



# KANE COUNTY

Brolley, Berman, Burns, Kaptain, Pickett, Michels

Hernandez, Silva, Martin, Allan, Sanchez, Lenert

Ex-Officio: Frasz, Lauzen & Nelson

## STORMWATER MANAGEMENT PLANNING COMMITTEE

JULY 14, 2020

---

County Board Room

Agenda

4:00 PM

Kane County Government Center, 719 S. Batavia Ave., Bldg. A, Geneva, IL 60134

---

1. **Call to Order**
2. **Approval of Minutes:** June 11, 2019
3. **Public Comments**
5. **Presentation:** Kane County Hazard Mitigation Plan
6. **Discussion:** Stormwater Ordinance – Typographical Amendments
7. **New Business**
8. **Adjournment**

# Hazard Mitigation Planning Process

Presented by Kane County Natural Hazard  
Mitigation Committee

July 14, 2020

# Introduction

- Kane County Natural Hazard Mitigation Plan
  - First adopted in 2003 by the County Board Resolution 03-308
  - Updated every five years
  - Five years is here again
- Outcomes for today:
  - Define Hazard Mitigation
  - Layout Planning Process
  - Discuss Outreach

# What is Hazard Mitigation?

- Any sustained action taken to reduce or eliminate long term-term risk to human life and property from a hazard event. –FEMA
- What are some Examples?

# Acquisition



**Acquisition and Expansion Strategy**  
The St. Charles Park District Master Plan lays out a vision for the future of the Park District and also describes the need and desire for future acquisition. It is the policy of the St. Charles Park District to continue to aggressively acquire land for future park space and preservation. The Park District will

The Park District has identified the following areas for acquisition:

- » Sites in the City: 1) Expansion of Delnor Woods Park, located on Fifth Avenue northeast of Downtown. The expansion was acquired by the Park District in 2012;


**Recommendations**  
With an understanding of the role played by parks and open space throughout St. Charles, the City should continue to work closely with the Park District in implementing its Comprehensive Master Plan. This may involve actions such as coordinating the selection of new park locations and facilities.



# Elevation



# Safe Room




**Taking Shelter  
from the Storm**

Building a Safe Room for Your Home or Small Business

Includes Construction Plans

FEMA P-320, Fourth Edition / December 2014



3. Planning Your Safe Room

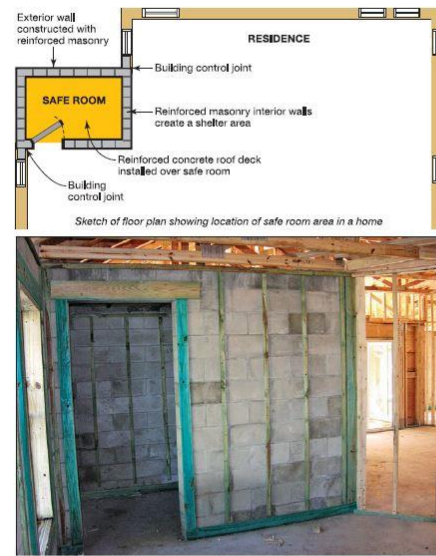


Figure 3-2: In-home safe room under construction; the CMU walls of the safe room are fully grouted and vertically reinforced with steel reinforcing bars from the foundation to the concrete roof deck (New Smyrna Beach, FL, 2007)

Sketch of floor plan showing location of safe room area in a home

### 3.4 Safe Room Size

The amount of floor area per person that your safe room must provide depends partly on the type of windstorm from which the safe room is intended to protect you.

Tornadoes are not typically long-lasting storms, so if you are relying on your safe room only for tornado protection, you will not need to stay in the safe room for as long as you would for a hurricane. As a result,

**USABLE SPACE**

Consult FEMA P-361 for guidelines on how to identify the net usable floor space and other requirements for a safe room design. Hard fixtures and furnishings reduce the square footage within a safe room that is available for protecting occupants.

TAKING SHELTER FROM THE STORM 19 Building a Safe Room for Your Home or Small Business

# What is Hazard Mitigation Planning

- Engaging in any process to identify risks and vulnerabilities associated with natural disasters and develop long-term strategies for protecting people and property from future hazard events
- Hazard mitigation activities may be implemented prior to, during, or after an event. However, it has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster occurs.

– FEMA



# Federal Planning Regulations

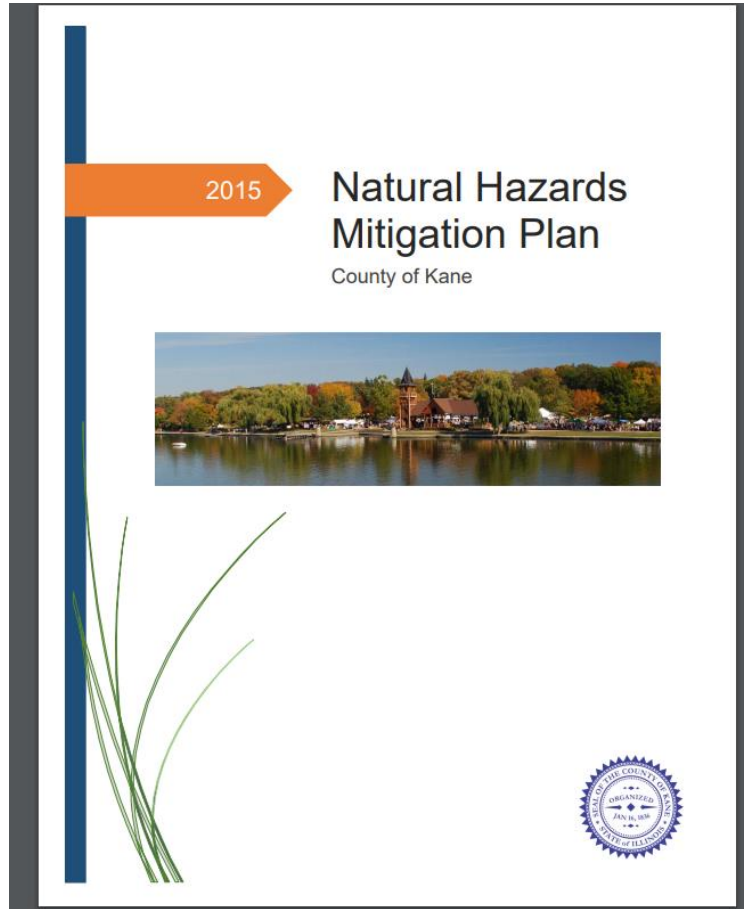
- Federal Planning Regulations
  - Disaster Mitigation Act of 2000
    - Establishes eligibility for FEMA Hazard Mitigation Assistance
    - Local governments must have a Hazard Mitigation Plan submitted and reviewed by the State and FEMA
  - Title 44 Code of Federal Regulations (CF) 201.6
    - Publishes requirements of the Plan

## Local Mitigation Plan Review Guide

October 1, 2011



# Time to update our Plan



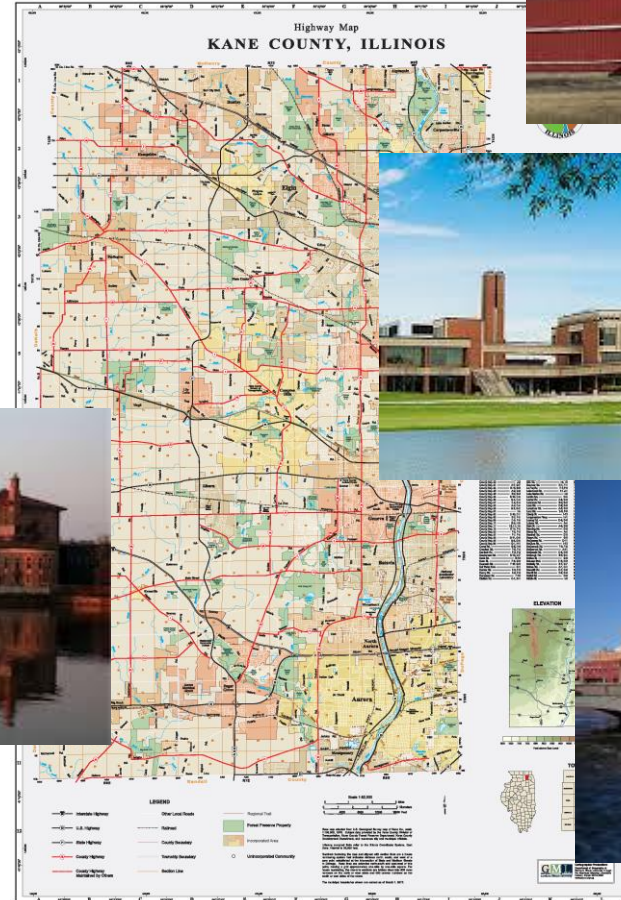
## Kane County Natural Hazards Mitigation Committee

Annual Report  
For  
2019



# Task 1: Determine the Planning Area

- Kane County -Multi Jurisdictional –County, Municipalities, Elgin Community College
  - Participation
  - Assess unique risks
  - Identify unique mitigation activities
  - Adopt plan



# Task 2: Build a Team

- Identify Planning Team Members
- Stakeholders
- Getting Buy In
- Promote Participation



## *Partners Involved in Hazard Mitigation Activities*

- Building Code Enforcement
- Emergency Management
- Fire Department/Districts
- Floodplain Administration
- Geographic Information Systems (GIS)
- Parks and Recreation
- Planning/Community Development
- Public Information Office
- Public Works
- Stormwater Management
- Transportation (Roads/Bridges)
- State Emergency Management Office
- Regional Planning Agency

## *Partners with Authority to Regulate Development*

- City Council/Board of Commissioners
- Planning Commission
- Planning/Community Development
- Regional/Metropolitan Planning

# Task 3: Create an Outreach Strategy

How do we reach out to Stakeholders and the Public?

The planning process shall include an opportunity for the public to comment on the plan during the drafting stage and prior to plan approval. 44 CFR §201.6(b)(1)



Figure 3.1: Outreach strategy framework

# Reaching out to folks in the “new normal”?



- Resiliency Walk
- Elevated Homes tour
- Surveys
- Webpages
- Public Meetings *on-line*
- Open Houses *on Social Media*
- Flood App
- ~~Game of Floods~~

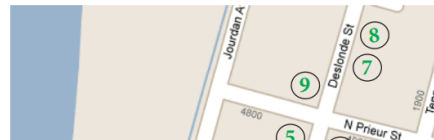


## Self-Guided Tour

Welcome to the Make It Right community in the Lower 9th Ward. Make It Right is an organization dedicated to rebuilding safe, sustainable and affordable homes for families who lost everything in Hurricane Katrina.

Before you begin your tour, please be advised that this is a neighborhood of private homes. Be respectful of the homeowners' privacy by walking on the sidewalk, not up driveways or through yards. Please do not ask to go inside someone's home.

Please also be aware that this is an active construction side. **Do not enter home under construction.** Keep an eye out for cars and construction vehicles as you cross the street.



**Station #9 - 1904 Deslonde Street**  
This home by Waggoner & Ball Architects in New Orleans is based on a traditional back home. The main living and dining area act as a generously proportioned great room with outside exposure on three sides and excellent views of the street and neighborhood.



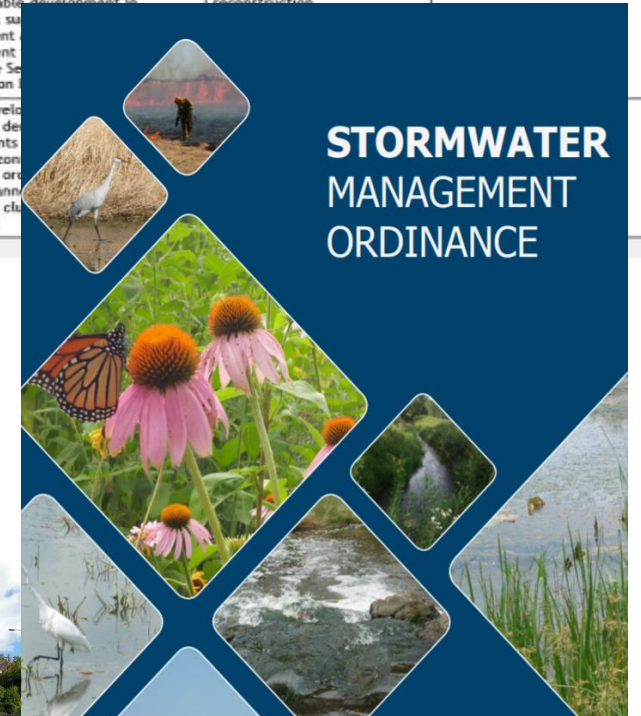
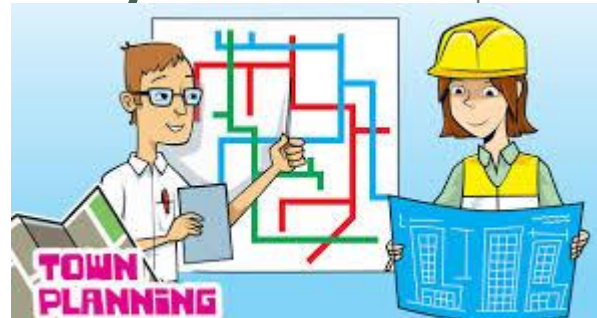
**Station #10 - 1905 Tennessee Street**  
Turn left on North Prieur, walk to Tennessee Street, turn left, home on the right: Station #10. Architects of Tokyo, Japan designed the first Make It Right home with a green roof that absorbs rainwater, providing a natural water storage system.



# Task 4: Review Community Capabilities

- Planning and Regulatory
- Administrative and technical
- Financial
- Education and Outreach

Policies and Programs	Policy/Program Status	Document Reference	Effectiveness/Rationale for Mitigation	Recommendations for Future Action
Comprehensive Land Use Plan (CLUP)	Adopted and in effect	Coastal Area Management Act (CAMA) Plan: Adopts goals intended to guide future land use; encourages avoidance of undesirable development in floodplain; su management development areas. See Section on Bridgeton	High, sets prudent planning objectives for reduction of hazards and post-disaster reconstruction	None, other than update of CAMA plan as necessary
Zoning Ordinance and Watershed Protection Ordinance	Adopted and in effect	Adopts development standards, de requirements enables a zone to oversee or allows "plann (PUD) that cl Article IX).		



# Task 5: Conduct a Risk Assessment

- The risk assessment shall include a description of the type, location and extent of **all natural hazards that can affect the jurisdiction.** 44 CFR §201.6(c)(2)(i)
- The risk assessment shall include information on **previous occurrences of hazard events** and on the **probability of future hazard events.**44 CFR §201.6(c)(2)(i)
- The risk assessment shall include an overall **summary of each hazard and its impact on the community.** 44 CFR §201.6(c)(2)(ii)
- All plans must address **NFIP insured structures that have been repetitively damaged** by floods. 44 CFR §201.6(c)(2)(ii)
- A local jurisdiction **must review and revise its plan to reflect changes in development.** 44 CFR §201.6(d)(3)



# Consider the communities assets

- People

- Concentration of residents
- Access and needs of population
- Vulnerable populations



- Economy

- Major employers
- Commercial centers
- Agriculture
- Economy and dependency on infrastructure



- Structures

- Locations, types, value
- Cultural and Historical
- New Development



- Critical Facilities and Infrastructure

- Location, age, value
- Dependency on



- Natural Environment

- Wetlands and Lakes and Rivers
- Parks and Forests
- Wildlife and Habitat



# What can happen and what has happened in Kane County?

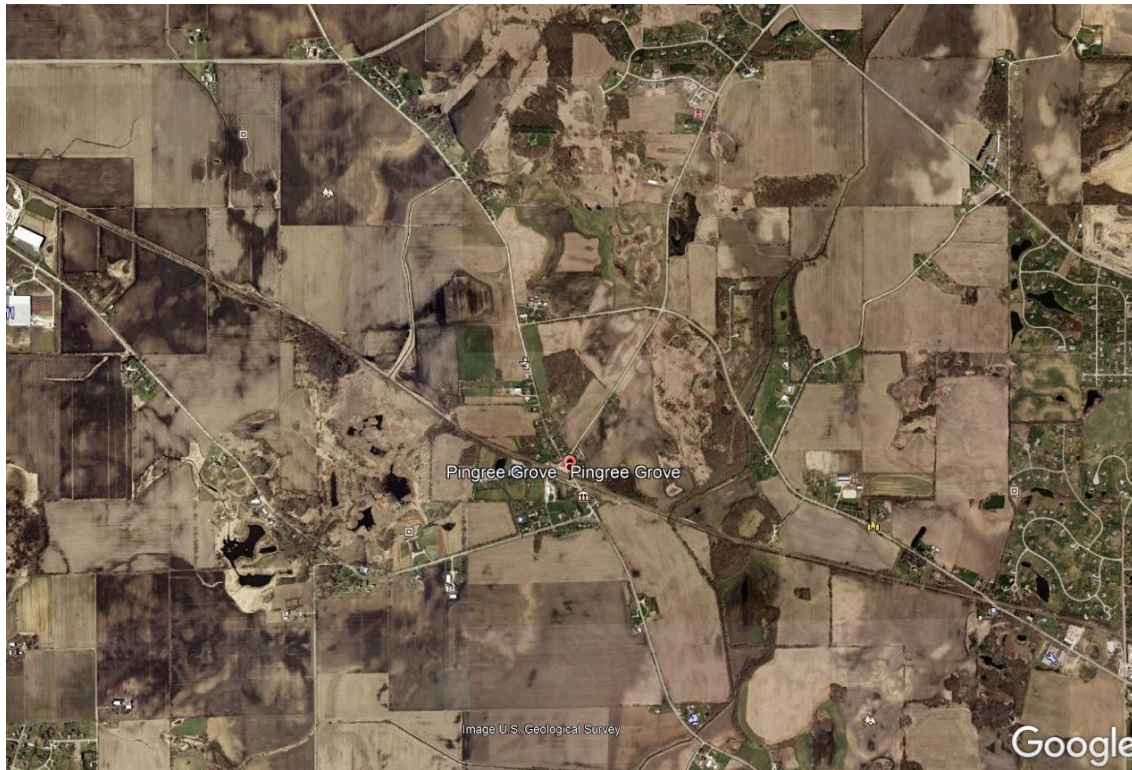


- Illinois Mitigation Plan 2017

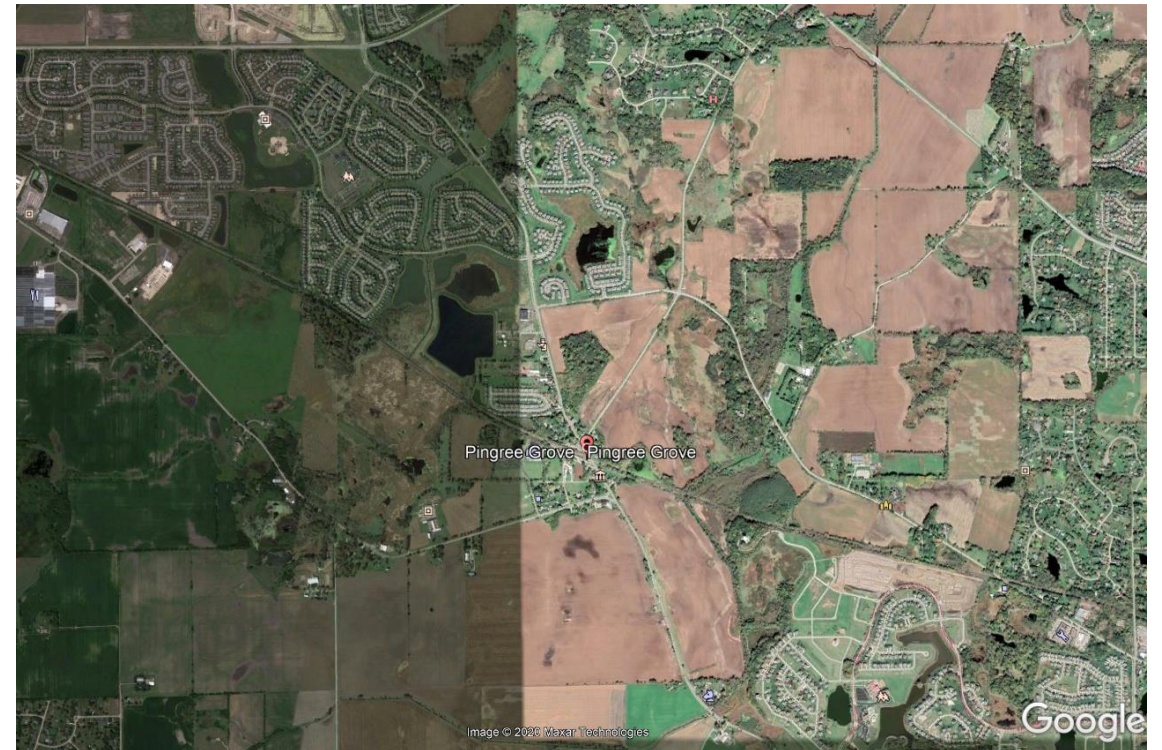
County Name	Population	Severe Storms	Floods	Severe Winter Storms	Drought	Extreme Heat	Earthquake	Tornado
Kane	531,715	Severe	Medium	High	Low	Low	Low	Medium



# Then and now...



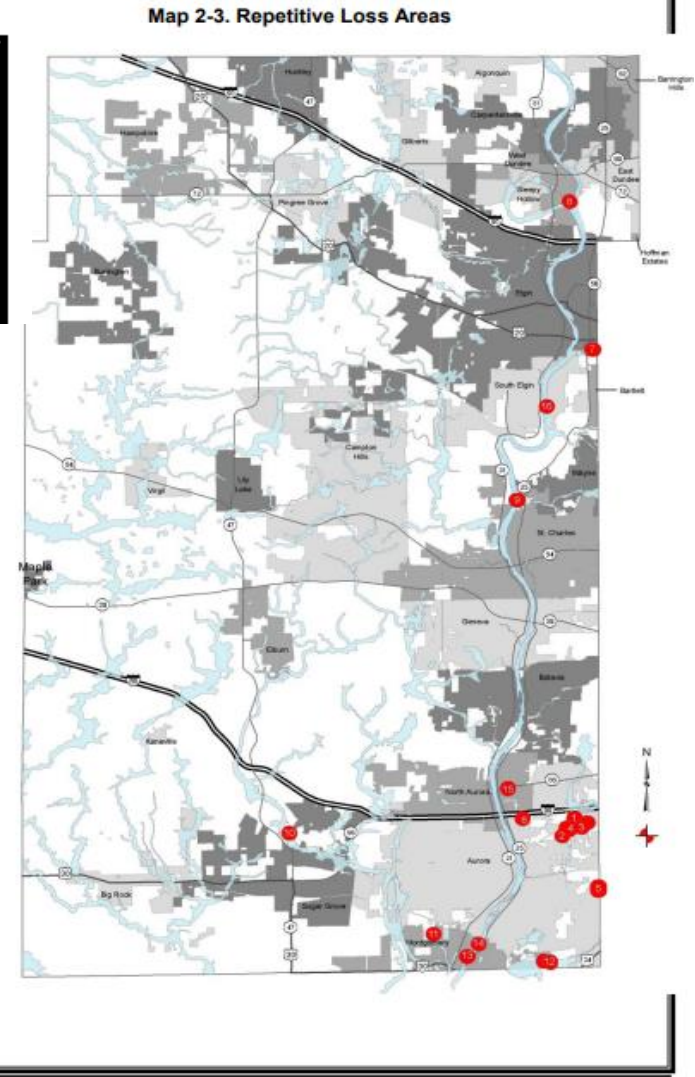
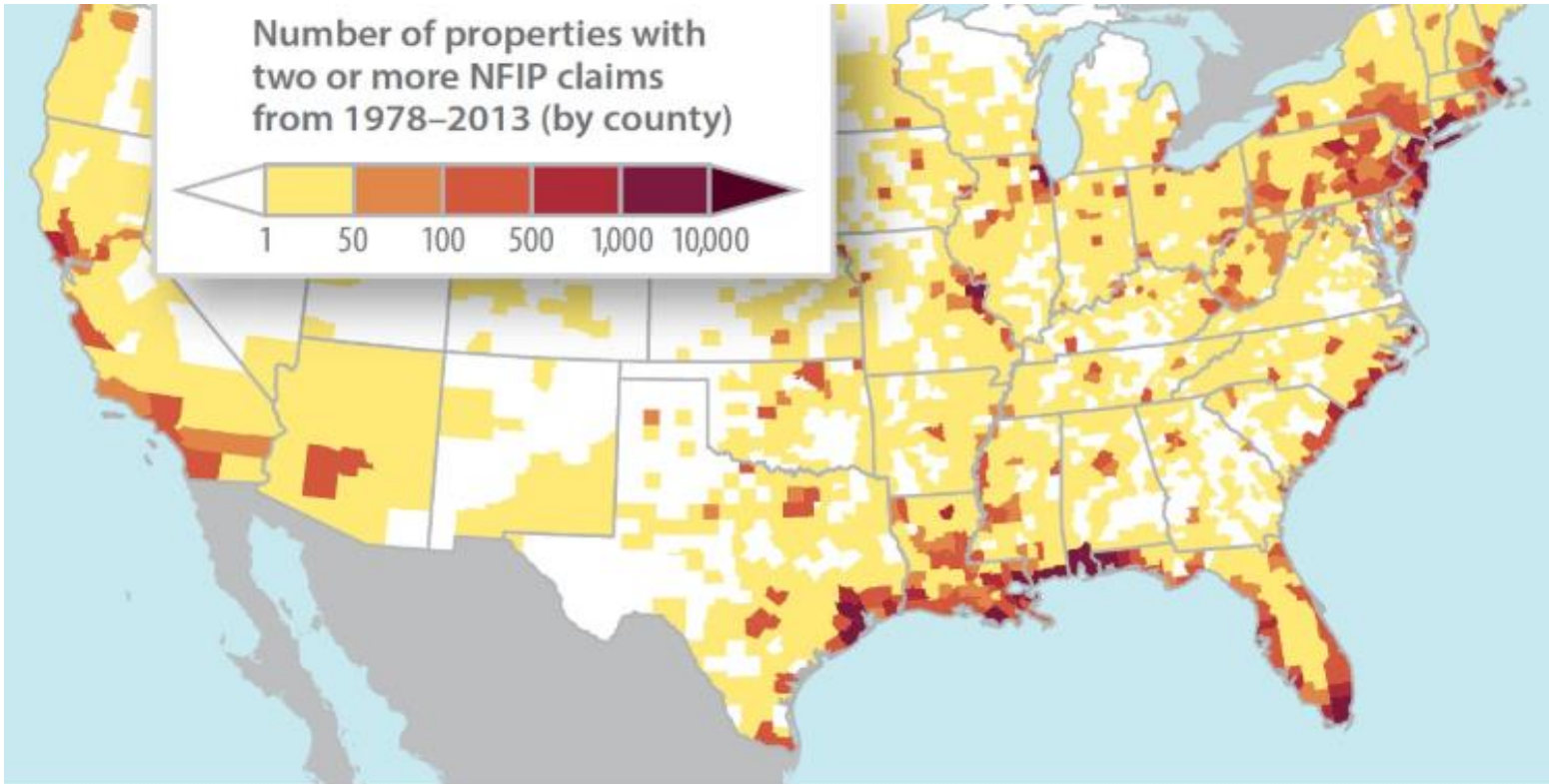
1993



2020



Floodplain Building Data						
	Total Number of Buildings		Flood Insurance Claims		Estimated Dollar Loss ++	
	Floodplain **	Floodway	Total Claims	Average Structural * Claim		Average Contents * Claim
Altonquin *	132	1	20	\$5,527	\$1,158	\$102,000



The darker colors show counties particularly prone to repetitive losses. Image credit: "Overwhelming Risk: Rethinking Flood Insurance in a World of Rising Seas" (Union of Concerned Scientists), based on FEMA data.

# Task 6: Develop a Mitigation Strategy



## Goal

- 2 Goals Minimum
- Re-evaluate current goals

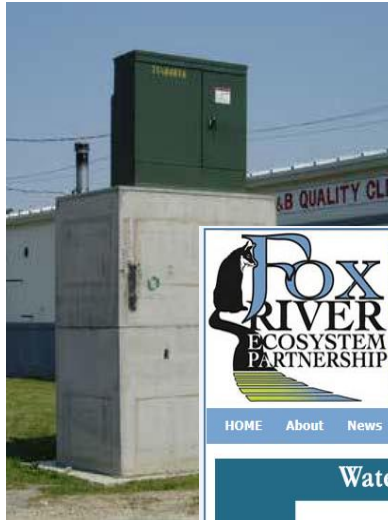
## Action

- Local Plans
- Structure and Infrastructure
- Natural Systems Protection
- Education and Awareness

## Action Plan

- Prioritize Actions
- How will Actions be implemented

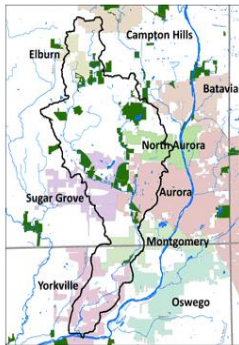
# Potential Actions



HOME About News Funding-Grants Topics Index Links Members Resources Subwatersheds

## Watershed Planning in the Fox River Basin

### Blackberry Creek Watershed



#### Blackberry Creek Watershed

Larger map here

The Blackberry Creek watershed is located in southwest Kane and northwest Kendall counties and has a drainage area of approximately 75 square miles. The watershed covers portions of the Cities of Aurora, Batavia and Yorkville, and the Villages of Campton Hills, Elburn, Montgomery, North Aurora, Oswego and Sugar Grove. The watershed is located on the urban fringe of the Chicago metropolitan area. Approximately 56% of the watershed land use is agricultural. Kane and Kendall counties are two of the fastest growing counties in Illinois (Kendall #1 and Kane #5). The total population in Blackberry Creek watershed is approximately 25,374.

#### Contact Info:

#### Maps

Map of Blackberry Creek Watershed

#### Google Earth Map Files

Blackberry Creek Watershed  
Blackberry Creek Streams  
Blackberry Creek Project Ideas

Download Google Earth

How to Use Google Earth

For more information about what a watershed is and general information about this planning process, please click on this link:

Watershed Planning HOME Page



▲ Goat farmer Bob Blanchard tends to his flock above Diablo Canyon nuclear power plant in Avila Beach, California. Photograph: Phil Klein

**In the face of climate change and deadly fires, states from California to Colorado are turning hungry animals loose on the countryside**



## Mitigation Ideas

A Resource for Reducing Risk to Natural Hazards

January 2013

# Task 7: Keep the Plan Current

- The plan maintenance process shall include a section **describing the method and schedule of monitoring, evaluating, evaluating, and updating the mitigation plan within a five-year cycle.** 44 CFR §201.6(c)(4)(i)



**2025**

January							February							March						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	31	1	2	3	4	26	27	28	29	30	31	1	23	24	25	26	27	28	1
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
26	27	28	29	30	31	1	23	24	25	26	27	28	1	23	24	25	26	27	28	29
2	3	4	5	6	7	8	2	3	4	5	6	7	8	30	31	1	2	3	4	5

April							May							June						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	31	1	2	3	4	5	27	28	29	30	1	2	3	1	2	3	4	5	6	7
6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14
13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21
20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28
27	28	29	30	1	2	3	25	26	27	28	29	30	31	29	30	1	2	3	4	5
4	5	6	7	8	9	10	1	2	3	4	5	6	7	6	7	8	9	10	11	12

July							August							September						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	1	2	3	4	27	28	29	30	31	1	2	31	1	2	3	4	5	6
6	7	8	9	10	11	12	3	4	5	6	7	8	9	7	8	9	10	11	12	13
13	14	15	16	17	18	19	10	11	12	13	14	15	16	14	15	16	17	18	19	20
20	21	22	23	24	25	26	17	18	19	20	21	22	23	21	22	23	24	25	26	27
27	28	29	30	31	1	2	24	25	26	27	28	29	30	25	26	27	28	29	30	1
3	4	5	6	7	8	9	31	1	2	3	4	5	6	5	6	7	8	9	10	11

October							November							December						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	1	2	3	4	26	27	28	29	30	31	1	30	1	2	3	4	5	6
5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13
12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20
19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27
26	27	28	29	30	31	1	23	24	25	26	27	28	29	28	29	30	31	1	2	3
2	3	4	5	6	7	8	30	1	2	3	4	5	6	4	5	6	7	8	9	10

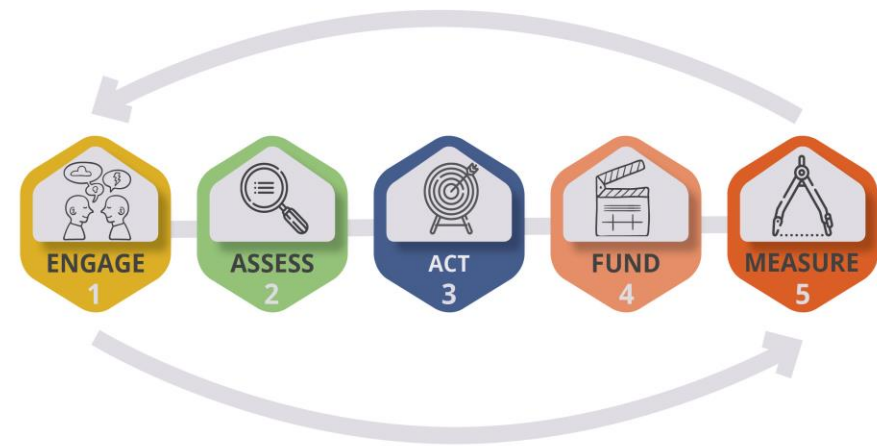
# Task 8: Review and Adopt the Plan

## State and FEMA Plan Approval





# Task 9: Create a Safe and Resilient Community



## *Things to do next*

- ❑ Participate in public meetings and committee meetings
  - ❑ Natural Hazard Mitigation meeting topics:
    - ❑ Assess the hazards
    - ❑ Set Goals
    - ❑ Review Possible Activities
    - ❑ Draft an Action Plan
- ❑ Talk to your planners, engineers, emergency management staff, first responders, local officials, stakeholder groups, community leaders and residents
- ❑ Get feed back
- ❑ Let's make a plan that works for Kane County!

Thank you for your time



Photo credit to University of Nebraska Omaha