



**ILLINOIS**

Illinois State Water Survey

**PRAIRIE RESEARCH INSTITUTE**

# Bond County Floodplain Mapping Project Initiation Meeting

## Agenda

- Rollcall
- Project Objectives and Goals
- Project Scope
- Communication
- Schedule
- Community Participation

# Introduction

- Illinois State Water Survey (ISWS) is a Cooperating Technical Partner with FEMA
- ISWS also partners with IDNR to help prioritize Illinois Floodplain Mapping Projects



The staff of the Coordinated Hazard Assessment and Mapping Program which includes 18 Certified Floodplain Managers (CFM), seven Professional Engineers (PE), and seven Geographic Information Systems Professionals (GISP)

[www.illinoisfloodmaps.org](http://www.illinoisfloodmaps.org)

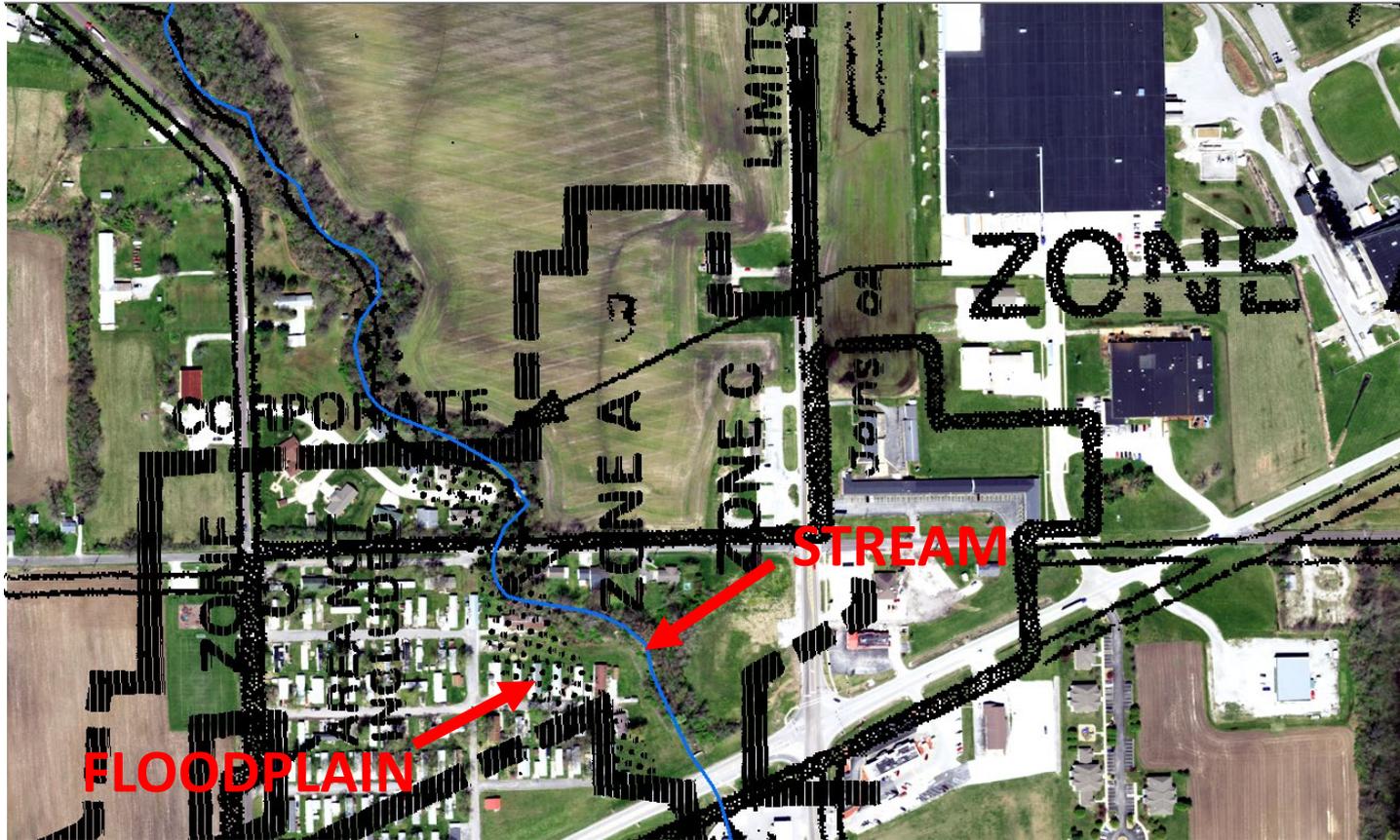
# Rollcall

- Village of Donnellson
- City of Greenville
- Village of Keyesport
- Village of Mulberry Grove
- Village of Old Ripley
- Village of Panama
- Village of Pierron
- Village of Pocahontas
- Village of Smithboro
- Village of Sorento
- Unincorporated Bond County
- Illinois Department of Natural Resources
- FEMA
- IEMA
- Southwestern Illinois Metropolitan and Regional Planning Commission
- Other Agencies?

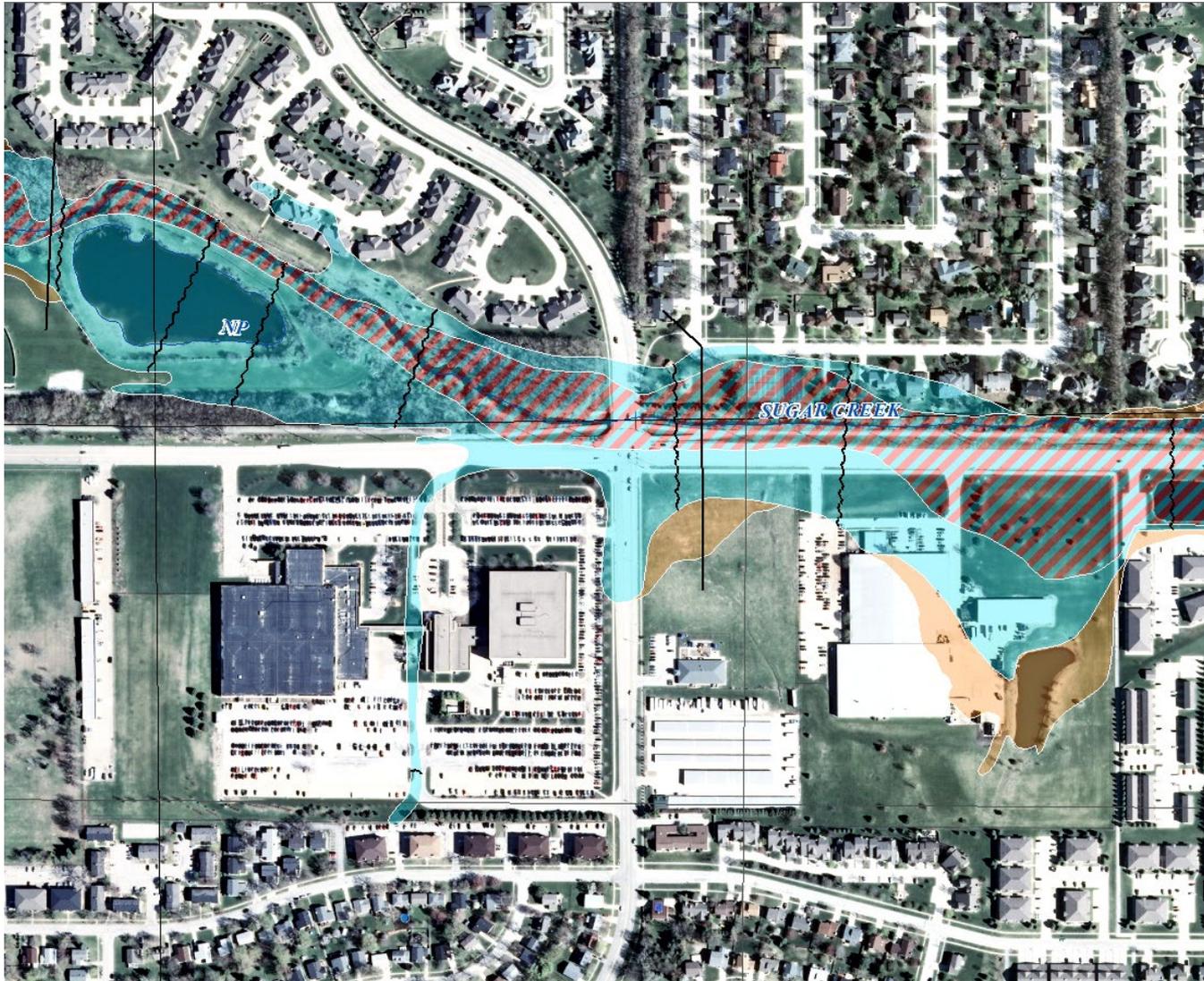
# Project Objective and Goals



# Bond County Paper Maps



# Paper Map to Digital Map



# Community Impact

## Ways New Floodplain Maps Can Affect a Community:

1. Can affect which residents are required to carry flood insurance
2. Depicts areas of community which are subject to floodplain management regulations
3. Can affect community planning and flood mitigation

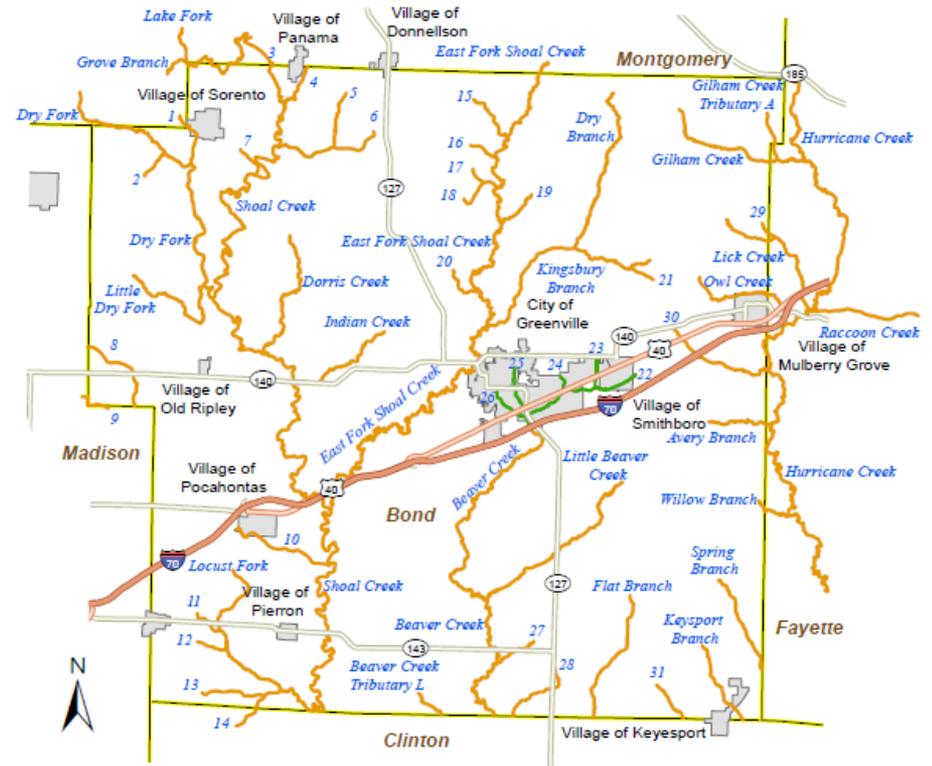
# Project Scope

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- Develop New Floodplain Studies
  - 200 miles of stream to be studied
  - 9 miles of stream to be studied using detailed methods
- Develop Draft Floodplain Mapping
- Community Outreach and Engagement
- Complete Digital Flood Insurance Rate Maps (Later Phase)

# Bond County Proposed Studies

## Floodplain Studies Overview

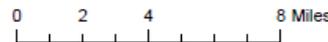


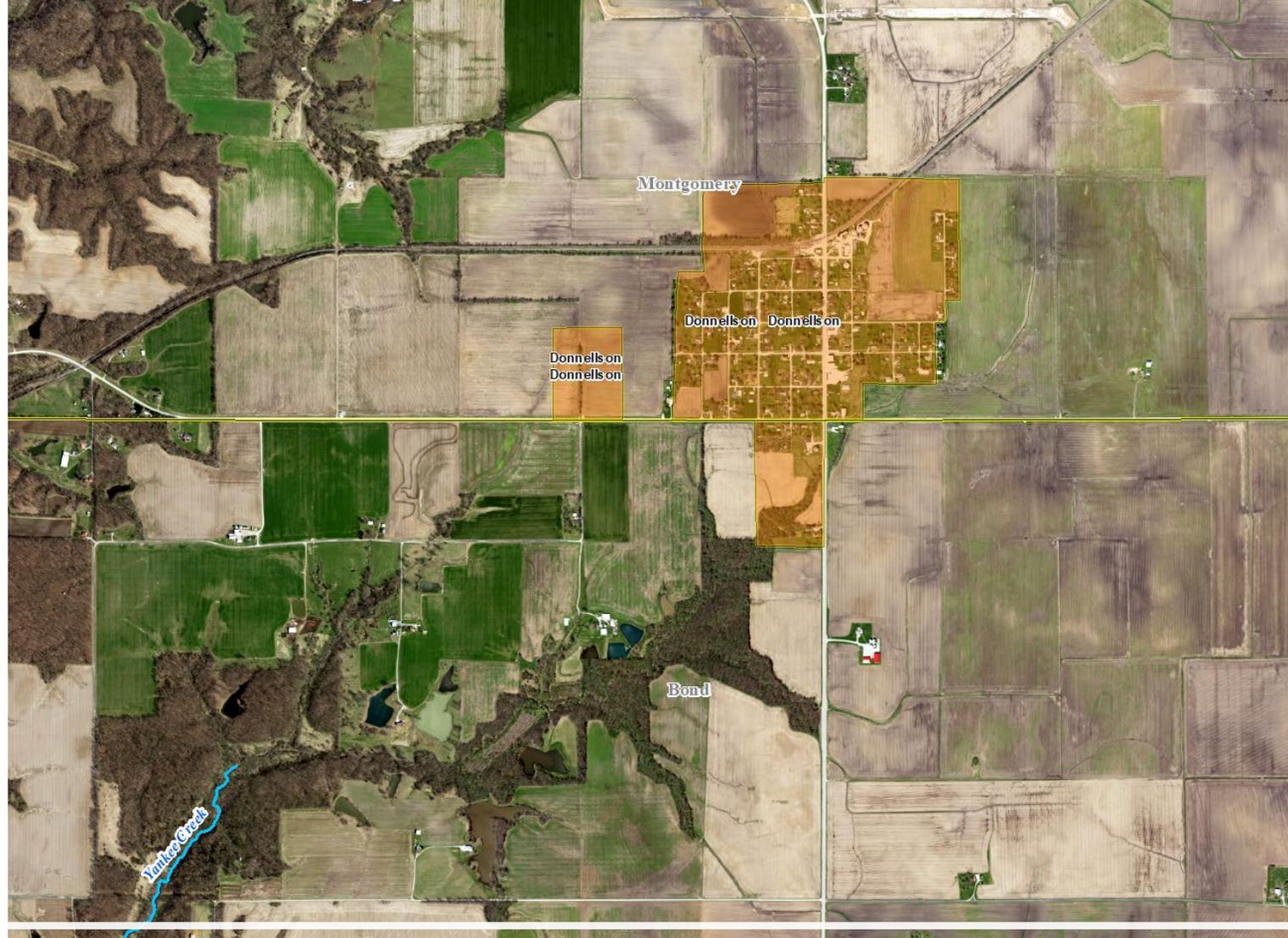
- |                                       |  |
|---------------------------------------|--|
| 1. Dry Fork Tributary A               | 16. East Fork Shoal Creek Tributary D  |
| 2. Dry Fork Tributary B               | 17. East Fork Shoal Creek Tributary C  |
| 3. Shoal Creek                        | 18. East Fork Shoal Creek Tributary C1 |
| 4. Bearcat Creek                      | 19. East Fork Shoal Creek Tributary B  |
| 5. Yankee Creek                       | 20. East Fork Shoal Creek Tributary A  |
| 6. Elm Point Branch                   | 21. Kingsbury Branch Tributary A       |
| 7. Shoal Creek Tributary Q            | 22. Beaver Creek                       |
| 8. Little Silver Creek                | 23. Beaver Creek Tributary Q           |
| 9. East Fork Silver Creek Tributary F | 24. Beaver Creek Tributary P           |
| 10. Shoal Creek Tributary P           | 25. Beaver Creek Tributary O           |
| 11. Locust Fork Tributary C           | 26. Beaver Creek Tributary O1          |
| 12. Locust Fork Tributary B           | 27. Beaver Creek Tributary N           |
| 13. Locust Fork Tributary A           | 28. Beaver Creek Tributary M           |
| 14. Locust Fork Tributary A1          | 29. Lick Creek Tributary A             |
| 15. East Fork Shoal Creek Tributary E | 30. Hurricane Creek Tributary A        |
|                                       | 31. Carlyle Lake Tributary H           |

-  Major Highways
-  Highways
-  Major Roads
-  County Boundary

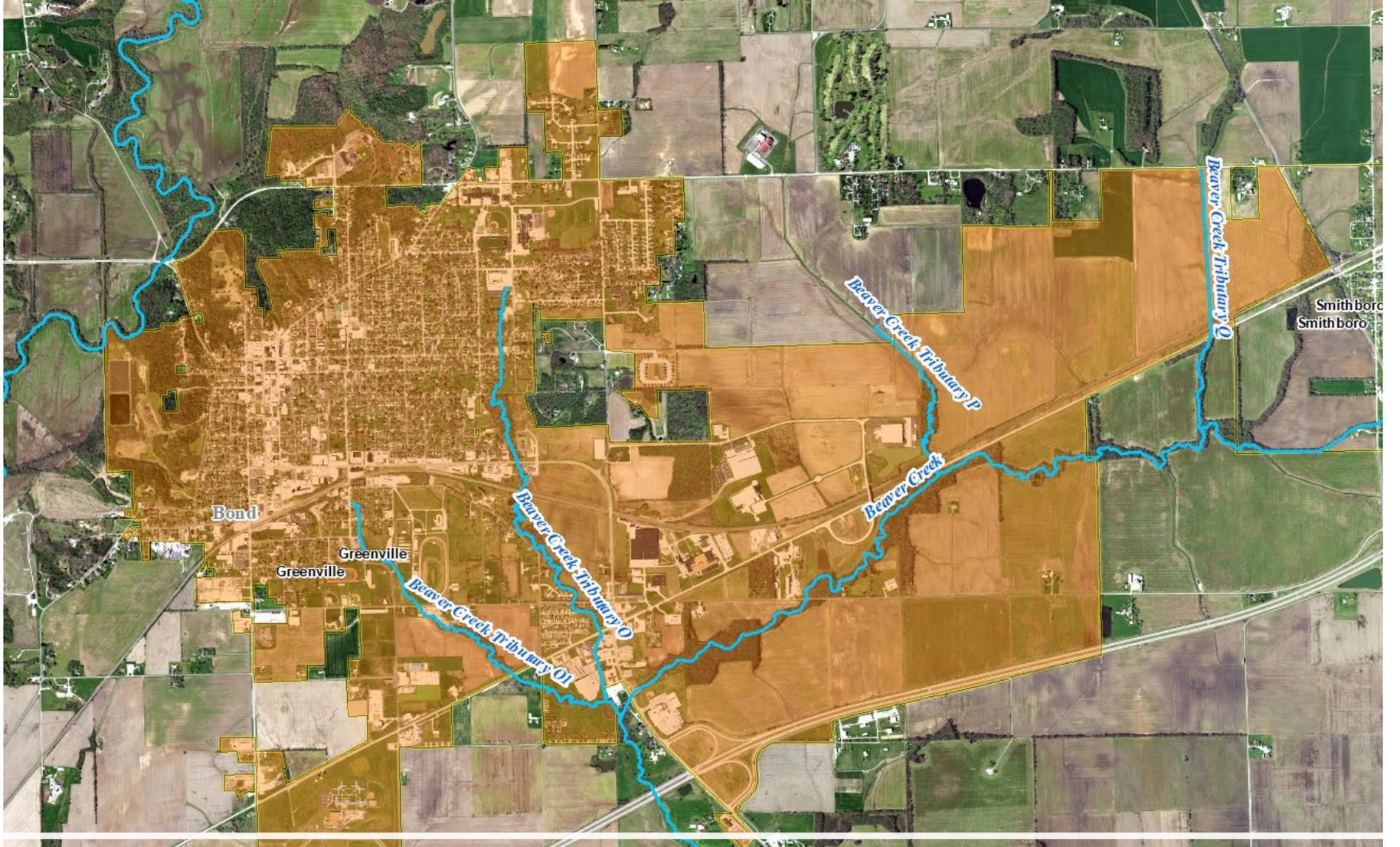
### Proposed Stream Study Type

-  Zone A
-  Zone AE





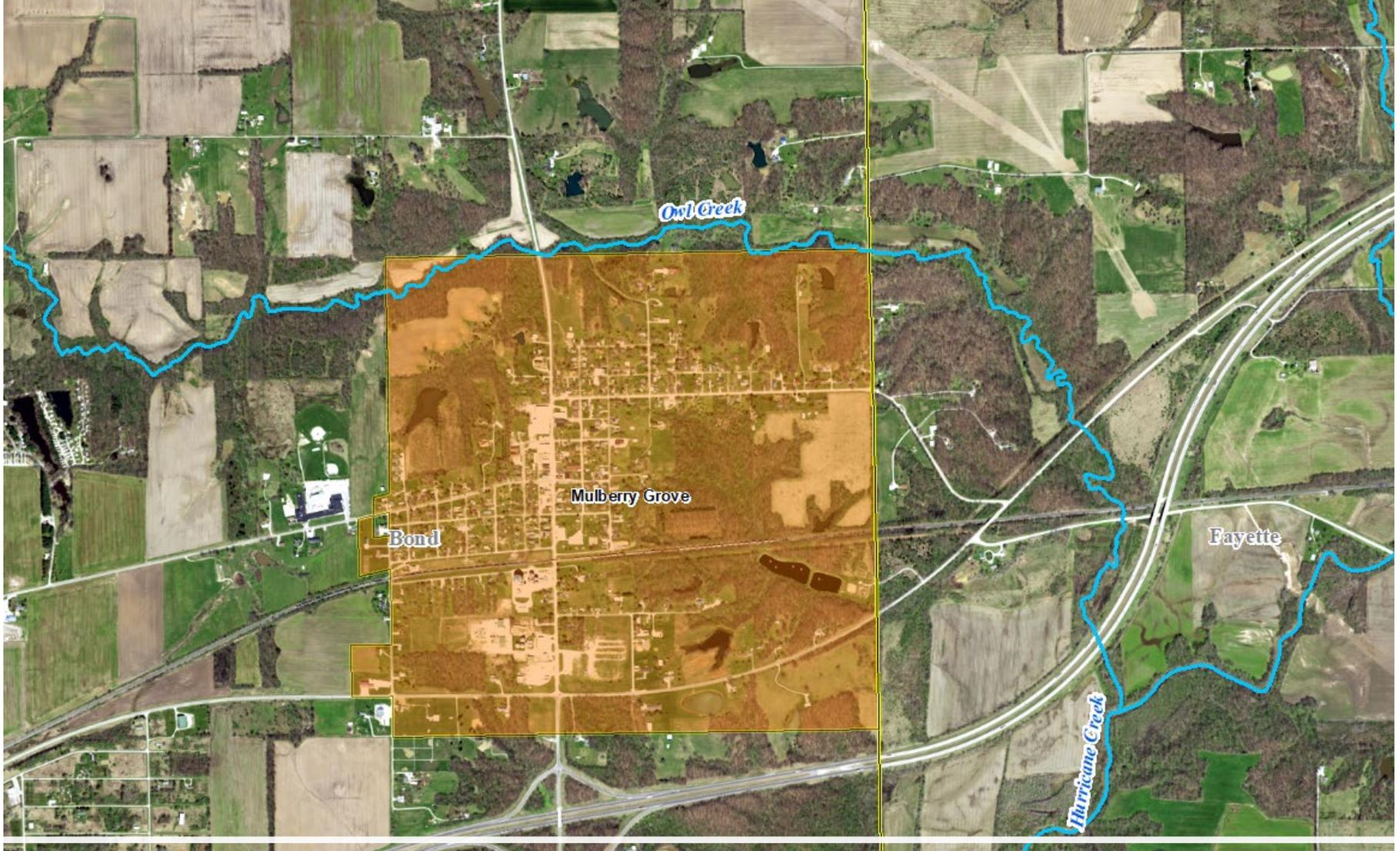
# Donnellson Proposed Studies



# Greenville Proposed Studies



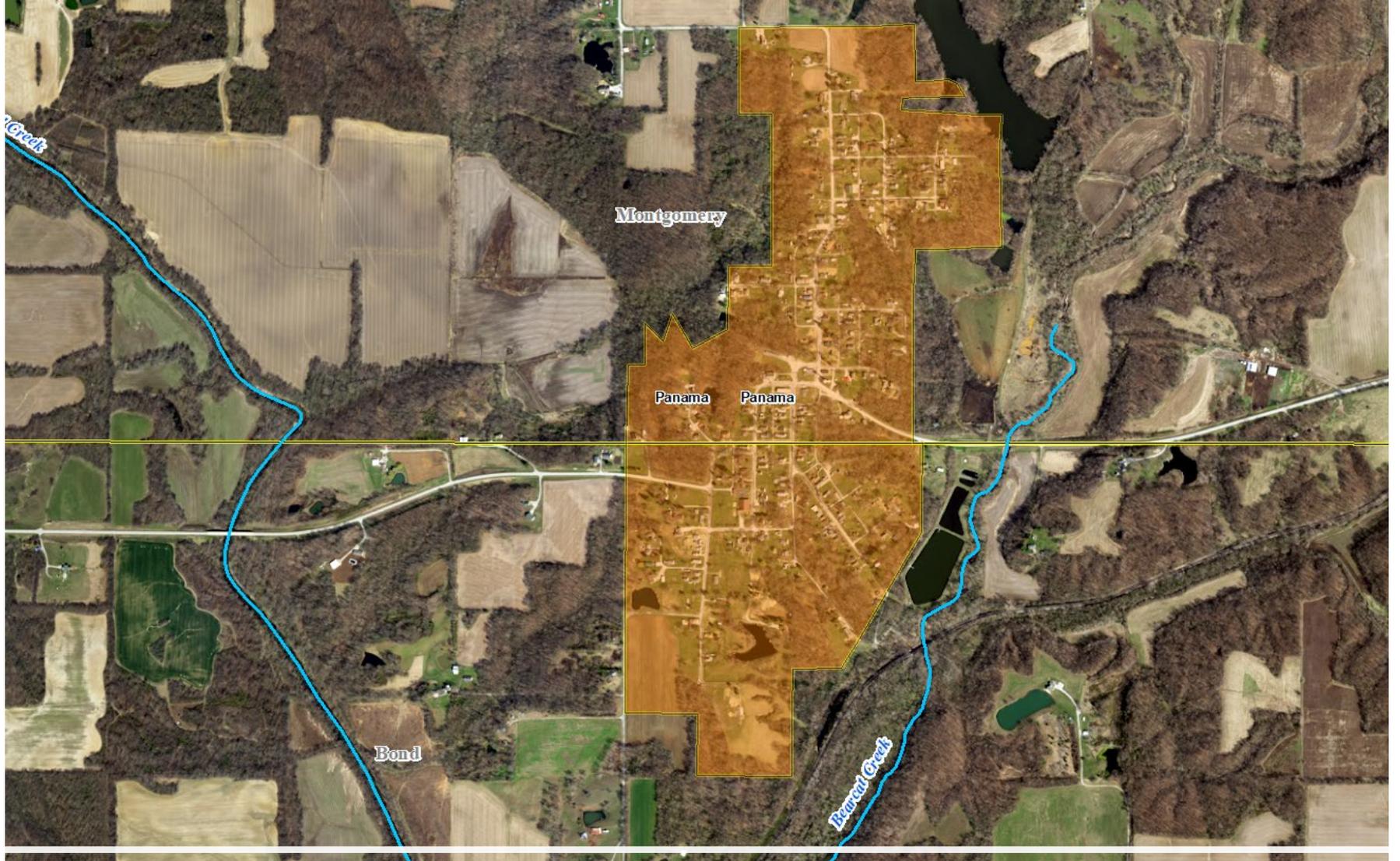
# Keyesport Proposed Studies



# Mulberry Grove Proposed Studies



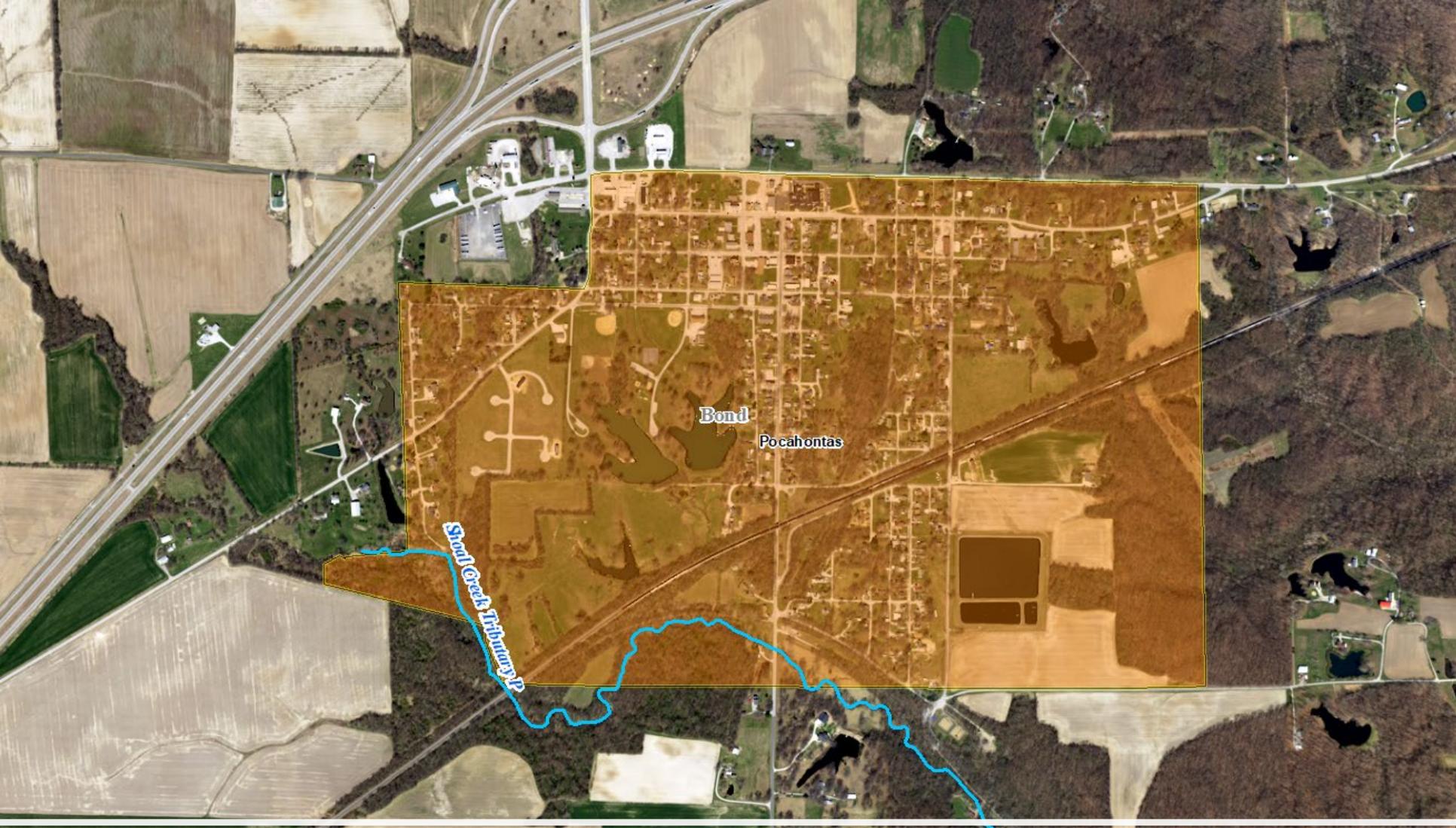
# Old Ripley Proposed Studies



# Panama Proposed Studies



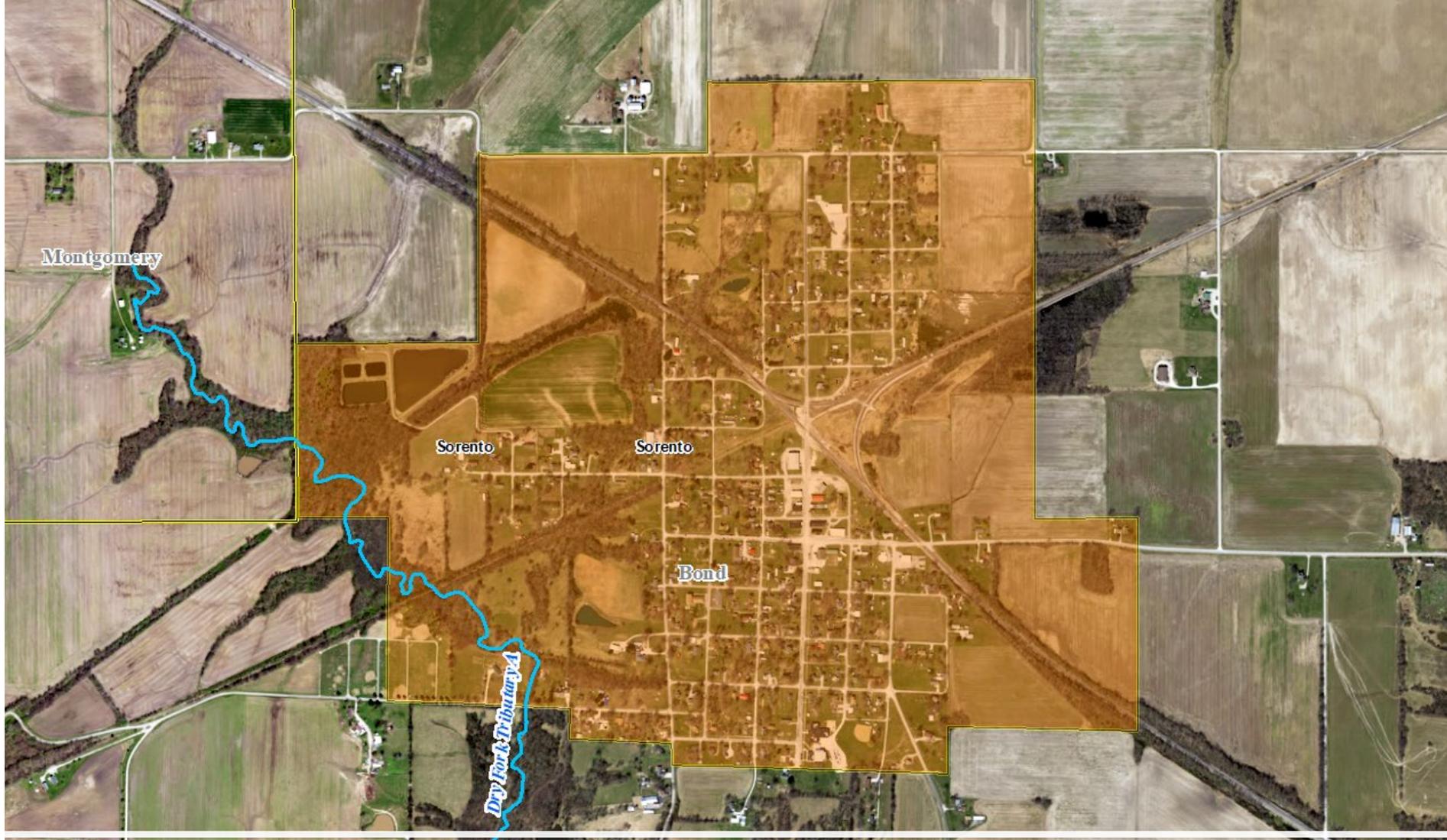
# Pierron Proposed Studies



# Pocahontas Proposed Studies



# Smithboro Proposed Studies



# Sorento Proposed Studies

Communication

# Communication Plan

- Project Initiation Coordination Call (today)
- Proposed Engineering Methods Notification Letter
- Flood Risk Review Meeting
- Data Submission Notification Letter

# Proposed Engineering Methods Letter

- Mailed to community CEOs
- Details the streams to be studied in community and engineering methods used to study each stream
- Informs community about 30-day period to provide comments on the proposed engineering methods for the study stream

# Engineering Methods 101

- Hydrology – Determine 1% Annual Chance (100-Year) stream flows
  - Common Methods
    - USGS Regression Equations
    - HEC-HMS Rainfall Runoff Modeling
    - Stream Gage Analysis
- Hydraulics – Determines 1% Annual Chance (100-Year) flood elevations
  - HEC-RAS Hydraulic Models

# Flood Risk Review Meeting

- In-person meeting to show draft floodplain mapping after floodplain studies developed
- Initiates a 30-day comment period for community to provide feedback on draft floodplain mapping

# Data Submission Notification

- Mailed to community CEOs
- Makes community aware the data collection and analysis phase of the project is concluding and Flood Insurance Rate Map (FIRM) database is being validated by FEMA
- Gives communities 30 days to comment on the data in the FIRM database

# Schedule

# Schedule

- Engineering Notification Letters to communities likely March 2020
- ISWS to finish floodplain studies by Spring 2021
- Flood Risk Review Meeting likely Summer 2021
- Submit Flood Studies to IDNR for State review
- Complete draft FIRM database to conclude data development phase of project by Fall 2022
- Digital Flood Insurance Rate Map Project to follow pending conclusion of data development

# Community Participation

# Community Participation

- Do you have data or information that we can use for the floodplain studies?
  - Flood prone areas
  - Flood photos
  - Historic high water marks
- Stay engaged in the process...
  - Attend meetings
  - Ask questions
- <https://storymaps.arcgis.com/stories/dd283f24754044bc9a66643734f9767d>

# Questions?



**ILLINOIS**

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**PRAIRIE RESEARCH INSTITUTE**

Chris Hanstad, P.E., CFM

hanstad@Illinois.edu – (217) 244-3371

Mary Richardson, CFM

mjr@Illinois.edu – (217) 300-3479

[www.illinoisfloodmaps.org](http://www.illinoisfloodmaps.org)