Hazard Mitigation Planning: A Seat at the Table



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## Poll Questions

- How many of you are floodplain managers? How many of you are local officials?
- How many of you have been involved in mitigation planning?
- How many CRS participating communities are in attendance?
- Raise your hand if your local mitigation plan includes considerations of changing weather and climate?

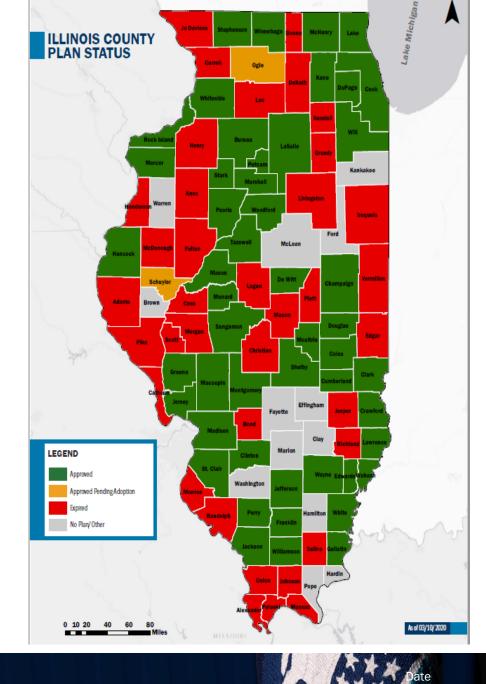


# What is Hazard Mitigation Planning

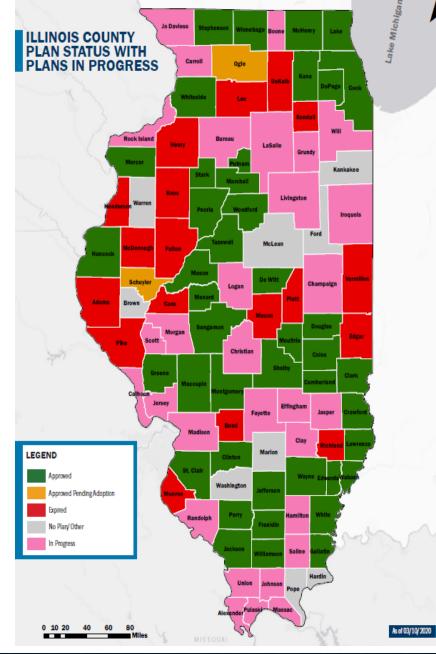
Mitigation planning provides a framework for state, local, tribal, and territorial governments to reduce the impacts of natural disasters. By encouraging whole community involvement, assessing risk, and using range of resources, communities can employ mitigation planning strategies to implement long-term risk reduction actions that protect people, economies, and natural environments.

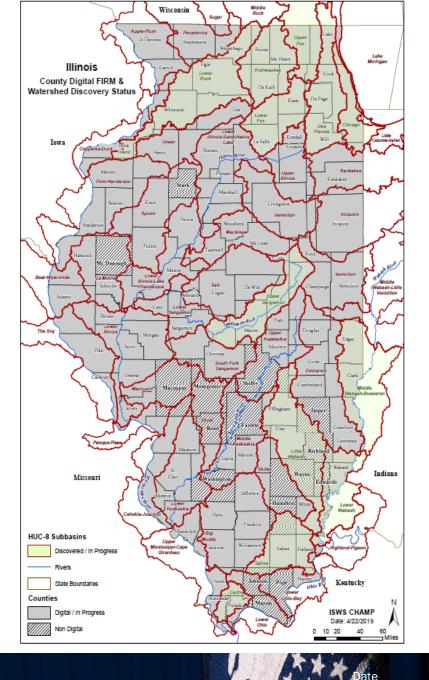


# Illinois County Plan Status Map











# Federal Planning Regulations

- Robert T. Stafford Act, as amended by Disaster Mitigation Act of 2000
  - Emphasizes the need for State, Tribal and local entities to coordinate planning efforts
  - Establishes eligibility for FEMA HMA
- Title 44 CFR 201
  - Publishes requirements for approval of a local, state, and tribal hazard mitigation plans.
    - FEMA Policy State Mitigation Plan Review Guide, Local Mitigation Plan Review Guide, Tribal Mitigation Plan Review Guide.



# Plan Requirement

Program	Enabling Legislation	Funding Authorization	Grantee Status	Sub-arantee Status
Public Assistance (PA) (Categories A, B: e.g., debris removal, emergency protective measures)	Stafford Act	Presidential Disaster Declaration	No Plan Required	No Plan Required
Public Assistance (Categories C-G: e.g., repairs to damaged infrastructure, publicly owned buildings)	Stafford Act	Presidential Disaster Declaration	× ,	No Plan Required
Individual Assistance (IA)	Stafford Act	Presidential Disaster Declaration	No Plan Required	No Plan Required
Fire Management Assistance Grants	Stafford Act	Fire Management Assistance Declaration	1	No Plan Required
Hazard Mitigation Grant Program (HMGP) Planning Grant	Stafford Act	Presidential Disaster Declaration	1 1 1	No Plan Required
HMGP Project Grant	Stafford Act	Presidential Disaster Declaration	✓ .	√
Pre-Disaster Mitigation (PDM) Planning Grant	Stafford Act	Annual Appropriation	No Plan Required	No Plan Required
PDM Project Grant	Stafford Act	Annual Appropriation	√	√
Flood Mitigation Assistance (FMA)	National Flood Insurance Act	Annual Appropriation	4	4

### https://www.fema.gov/hazard-mitigation-plan-requirement

## Hazard Mitigation Grant Program

 A Plan must be in effect at time of award for project applications

## Pre-Disaster Mitigation Grant

 A Plan must be in effect at time of application deadline and at time of award for project sub-applications

## Flood Mitigation Assistance

 A Plan must be in effect at time of application deadline and at time of award for project sub-applications



# Your Expertise

- Does the Plan address National Flood Insurance Program (NFIP) insured structures, within each jurisdiction, that have been repetitively damaged by floods including structure type?
  - ➢ The local floodplain manager can verify if FEMA NFIP Repetitive Loss data is accurate and consistent with their records.
  - Consider identifying how many policies are in force compared to how many structures are in the floodplain.
- The Plan must describe changes in development that have occurred in hazard prone areas and increased or decreased the vulnerability of each jurisdiction.
  - > You or your office issue permits for development in the community's floodplain and review proposed development.

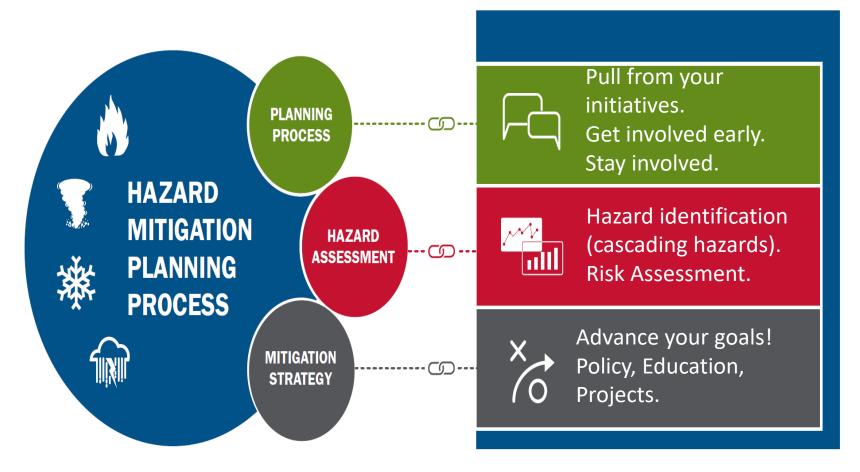


# Your Expertise

- The Plan must describe each jurisdiction's participation in the NFIP and describe their floodplain management program for continued compliance.
  - > The best person to describe the local floodplain management program is the local floodplain manager.
  - ➤ The floodplain manager can provide the planning team with greater understanding of the NFIP requirements and should know what jurisdiction specific activities are needed to continue to comply.



# How to contribute to this planning process?





# Integration

94% of NFIP participating communities have a plan (2018)

99% of CRS communities also have a plan (2018)

Table 3. Comparison of the Planning Processes				
Mitigation Planning Elements*	CRS Planning Steps**	Max Points	Average	
A. Planning Process	1. Organize to prepare the plan	15	10	
	2. Involve the public	120	34	
	3. Coordinate	35	10	
	10. Implement, evaluate, revise	26	5	
B. Hazard Identification and Risk Assessment	4. Assess the hazard	35	25	
	5. Assess the problem	52	29	
C. Mitigation Strategy	6. Set goals	2	2	
	7. Review possible activities	35	20	
	8. Draft an action plan	60	42	
D. Plan Update	10. Implement, evaluate, revise 5-year update	See Element A		
E. Plan Adoption	9. Adopt the plan	2	2	
		382	171	
	Local Mitigation Plan Review Guide and ctivity 510, Section 512.a, Floodplain Ma		(FMP) in the CRS	

**FEMA** 

Coordinator's Manual

# Urban Flooding in Mitigation Plans

- How should mitigation plans capture urban flood risk?
  - ➢ soils data, topography, land cover and density of urban development
  - topographic wetness index (ISWS)
  - > documented flooding problems or flooding
- Why floodplain managers should be part of the conversation.

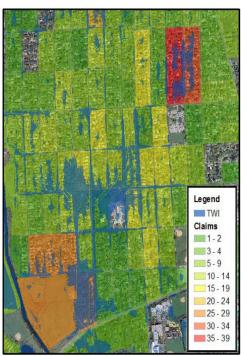
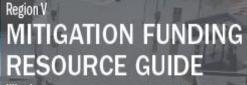


Figure 3.7: Example of a topographic wetness index compiled for DuPage County. The index was overlaid with the claims per census block.

 You are the subject matter expert of flooding whether it is stormwater flooding or riverine flooding
Your records are vital to inform the risk assessment
Opportunity to align goals and priorities



## Resource Guides



Illinois



March 2019



#### Coastal and Estuarine Land Conservation Program (CELCP) Grants

Agency or Organization	Nichigan Department of Environmental Quality	
Resource Type	Grant	
Primary Recovery Function	Natural and Cultural Resources	
Eligible Applicants	State of Michigan Departments, Local units of government, including cities, counties, villages and townships, Conservation Districts, State colleges and universities, Tribal governments.	
Type of Assistance Provided	Financial Assistance	
Restrictions	Project criteria and eligibility can be found here: https://www.michigan.gov/deq/0,4561 135-3307 3515-38110300.html	
Funding Available	Maximum grant amounts are \$1,500,000. There is no minimum grant requirement.	
Cost Sharing	1:1 local match required.	
Website	https://www.michigan.gov/deg/0.4561.7-135-3307_3515-381103,00.html	
Contact Name	Ronda Wuycheck	
Contact Address	525 West Allegan SL, PO Box 48909 Lansing, MI 48909	
Contact Phone	517-284-5040	
Contact Email	WUYCHECKR@michigan.gov	

#### About the Resource

The goals of the program are to protect high quality, sensitive cossial areas; protect rare and hreatened species and natural communities; maintain biodressly and protect the cossial natural communities necessary to support diversity, maintain Michigan's outural heritage, fulfil recreational needs, utilize previously contacted conservation and management plans to identify projects that are eligible for funding ensure lands acquired unite this program are effectively managed.

#### Case Study or Best Practice

#### Bete Grise South Preserve

A stellar and vital welland along Lake Superior, this easement protects 1,040 across that have been recognized by the Michigan Natural Fedures investory as the single most important located plain mursh remaining in the Upper Great Lakes region. The Presence is biologically in our him or the hold possible of plant, single single mortane and biolegies, tableginger concisis, carrivorous plants including sundews, bladderwords, and planter plants, and a high diversity of grasses and sedges. The initiat estuarine mush provides important habitats for this and amphibians. The belo cires South Preserve has over 7,500 feet of Lake Superior shoreline, much of which is beaufitia and ybeach unrivided in the Kaveenaux.

Since this important first slep was taken, additional land has been protected by partner organizations within this critical target area. An 404 area parcel: Bete Gries North, was purchased by MCCD shortly attir. Another 1, 475 parces of high-quality wetlands, sand dure uplands, and 3:500 feed of shoreline fortage on Lac La Belle was purchased in 2010 with humding from the Great Lakes Restoration hilding and Cascilla and Saturatic Lacid Conservation Dragom (CECC) P and other funding partners. 161 acres of land was purchased in 2013 with CELCP support, adding needly 17 miles of Lake Superior shoreline sround Point Isabelle. Together, these equilations provide significant advances toward the locally driven initiative to protect the larget 8,000<sup>+</sup> are coastal wetland complex.

## FEMA RV expects to release an updated guide in Spring 2020

#### **ILLINOIS** Prairie Research Institute

This Illinois Natural Hazard Risk Assessment Resource Guide was compiled from

by scientists at the Prairie

PRI's mission is to steward

Illinois' natural and cultural

Research Institute (PRI).

resources by providing objective and timely

makers and stakeholders.

provide natural hazard and

risk resources specifically

research, data, and expertise to decision

The purpose of this

Resource Guide is to

relevant to Illinois

research and recommended resources

#### Illinois Natural Hazards

#### Introduction

This document can be used as a starting point for collecting hazard-specific information in preparation of local hazard mitigation plans, emergency operation plans, and other response/recovery plans and exercises. The resources are organized alphabetically according to hazard type (e.g., drought), and include a hyperlink and a description of the available information. The list also includes more general hazard resources and climate change resources.

#### General Resources

National Centers for Environmental Information (NCEI) Storm Events Database https://www.ncdc.noaa.gov/stormevents/

The NCEI Storm Events Database contains various types of storm reports. Data are available as a searchable web interface or download in comma-separated files (CSV) from October 2006 to present, as entered by NOAA's National Weather Service (NWS). The entire Storm Events Database (1950-present) is available as a Microsoft Access database.

National Weather Service (NWS) Storm Prediction Center (SPC) downloadable GIS data for Tornado, Hail, Severe Wind

#### https://www.spc.noaa.gov/gis/svrgis/

The SPC provides downloadable GIS data for tornadoes (since 1950), plus severe hail and wind (since 1955) reports. This data is available as either paths/swaths, or initial points. These files are updated each year. Caveat: tornado paths are digitized as straight lines, connecting touchdown and liftoff points only.

#### The Midwest Climate Watch Record Maps https://mrcc.illinois.edu/cliwatch/watch.htm

This resource provides climate summary maps of the past week and month for the Midwest, of variables such as maximum and minimum temperatures, precipitation, maximum wind, heat index, and freeze conditions.

#### Cli-MATE

https://mrcc.illinois.edu/CLIMATE/index.jsp

A tool to retrieve raw weather observations and a variety of value added information, including listing of observations above/below a given threshold, growing/heating/cooling degree days, and rankings of extreme events. Users must register, but most use is free of charge.

Prairie Research Institute Illinois Natural Hazard Risk Assessment Resource Guide

## Go.illinois.edu/riskresource









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