

22-11 White & Gallatin County, Illinois FEMA RISK MAP

Project Initiation Community Coordination call



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FEMA

Agenda

Rollcall

Introduction

Project Objectives and Goals

National Flood Insurance Program/Mitigation

Terminology

Project Scope

Data Development

Communication & Outreach

Schedule

Community Participation

Questions/Discussion

Roll Call

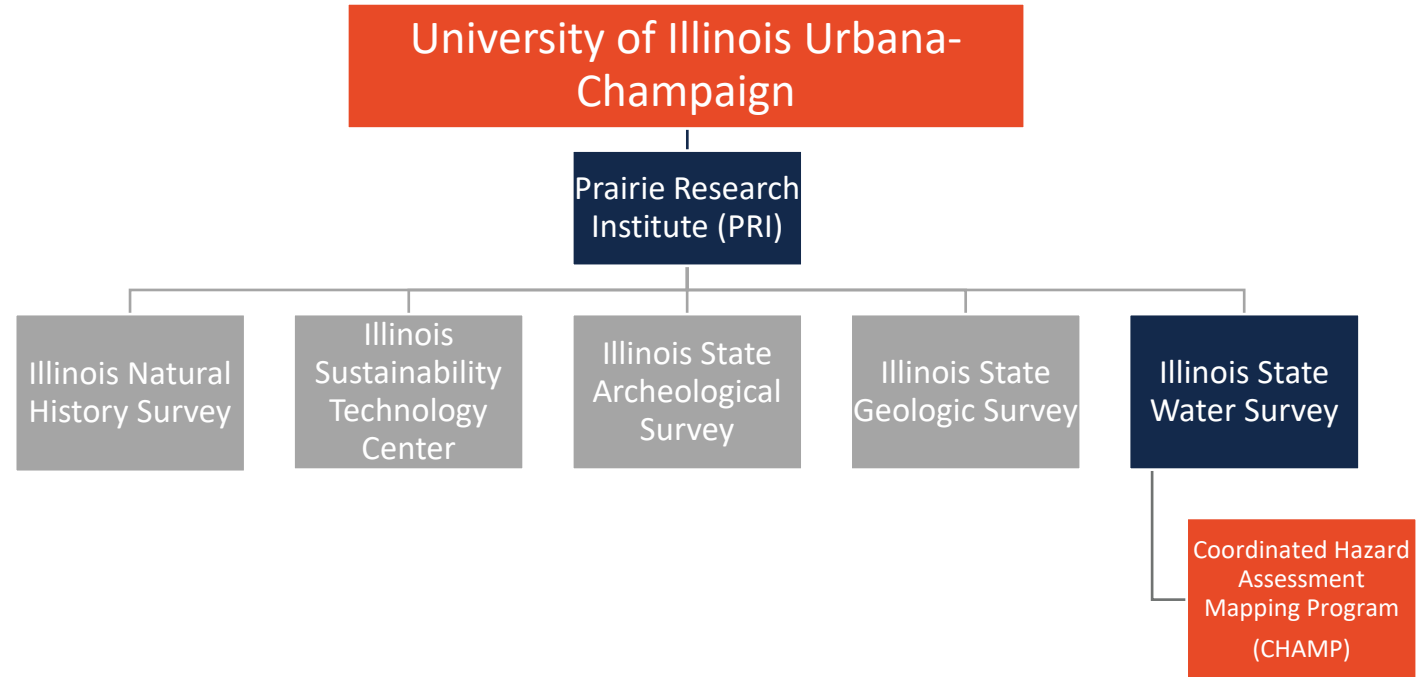
- Village of Norris City⁺
- White County * ⁺
- Gallatin County* ⁺
- Greater Wabash Regional Planning Commission
- IDNR-OWR
- FEMA
- IEMA
- Other Agencies?

* NFIP Participating; + Participating MHMP jurisdiction

Introduction

Introduction

Who We Are



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<https://www.illinoisfloodmaps.org/>

<https://www.isws.illinois.edu/champ>

Introduction

Our Partners

FEMA

ISWS is a Cooperating Technical Partner (CTP) with the Federal Emergency Management Agency. (FEMA)



The Cooperating
Technical Partners (CTP)
Program

IDNR-OWR

ISWS partners with The Illinois Department of Natural Resources-Office of Water Resources (IDNR-OWR). Together we prioritize Illinois floodplain studies and mapping projects.



Your Community

ISWS provides ongoing engagement with state and local officials and watershed stakeholders to reduce flood risk.

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Introduction

What We Do

PRODUCE FLOOD STUDIES



FLOOD INSURANCE STUDY


WINNEBAGO COUNTY, ILLINOIS AND INCORPORATED AREAS


Volume 1 of 2

COMMUNITY NAME	COMMUNITY NUMBER
CHERRY VALLEY, VILLAGE OF	170721
DURAND, VILLAGE OF	170789
LOUIS PARK, CITY OF	170722
MACHESNEY PARK, VILLAGE OF	171009
NEW MILFORD, VILLAGE OF	175182
PECATONICA, VILLAGE OF	170787
ROCKFORD, CITY OF	170523
ROCKTON, VILLAGE OF	170774
ROSDALE, VILLAGE OF	170724
SOUTH BELLEVUE, CITY OF	170725
WINNEBAGO COUNTY (UNINCORPORATED AREAS)	170720
WINNEBAGO, VILLAGE OF	175183

*NO SPECIAL FLOOD HAZARD AREAS IDENTIFIED

Winnebago County



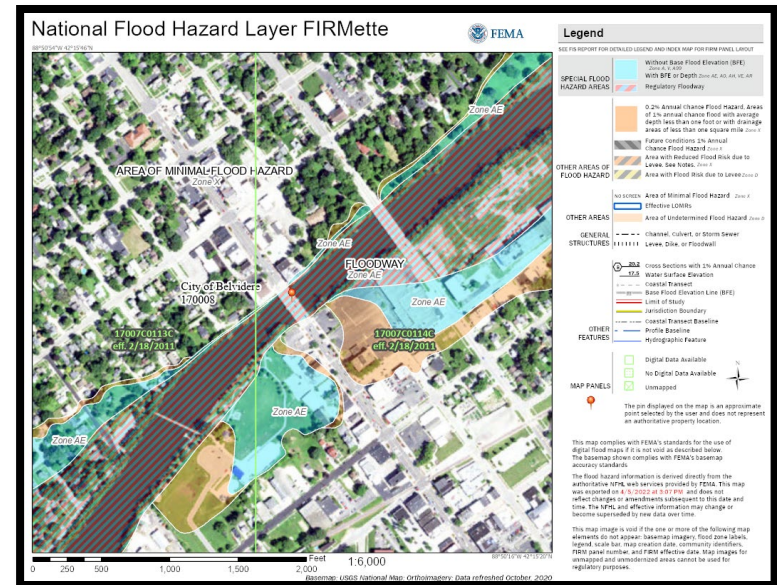


Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
17201CV001B

REVISED: FEBRUARY 17, 2016

GENERATE FLOODPLAIN MAPS



Introduction

How We Are Funded

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FEMA administers the National Flood Insurance Program (NFIP).



The Risk Mapping, Assessment, and Planning (Risk MAP) Program is the FEMA process used to implement NFIP floodplain studies and mapping projects.



The Cooperating Technical Partners (CTP) Program

FEMA provides grants to Cooperating Technical Partners to complete Risk MAP work.

Introduction

INFORM RESIDENTS AND COMMUNITIES about flood hazards in their communities.

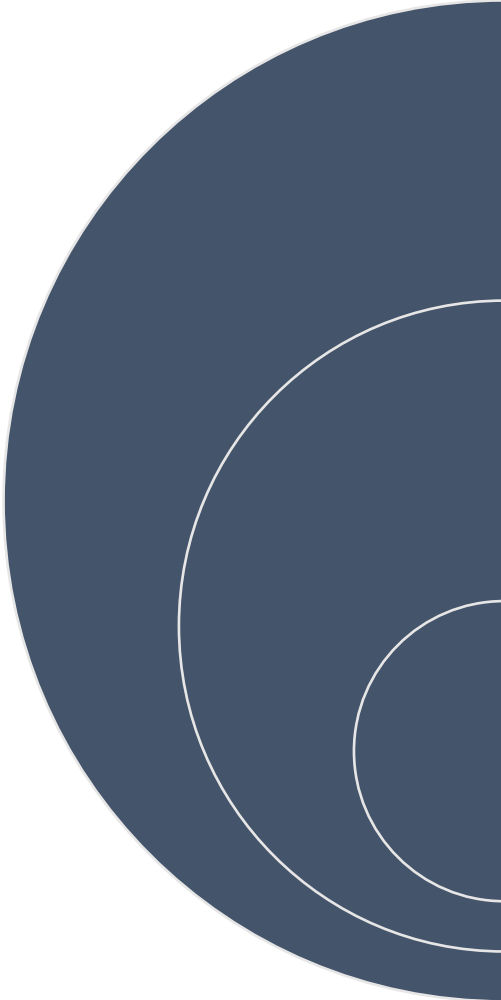
What We Do



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National Flood Insurance Program and Mitigation

National Flood Insurance Program



The NFIP is a voluntary program based on a mutual agreement between the Federal government and a community.

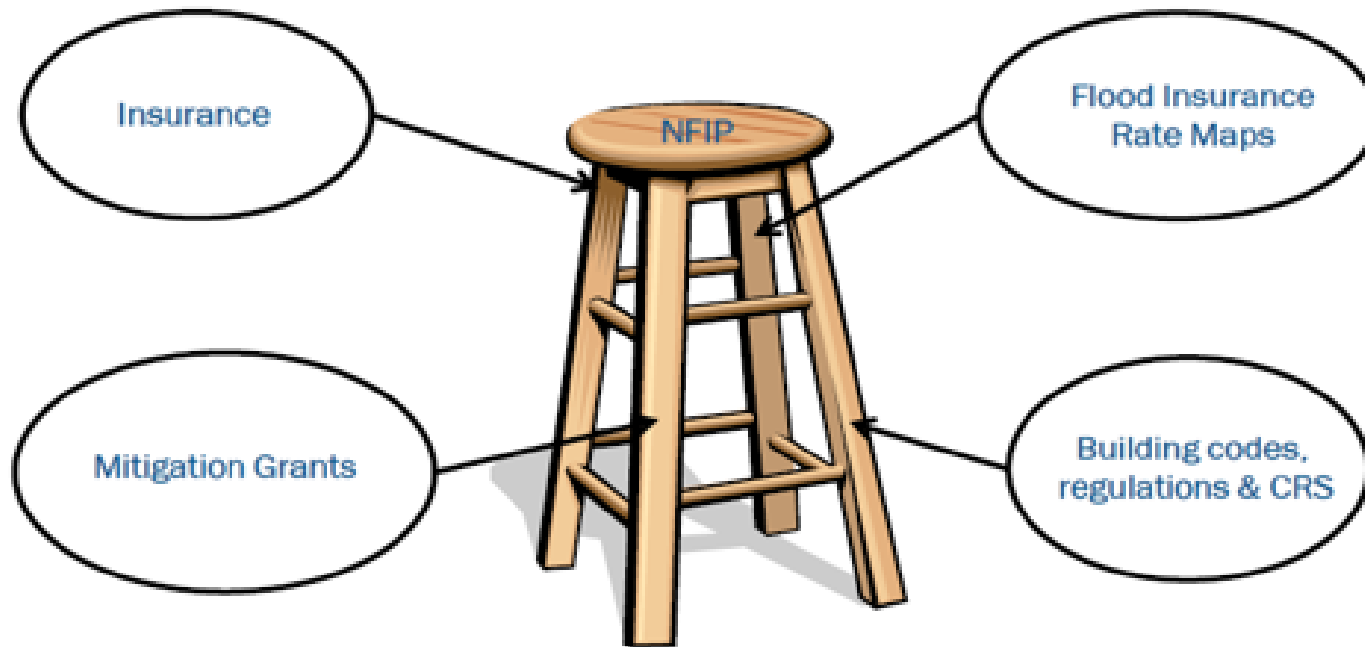
In exchange for adopting and enforcing a floodplain management ordinance, Federally-backed flood insurance is made available to property owners throughout the community.

Erin Conley, NFIP State Coordinator

erin.c.conley@Illinois.gov

National Flood Insurance Program

Three +1 Related Program Areas



White County Multi-Hazard Mitigation Plan

White County, Illinois Multi-Hazard Mitigation Plan

A 2017 Update of the 2009 Countywide MHMP



Figure 4-18. Building Inventory Located within the 100-year Floodplain in White County

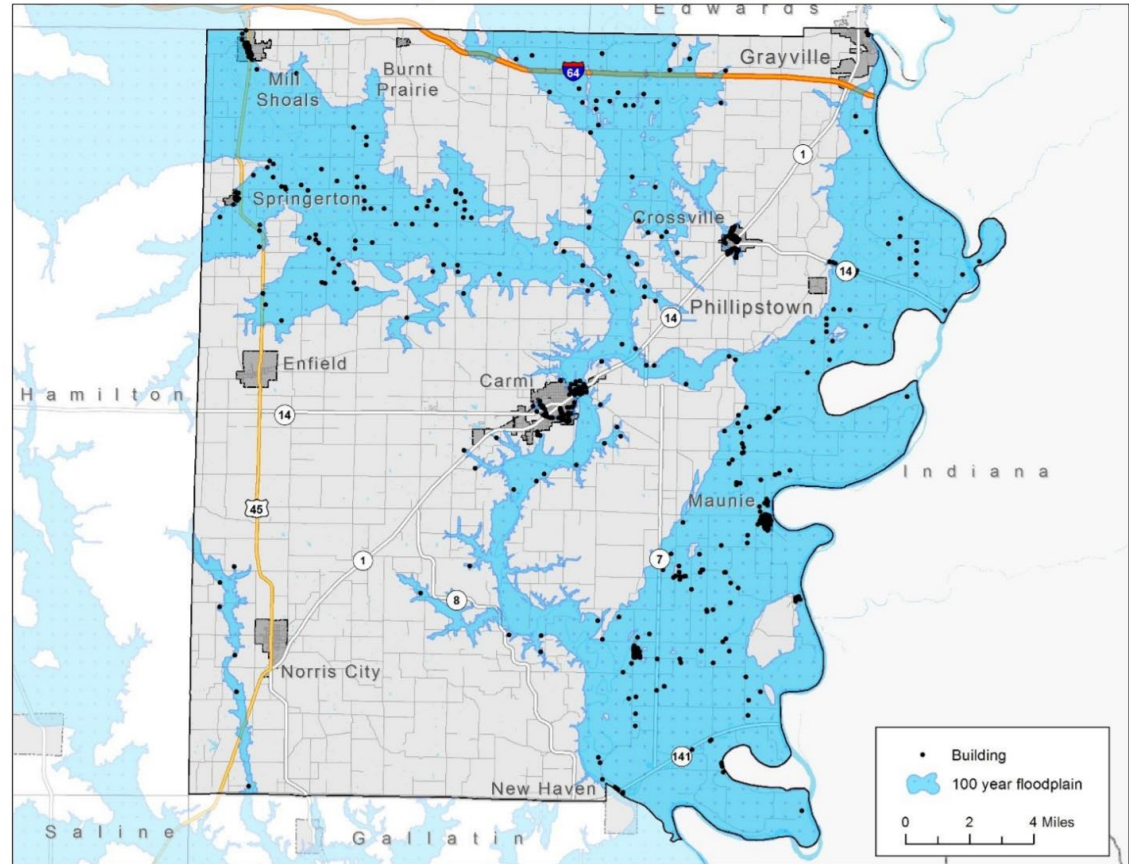


Table 4-34. Estimated Flood Losses within the 100-year Floodplain

Occupancy Class	Number of Structures	Estimated Building Related Losses
Residential	496	\$5,681,792
Commercial	47	\$1,868,848
Industrial	4	\$121,978
Agricultural	112	\$1,242,857
Total:	659	\$8,915,475,000

N.B. Error in MHMP Table: Total should read \$8,915,475

Terminology

What is a Special Flood Hazard Area?

The FEMA Special Flood Hazard Area (SFHA) zone type designation is related to the method and level of hydraulic analysis performed.

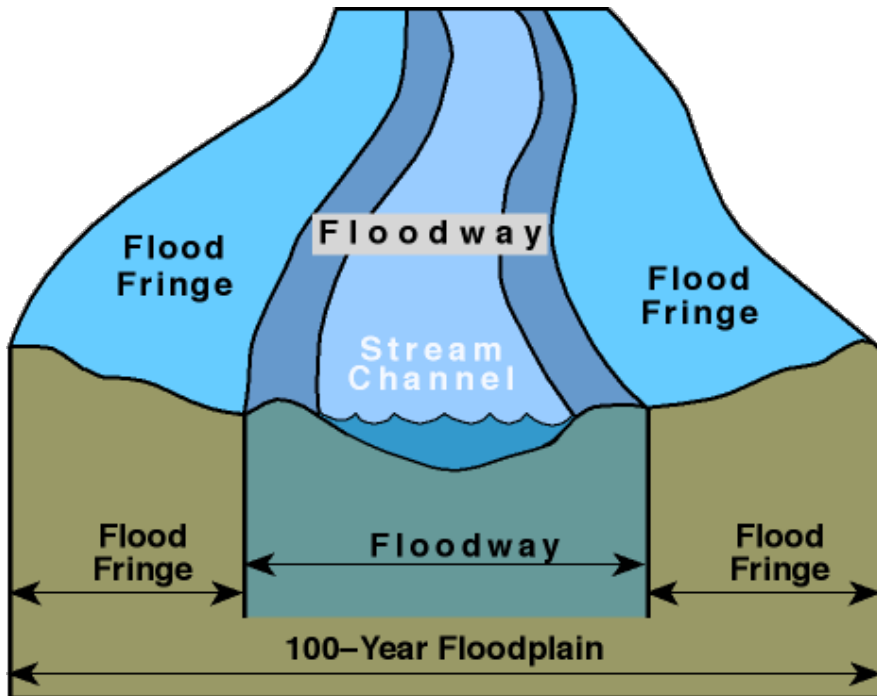
Riverine hydraulic analysis typically results in SFHA designation as Zone A or Zone AE, based on the analysis level deemed appropriate for the study area.

The Base Flood Elevation (BFE) is the elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year.

Zone A	Areas subject to inundation by the 1-percent-annual-chance flood event. NO Base Flood Elevations are shown.
Zone AE	Areas subject to inundation by the 1-percent-annual-chance flood event. Base Flood Elevations ARE shown.

Floodway Zone AE

The **floodway** is the channel of a stream *plus* any adjacent floodplain areas that must be kept free of encroachment so that the 1%-annual-chance flood can be carried *without* substantial increases in the flood heights.

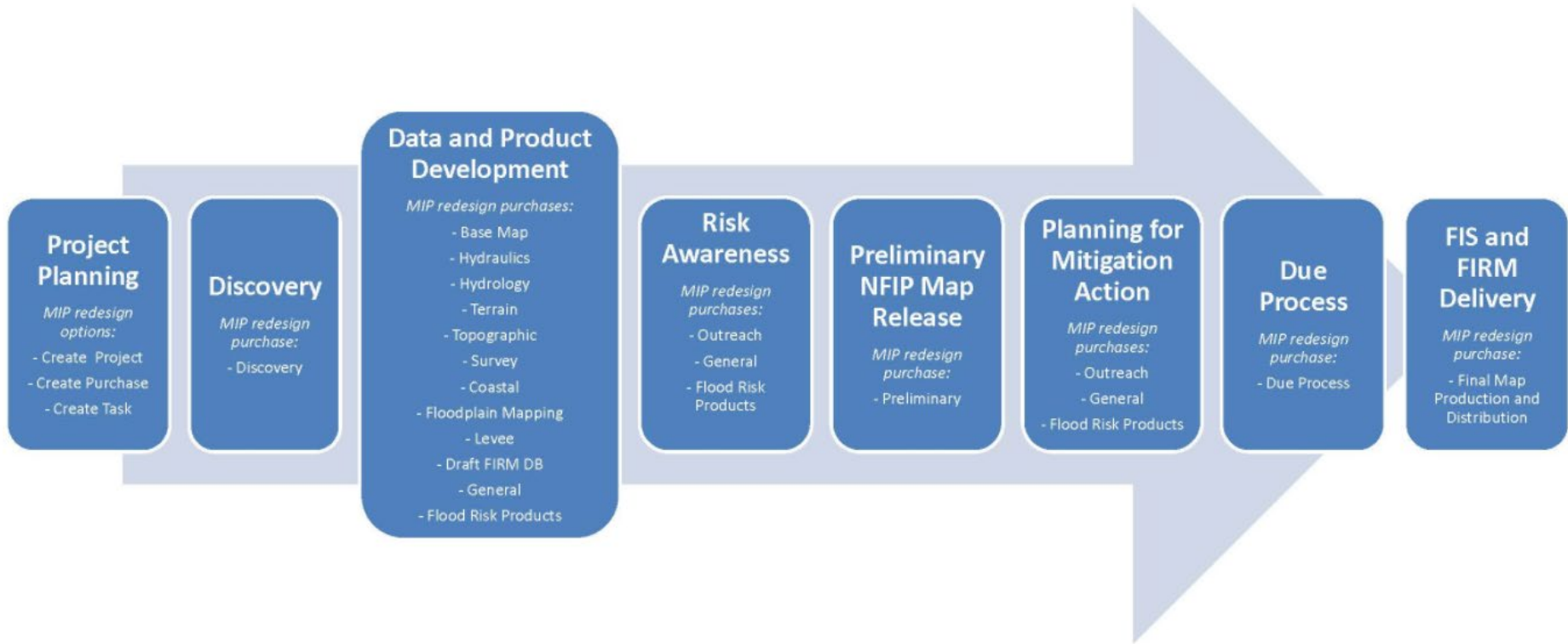


What is a Special Flood Hazard Area?



Project Objectives and Goals

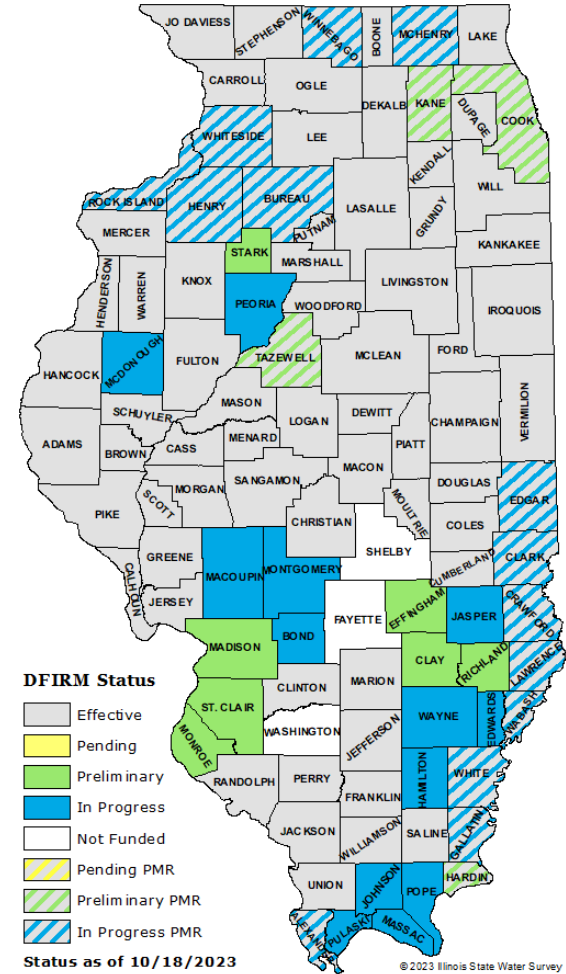
FEMA National Objectives and Goals



State Objectives and Goals

Update Flood Risk with Hydrologic and Hydraulic Analyses for Select Streams

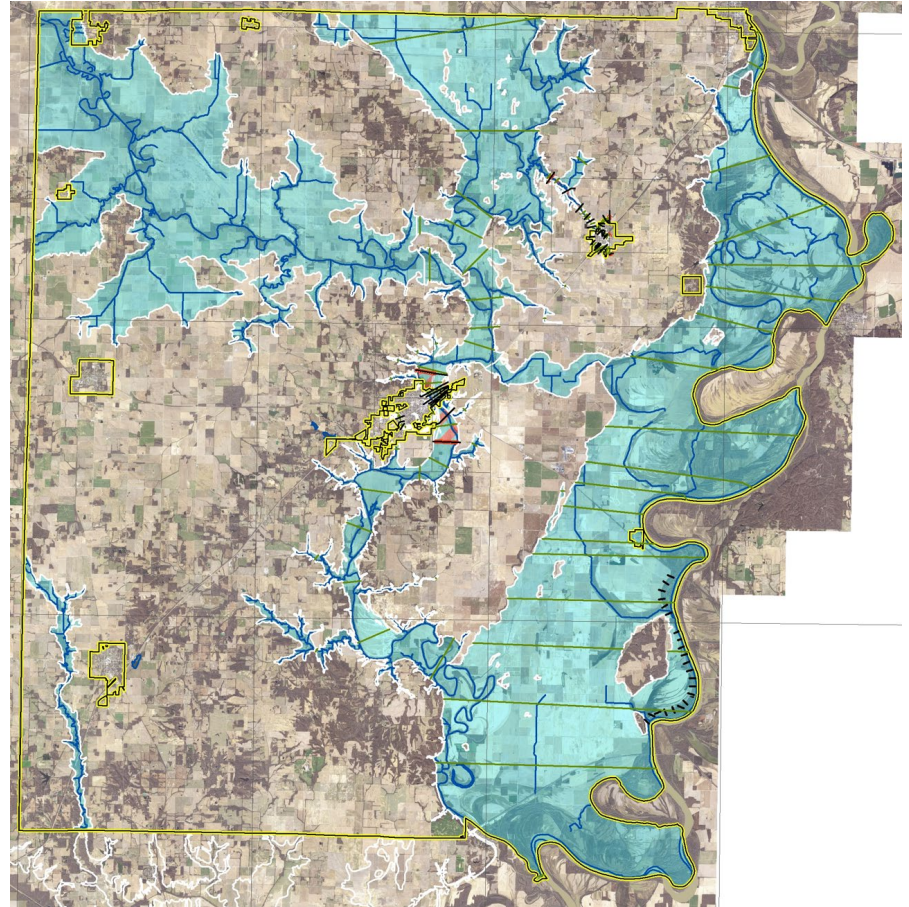
Update Digital Floodplain Maps



<https://www.illinoisfloodmaps.org/>

Update Flood Risk Data and Maps

- White County FIRM, 02/16/2012
- White County Data, 04/03/1985



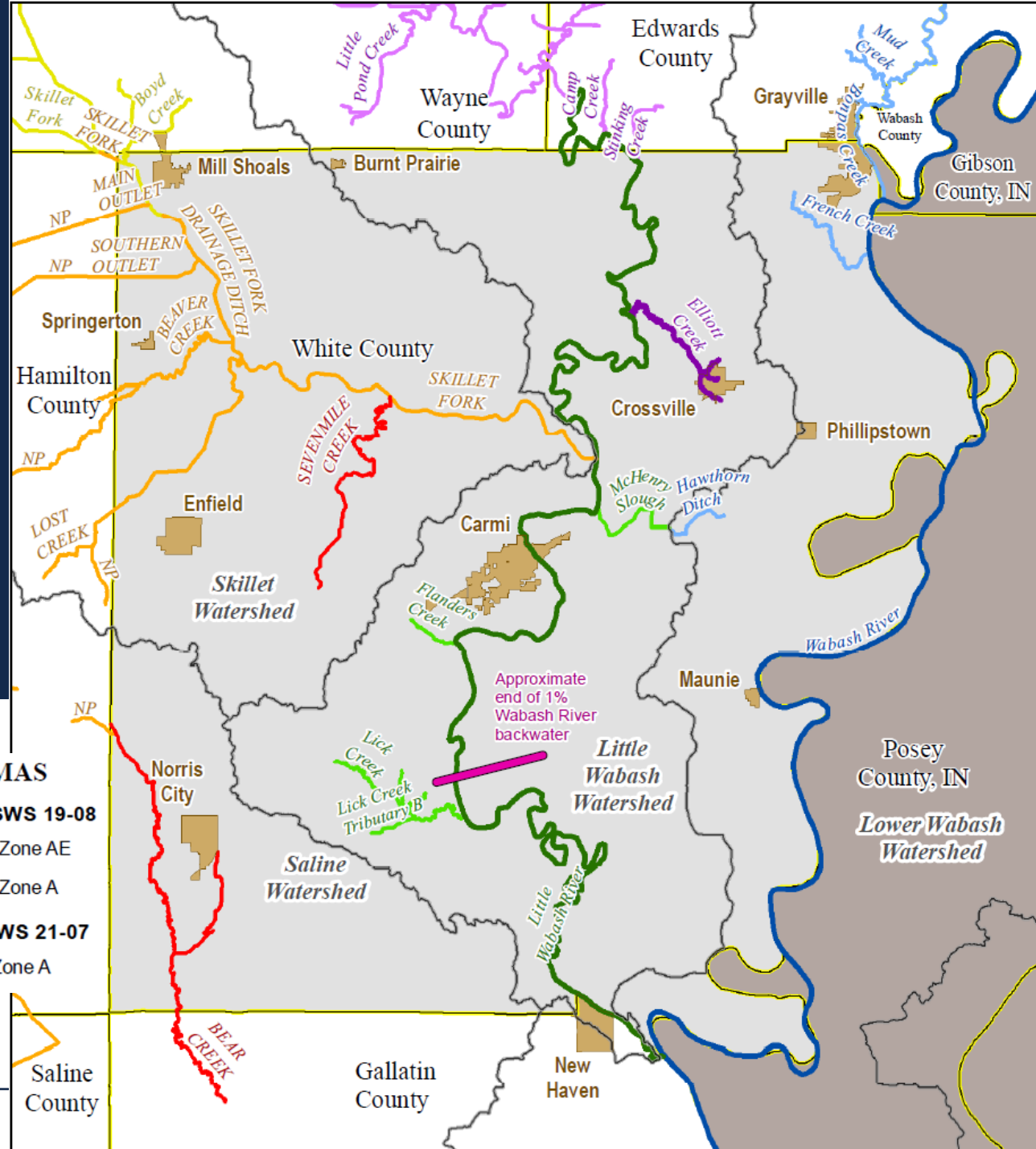
Project Scope

Funded Projects

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White County, IL - Streams for Study by MAS

MAS ISWS 17-03	MAS ISWS 18-03	MAS ISWS 19-08
Zone AE	Zone AE	Zone AE
Zone A	Zone A	Zone A
MAS ISWS 20-11	MAS ISWS 22-11	MAS ISWS 21-07
Zone A	Zone A	Zone A



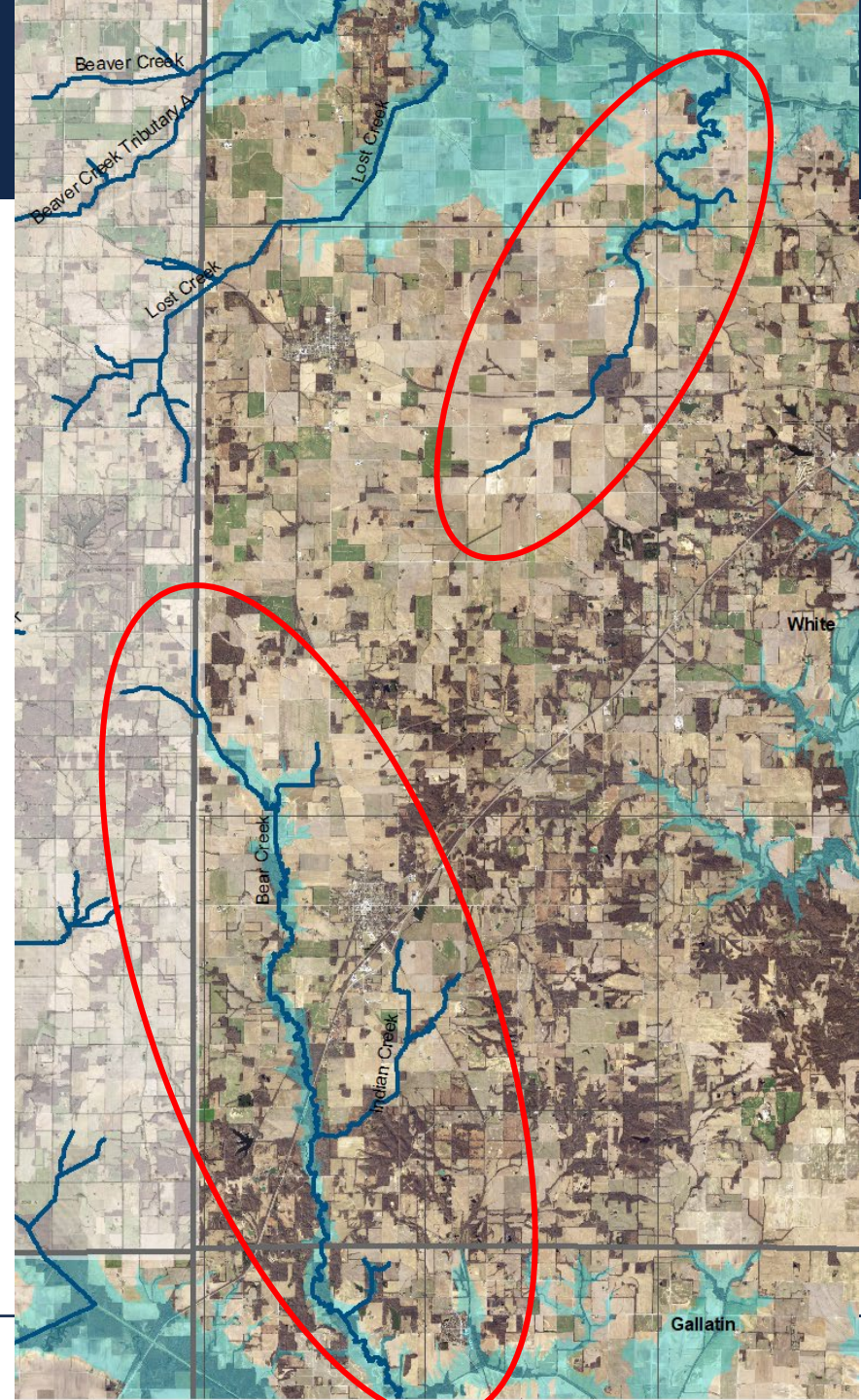
Project Scope

Stream Study Lines

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- Sevenmile Creek and Tributaries
- Bear Creek and Tributaries
- Indian Creek and Tributaries

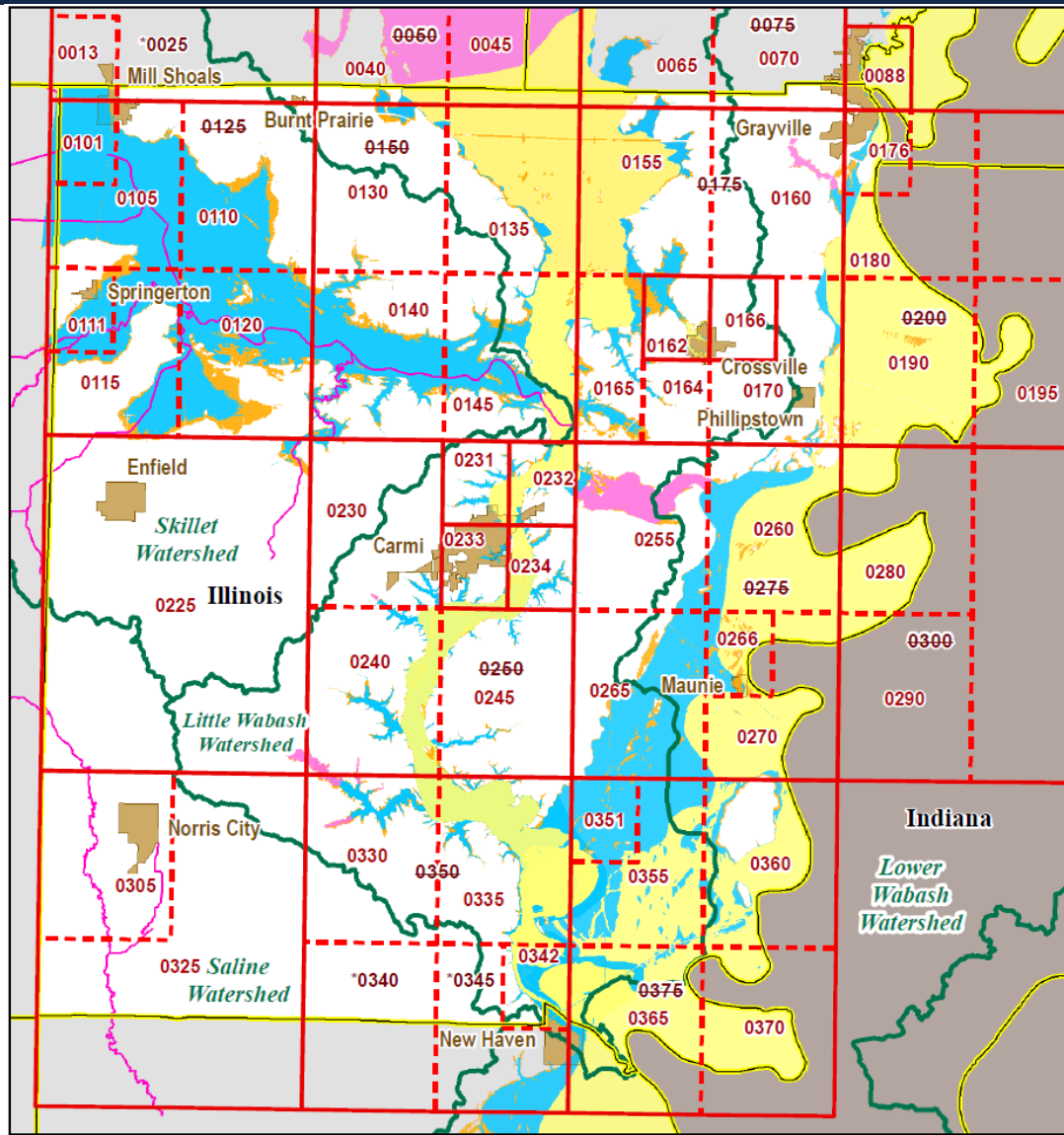


Project Scope

White County Proposed Panel Layout



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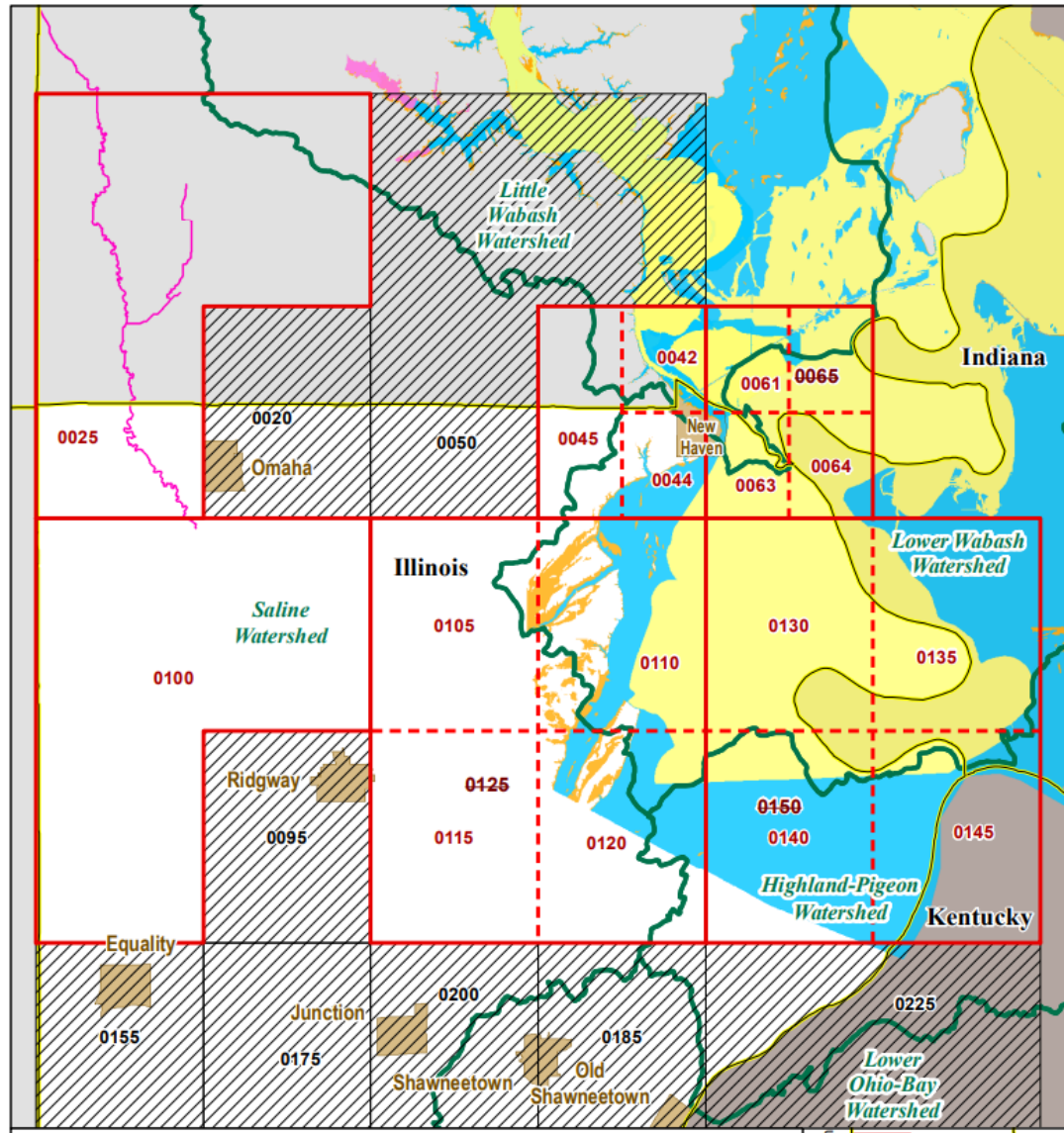


Project Scope

Gallatin County Proposed Panel Layout

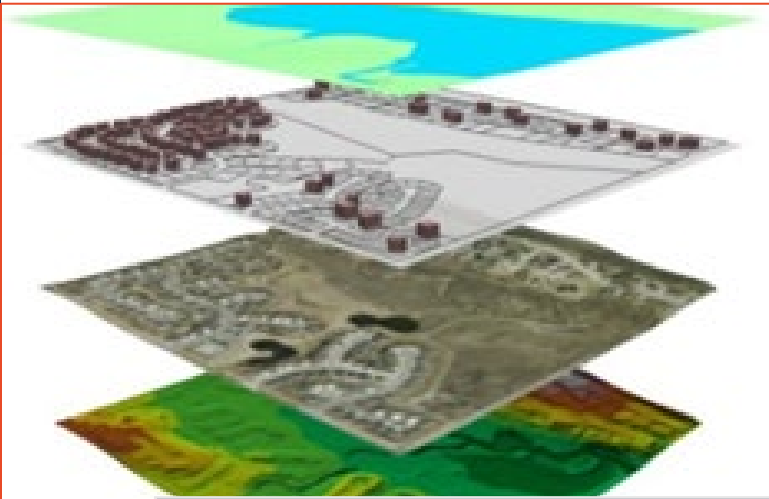
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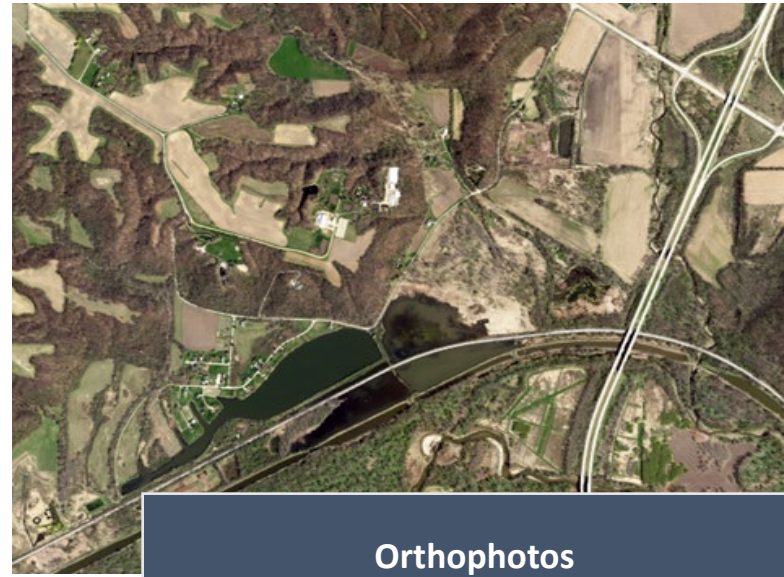


Data Development Phase

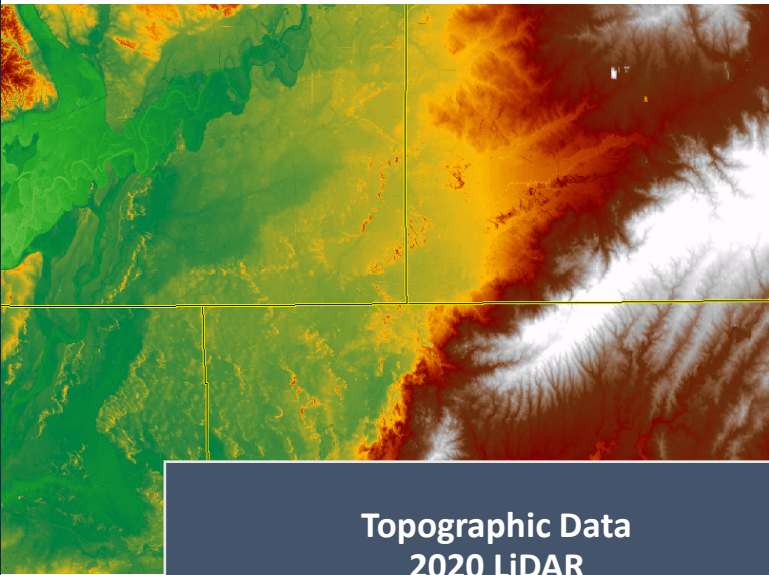
Mapping Data



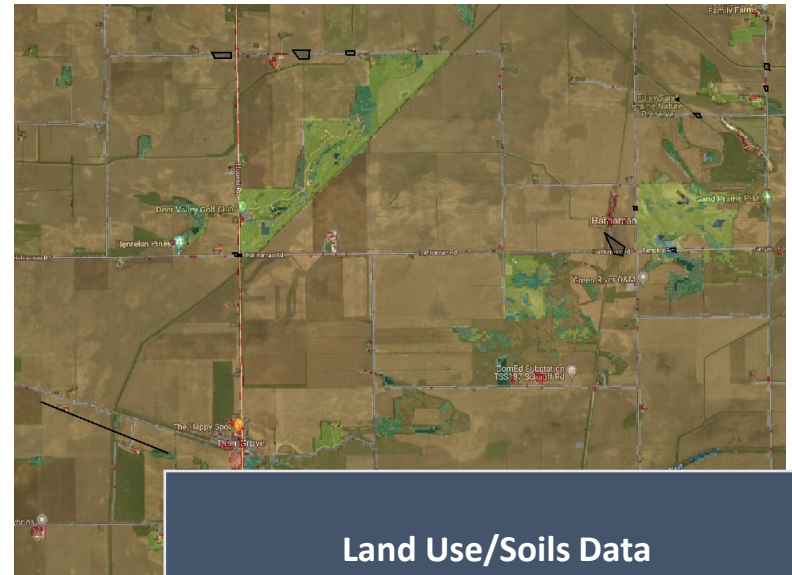
Mapping Data



Orthophotos



Topographic Data
2020 LiDAR



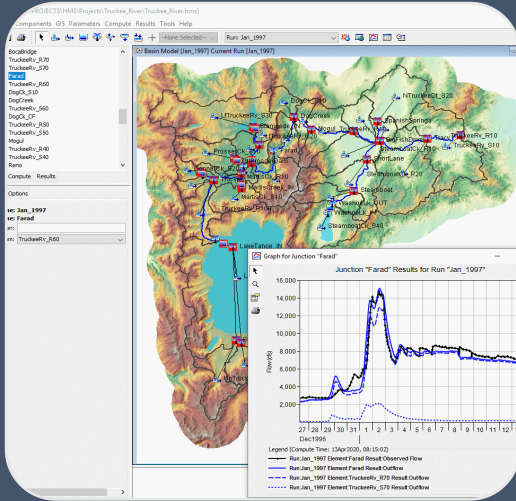
Land Use/Soils Data

Proposed Engineering Methods

Hydrologic Studies

Determine 1-percent-annual-chance **Flows** using:

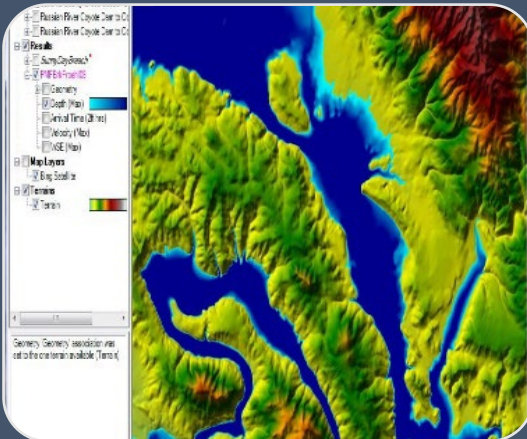
- Army Corps of Engineers HEC-RAS 2D Rain-On-Mesh
- Bulletin 75 (2020) Precipitation Data
- 10%, 4%, 2%, 1%, 0.2% and 1%+ annual chance flows
- USGS Regression Equations StreamStats



Hydraulic Studies

Determine flood frequency **Elevations** using Army Corps of Engineers HEC-RAS 6.4.1 software

- Sevenmile Creek 2D as part of Skillet Fork Watershed
- Bear Creek and Tributaries 1D



Communication and Outreach

Communication and Outreach

Communication Plan

Project Initiation Community Coordination Meeting (today)

Proposed Engineering Methods Notification Letter

- 30-Day Comment Period

Flood Risk Review Meeting

- 30-Day Comment Period

Data Submission Notification Letter

- 30-Day Comment Period

Please reach out to **Mary Richardson** at mjr@illinois.edu

Communication and Outreach

Proposed Engineering Methods Letter

FEMA Standard ID 620



Communication and Outreach

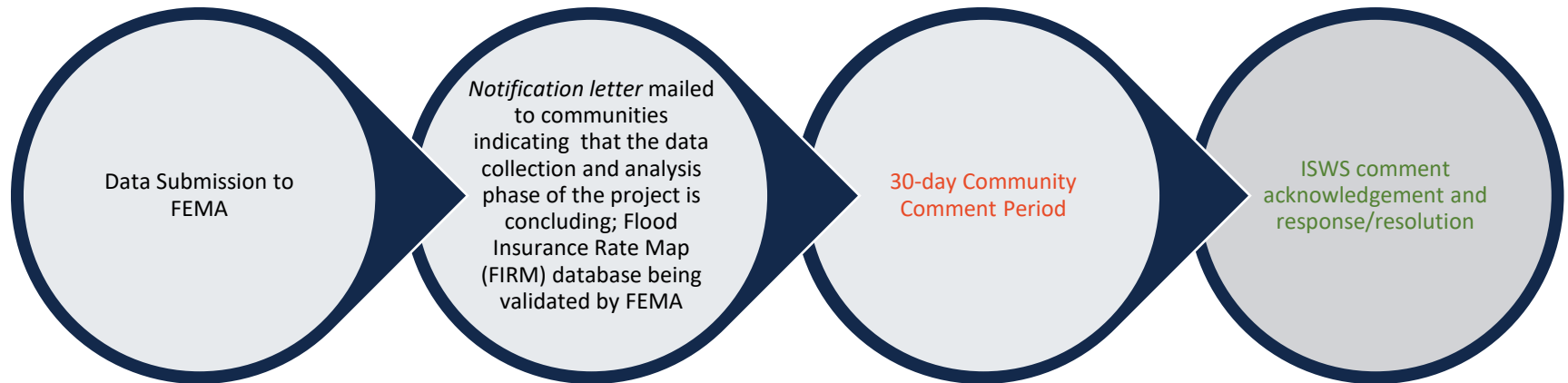
Flood Risk Review Meeting



Communication and Outreach

Data Submission Notification

FEMA Standard ID 621



Project Schedule

Project Schedule

Project Initiation and Community Coordination Meeting

- **Today**

Engineering Methods 620 Letters to communities

- Letters will be issued following meeting

Complete all Hydrologic Studies

- Winter 2023

Complete all Hydraulic Studies

- Early 2024

Flood Risk Review Meeting

- Summer 2024

Digital Flood Insurance Rate Map Project to follow pending conclusion of data development

- ***Future Phase*** (To Be Determined)

Community Participation

Community Participation

Please provide us with the following data or information:

- Flood prone areas
- Flood photos/Drone video
- Historic highwater marks
- Local floodplain studies and survey data
- Any other data or information

Stay engaged in the process...

- Attend meetings
- Ask questions
- Inform others
- Update contact Information

Community Participation

In Summary

Local Partners are critical to the project

- Best understand their community needs
- Can provide critical information to enhance the studies with local knowledge

Our goal is to make managing and mitigating flood risk easier for our local partners

- Use the latest data to understand flood risk
- Utilize the tools and mapping available to assist communities in administering the NFIP locally

Please ask questions and share your concerns

- Communicating early and often ensures the flood risk products capitalize on local knowledge and best address local needs

Questions?

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Glenn Heistand, P.E., CFM

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www.illinoisfloodmaps.org