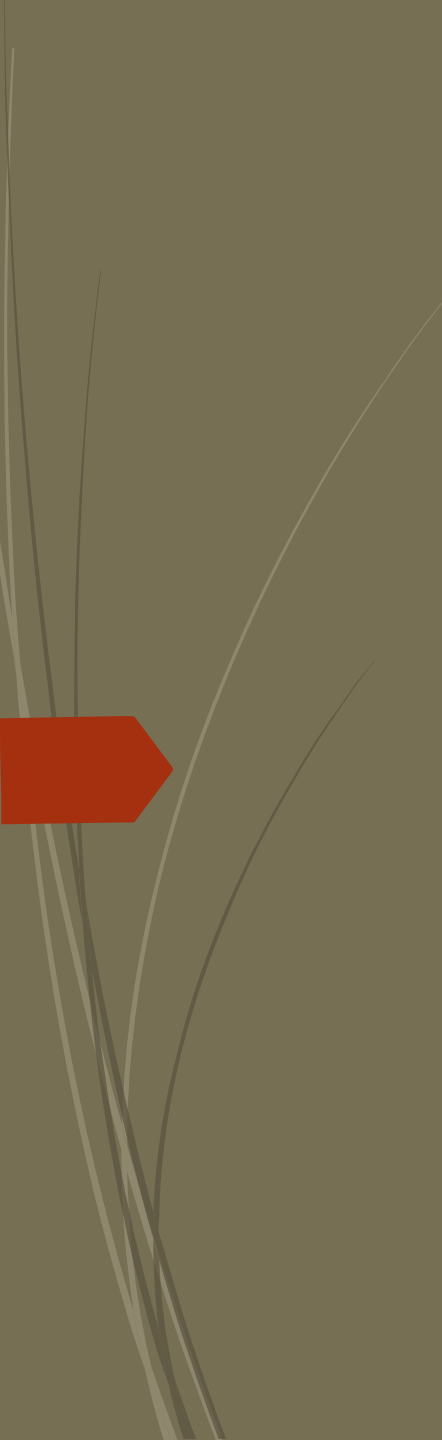
1. A spatial distribution of the various land uses which minimizes hazards and dangers to health, welfare and safety as well as further enhancing the economic base of the County, and will result in a compatible arrangement of land uses properly related to the existing and proposed supporting transportation, utility, public safety systems, 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 County, including its soils, inland lakes and streams, groundwater, wetlands, woodlands, wildlife, and natural areas and critical species habitats.



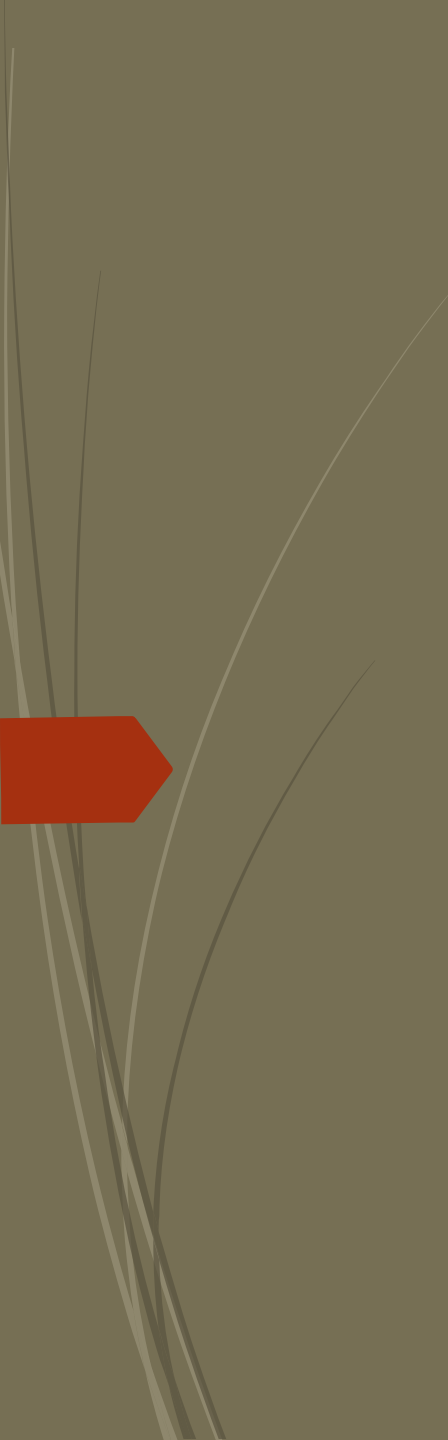
# Hazard Mitigation Goals

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3. An integrated transportation system which, through its location, capacity, and design, will safely, economically, and effectively serve the existing and proposed land use pattern and promote the implementation of the land use plan, meeting the current and anticipated travel demand and minimizing the potential for accidents and the associated toll on life and property damage.
  4. The provision of facilities necessary to maintain a high quality of fire and police protection and emergency medical services throughout the County.

# Hazard Mitigation Goals

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5. The development of a stormwater and floodland management system which reduces 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 resulting from flooding and inadequate stormwater drainage.
  6. The identification of high erosion risk Lake Michigan shoreline areas and the development of a coastal erosion control program which reduces the exposure of people and real and personal property to shoreline erosion and bluff recession.

# Hazard Mitigation Goals

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7. The identification and development of programs which complement County and local emergency operations plans, 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.



The background is dark with a pattern of question marks in various shades of gray and brown. A large, light gray question mark is centered in the upper half. On the left side, there is a solid orange arrow pointing to the right.

Questions?

- Evaluate the potential that specific hazards may occur, the likely severity of impacts resulting from these hazards, and the extent to which these impacts may be mitigated by current levels of preparedness.

# Hazard and Vulnerability Assessment Exercise

(Agenda Item #5)

## Hazard and Vulnerability Assessment Exercise

LINK TO SURVEY:

<https://arcg.is/1Ou8yG1>

