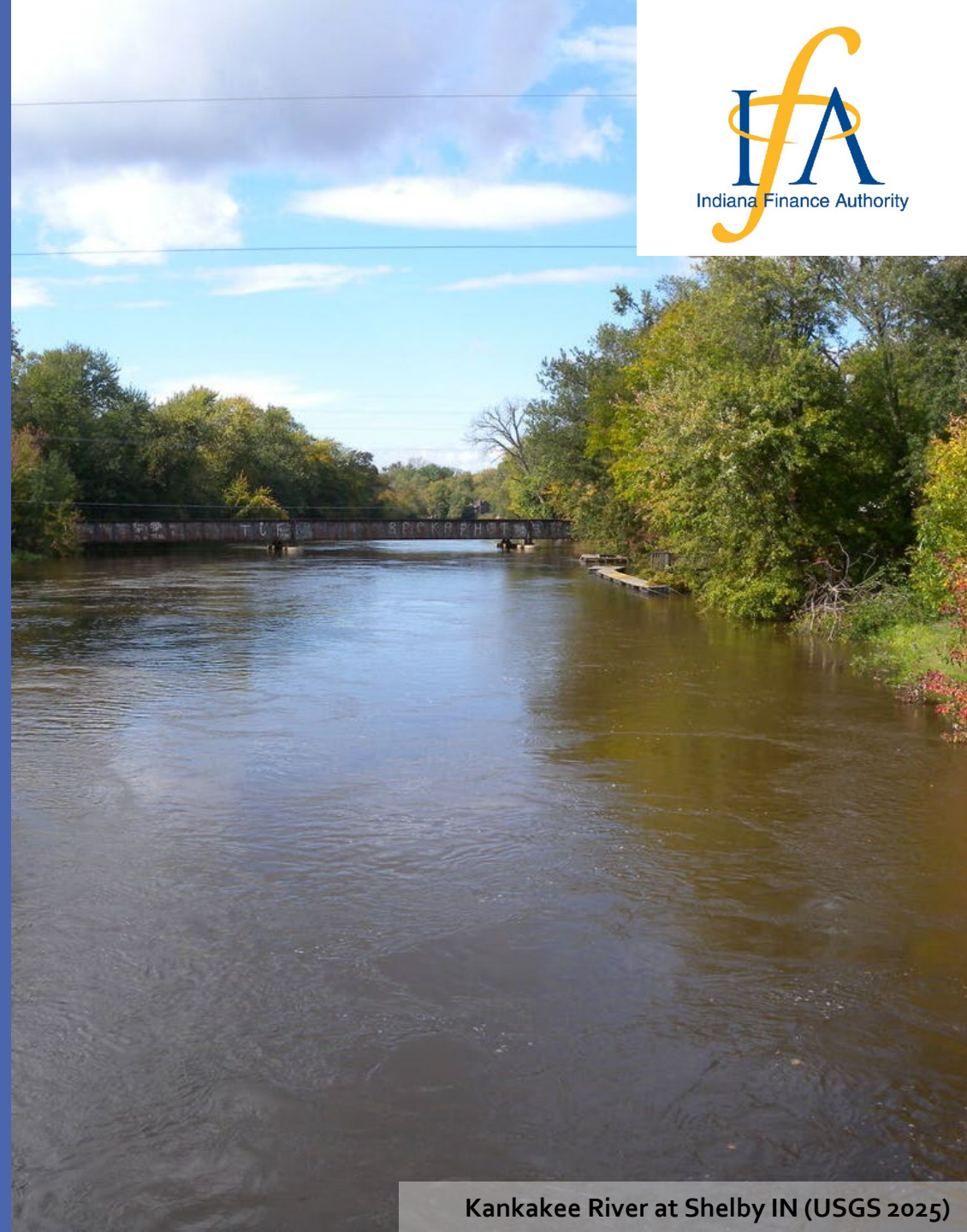


# Kankakee Basin Regional Water Study



Kankakee River at Shelby IN (USGS 2025)

# Agenda

- Statewide Regional Water Studies Program
  - Program Overview
  - Executive Order 25-63
- Kankakee Basin Regional Water Study
  - Study Area and Project Approach
  - Technical Advisors and Project Partners
  - Next Steps
  - For More Information

# IFA Regional Water Studies – General Goals

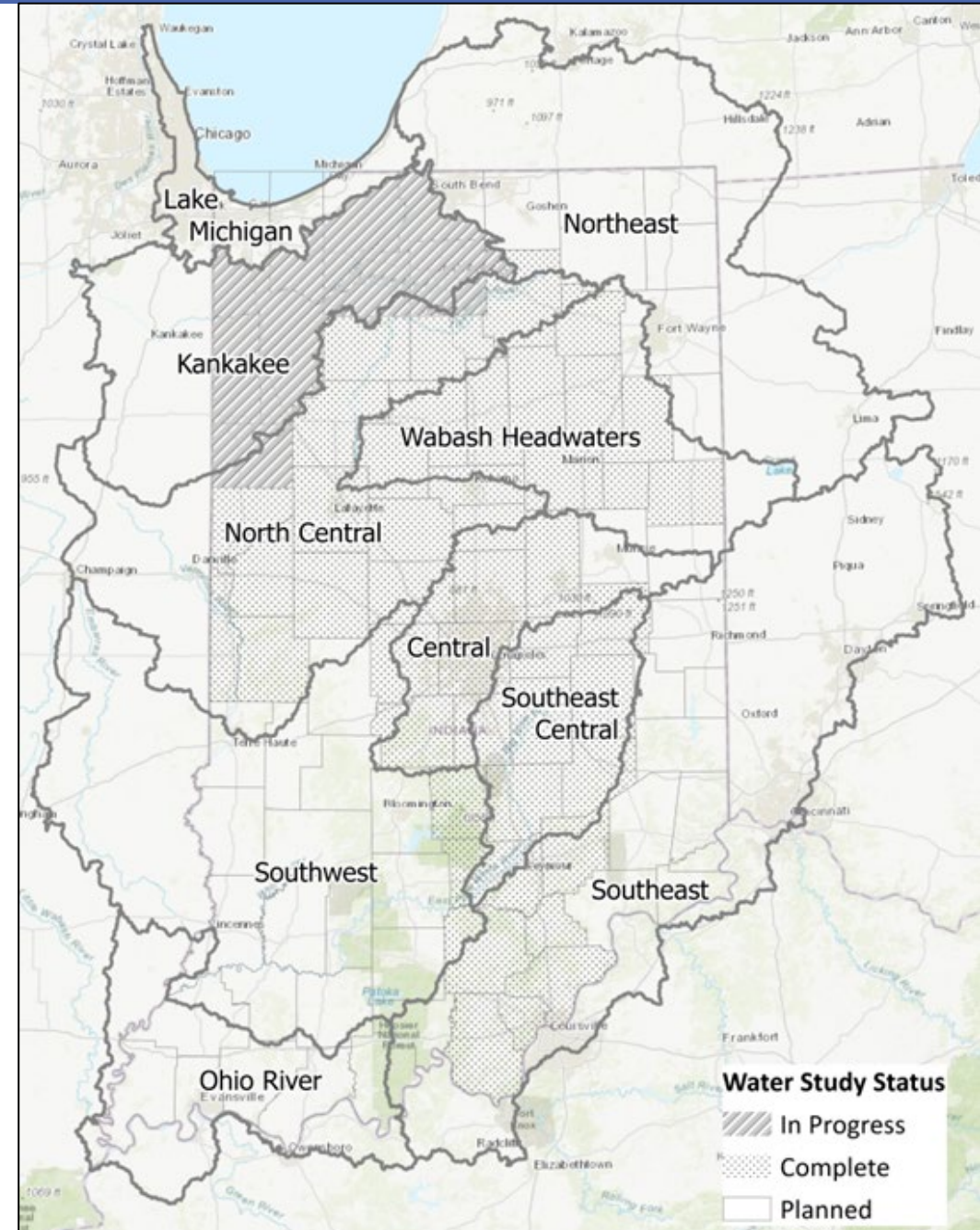
- Statewide understanding of water resources and needs
- Water studies provide data to support water supply planning
- Organized outreach with utilities, public officials, the public, economic development interests, other stakeholders
- Standardized process/comparable across regions

# IFA Regional Water Studies – History

## IC 5-1.2-11.5

<https://iga.in.gov/laws/2024/ic/titles/5#5-1.2-11.5>

- Southeastern Indiana Regional Water Supply Report, 2018
- Central Indiana Water Study, 2021
- Southeast Central (I-74) Water Study, 2024
- Wabash Headwaters Water Study, 2025
- North Central Indiana Water Study, 2025
- *Kankakee Basin Water Study, 2025*





# EO 25-63: Statewide water inventory and management plan

1. Inventory current usage, availability of surface and groundwater resources and forecasting of future demand.
2. Develop a statewide water planning framework at a regional scale.
3. Develop recommendations for enhancement and optimization of Indiana's water resource monitoring networks.
4. Create a centralized, publicly accessible, on-line water data platform.

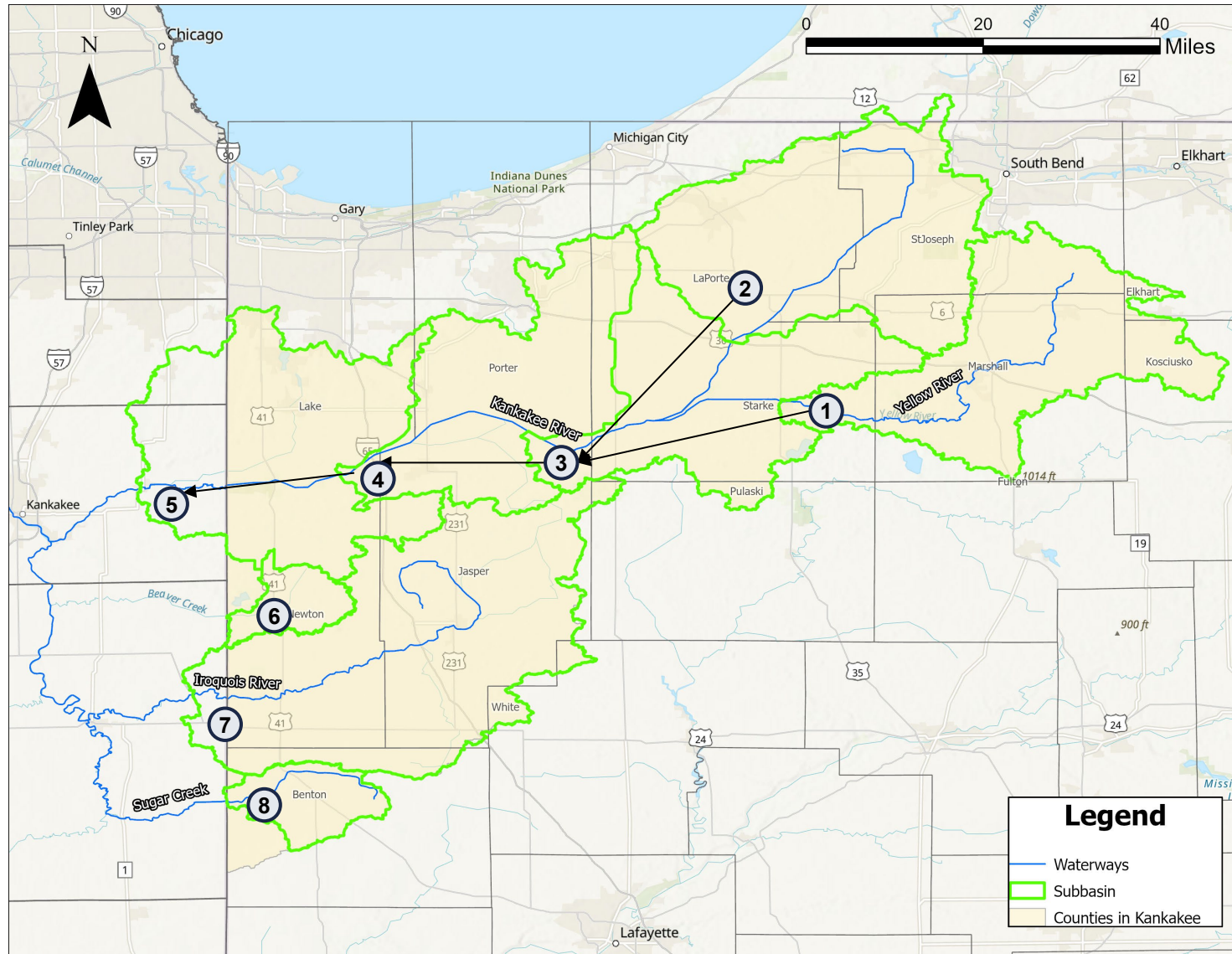
The inventory shall be completed by Oct. 31, 2026 with a report provided to the Governor and Legislative Council by Dec. 31, 2026.

Indiana Water Inventory and Management Plan Email Signup:

<https://in.accessgov.com/dnr/Forms/Page/water/water-plan-emails/o>



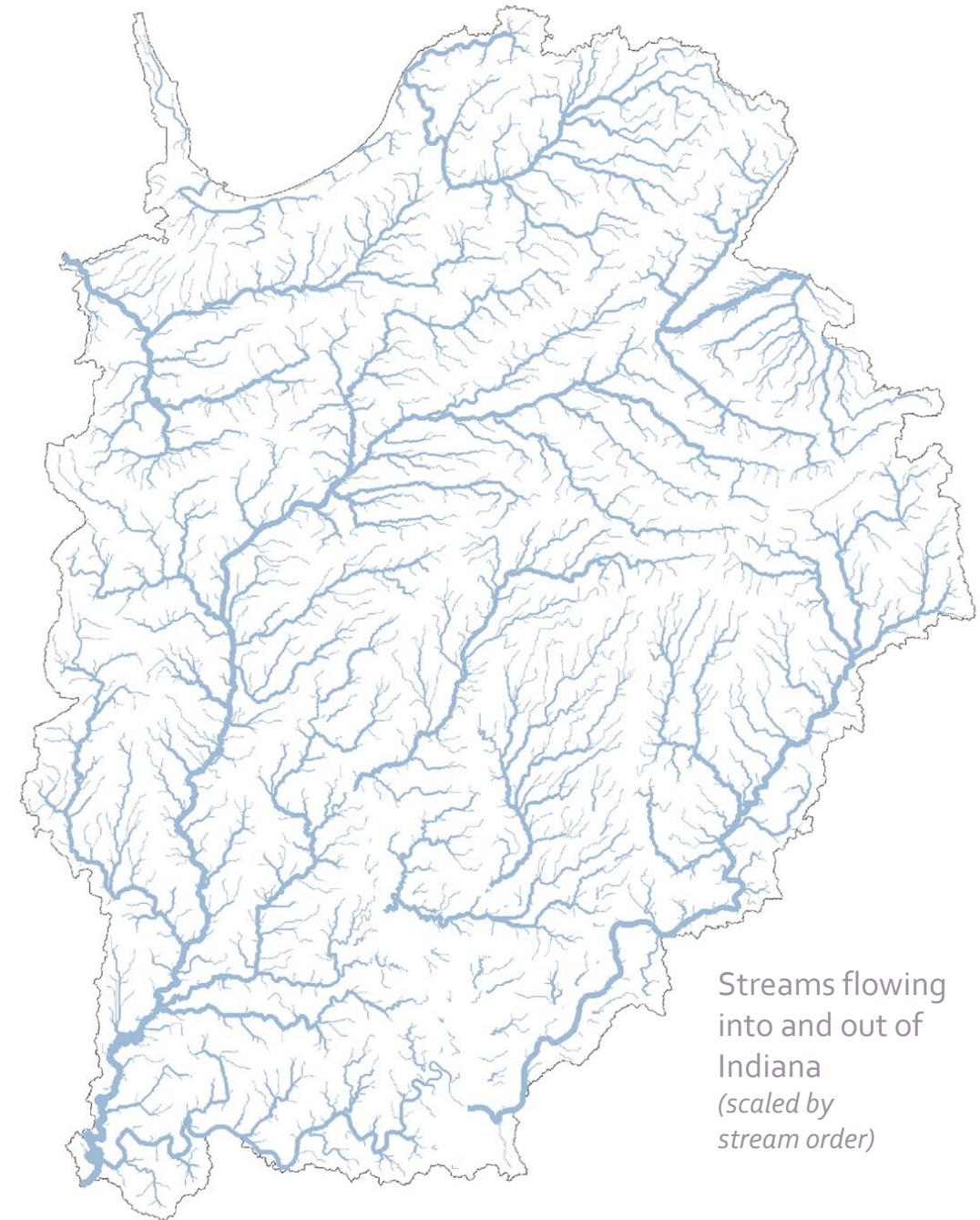
# Kankakee Basin Regional Water Study – Study Area



Subbasin ID	Subbasin Name	USGS Station at Outlet	Station Name
1	Yellow Knox	05517000	YELLOW RIVER AT KNOX, IN
2	Kankakee Davis	05515500	KANKAKEE RIVER AT DAVIS, IN
3	Kankakee Kouts	05517530	KANKAKEE RIVER NR KOUTS, IN
4	Kankakee Shelby	05518000	KANKAKEE RIVER AT SHELBY, IN
5	Kankakee Momence	05520500	KANKAKEE RIVER AT MOMENCE, IL
6	Beaver	Synthetic	-
7	Iroquois	05525000	IROQUOIS RIVER AT IROQUOIS, IL
8	Sugar	Synthetic	-

# Approach: Data-driven and Science-based

- Studies are supported by an **Advisory Board** with representatives from state and federal agencies, stakeholders from water-use sectors, and universities
- **Regional approach** allows us to focus on characteristics important to each region, incorporating region-specific economic factors, land use, water use, and geological factors
- Recognize administrative (i.e., county) boundaries, but **primarily focused on hydrology** (both surface and groundwater) at subbasin scale



Streams flowing  
into and out of  
Indiana  
(scaled by  
stream order)

# Scope of Work



**Phase 1:** Fifty-year water demand forecast

**Phase 2:** Fifty-year water supply availability forecast

**Phase 3:** Comparison of water demand and availability forecasts to identify whether enough water is available to meet the 50-year Public Water Supply needs in the region

Recommended next steps



# Approach: Water Demand - Historical

- Based on historical data collected by the IDNR (1985-2023)
- Water-use sectors:
  - Public supply (PS)
  - Industrial (IN)
  - Energy (EN)
  - Irrigation (agricultural and turf) (IR)
  - Rural (livestock, fisheries) (RU)

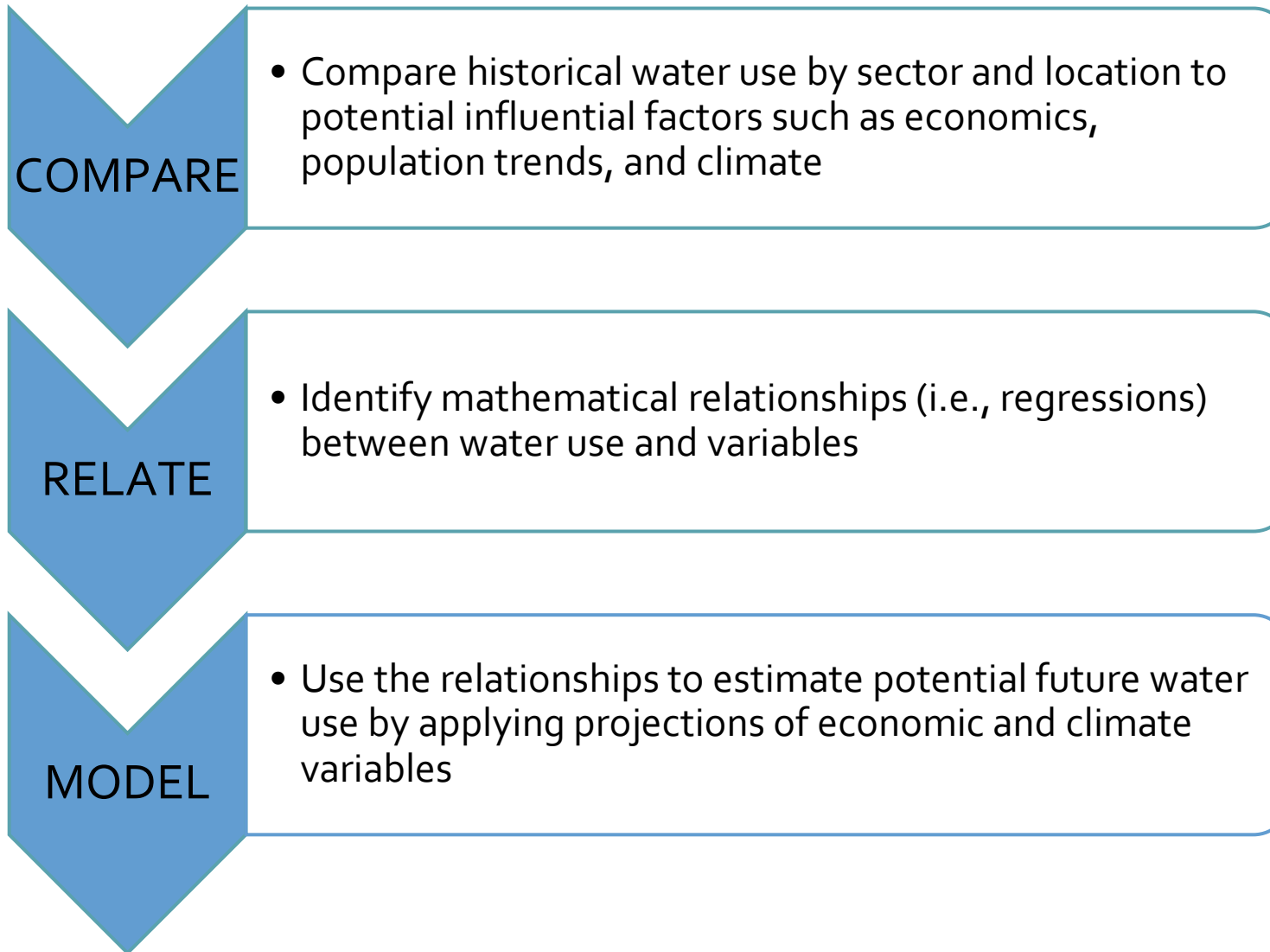
Residential wells (estimated)

Smaller livestock operations (estimated)

## Assumptions:

- Water withdrawals are a proxy for water demand (treated as equivalent)
- Reported water use for significant water withdrawal facilities (SWWF) is representative of all water use
- Self-supplied residents all use water the same way

# Approach: Water Demand – Future Forecasts



## Assumptions:

- Sectors will use the same water sources (groundwater or surface water) in the future as in the past
- Future climate models provide an opportunity to project the likely hydrological response to precipitation and temperature

# Project Partners

## Advisory Committee



## Additional Data & Technical Support



# Study Outcomes

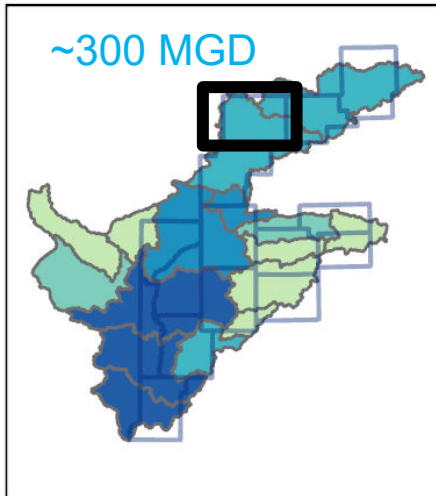
- Written report, anticipated December 2025, including:
  - Executive summary
  - Historical and projected future water demand by county and by subbasin
  - Historical and projected future water availability by subbasin



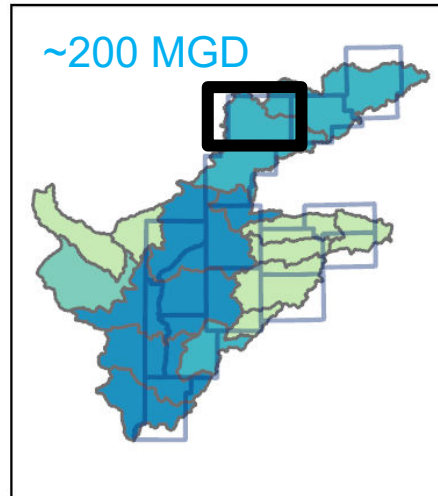
# Example Output from North Central Indiana RWS - Projected Future Water Availability (Pulaski County)

**'Typical' Years**  
(median)  
Fall (Sep-Nov)

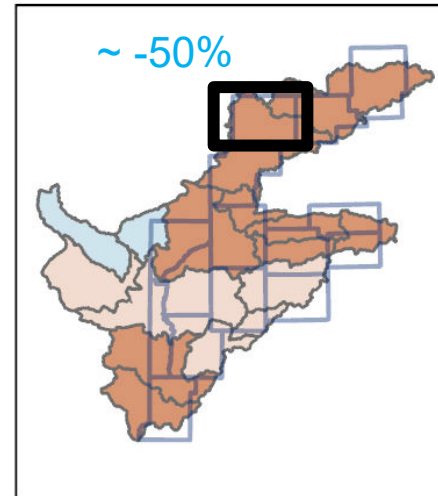
**Historical**



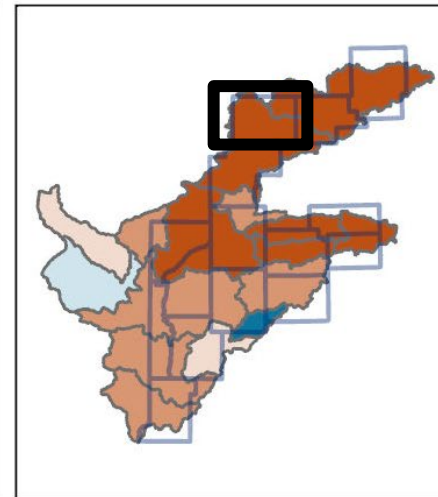
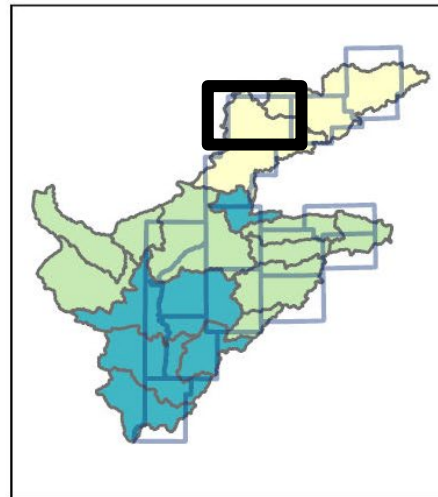
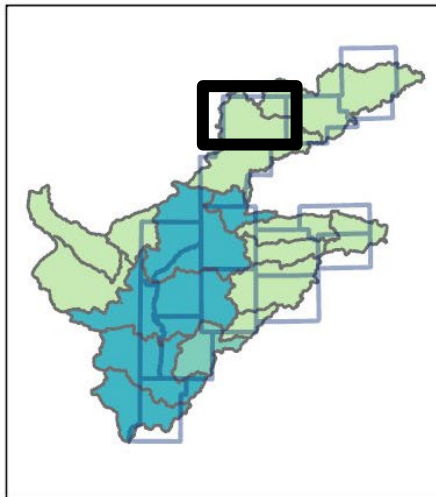
**Future  
(2060s)**



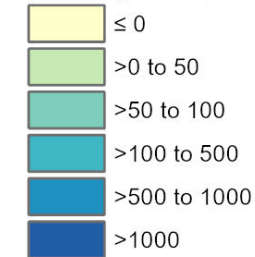
**Change  
(%)**



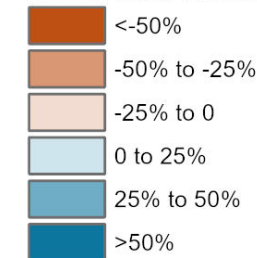
**Drought Years**  
(95<sup>th</sup> percentile)  
Fall (Sep-Nov)



Cumulative excess water availability  
(million gallons per day)



Future Change in Cumulative  
Excess Water Availability

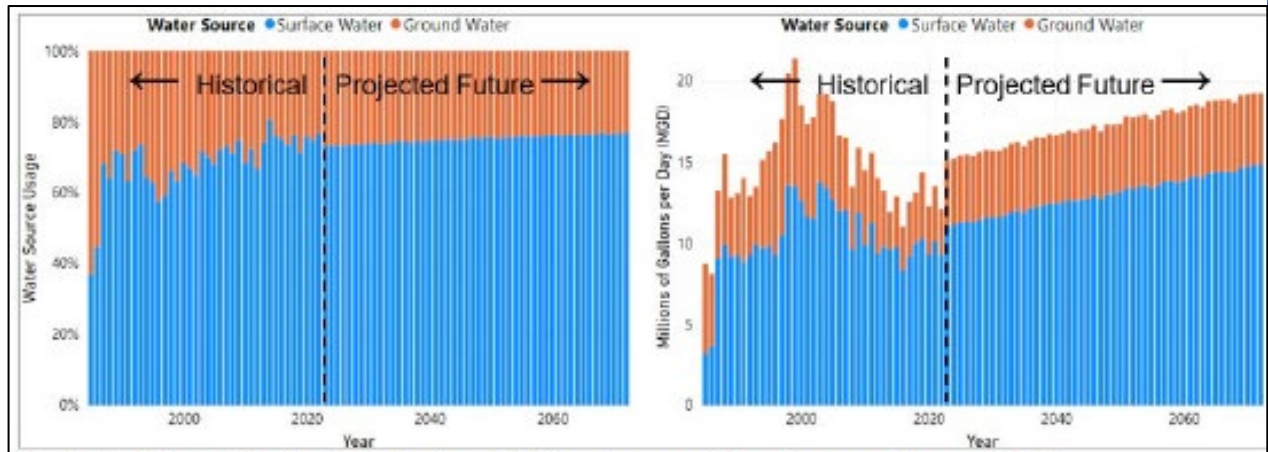
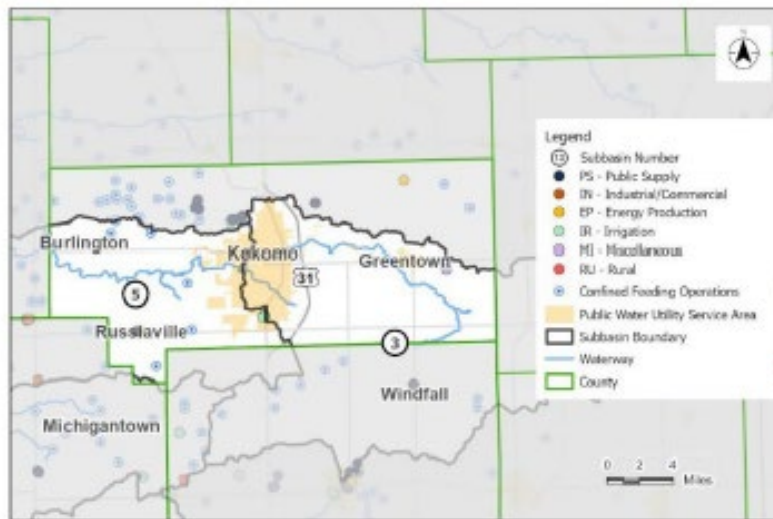


# Example Output from North Central Indiana RWS – County Summaries (Howard County)

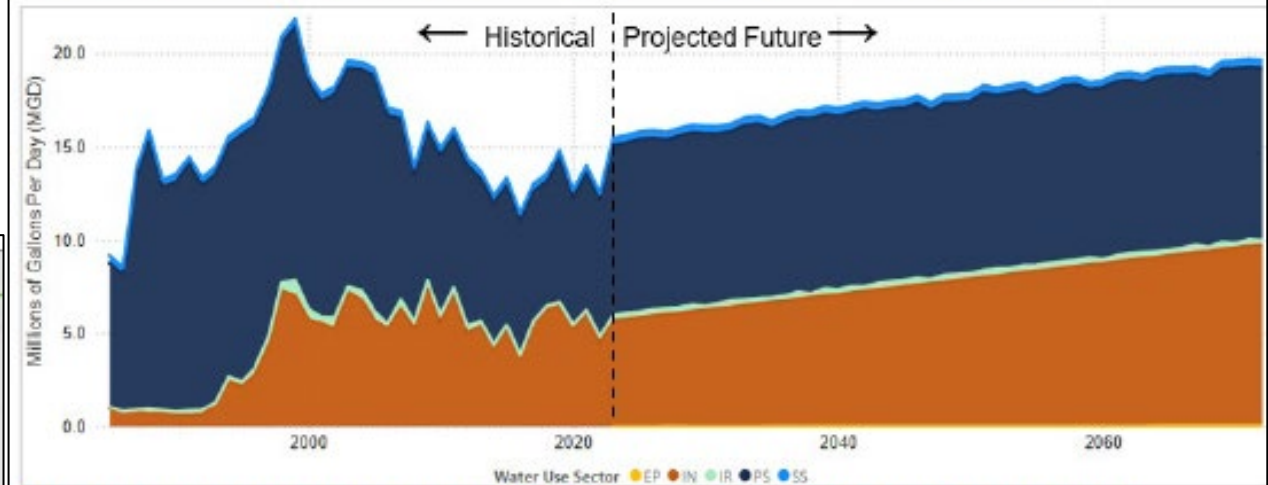
## Howard County



Subbasin 3: Wildcat Kokomo  
Subbasin 5: Wildcat Lafayette



Historical and Projected Future Water Demand by Source Type (MGD)



Historical and Projected Future Water Demand by Water Use Sector (MGD)

# Project Stakeholders

- Project stakeholders include:
  - Utilities
  - Economic Development Leaders
  - Public Officials
  - Other Significant Water Users
- To continue to participate:
  - Upcoming project updates and presentations
  - Ongoing stakeholder interviews (updated service areas, significant change in water usage, significant plans, additional data, etc.)

# Kankakee Basin Regional Water Study

<https://www.in.gov/ifa/regional-water-studies/kankakee-basin-regional-water-study/>

IFA / Regional Water Studies / Kankakee Basin Regional Water Study

## Kankakee Basin Regional Water Study

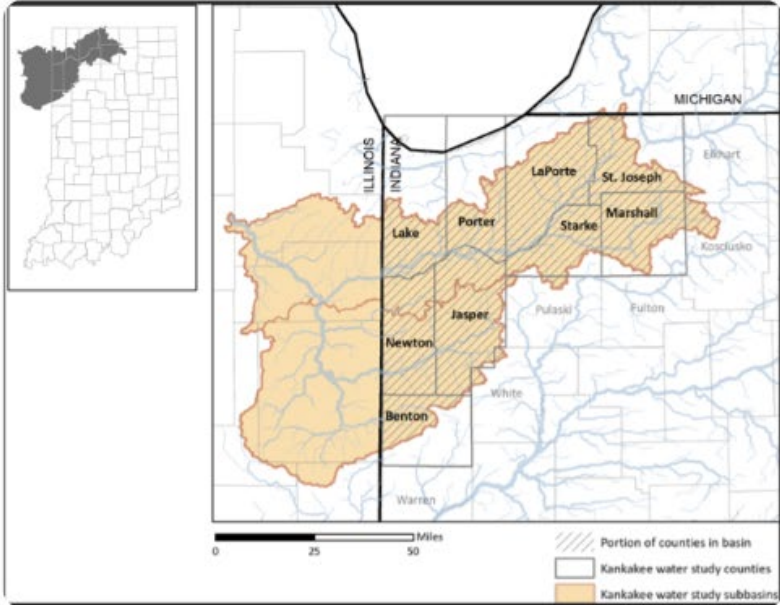
### Overview

The primary goal of the IFA's Kankakee Basin Regional Water Study is to improve the understanding of estimated future groundwater and surface water demand and availability within the public water utility sector so that a gap analysis can be conducted. The questions the study is looking to answer include: how much water is currently available? Will there be enough water to meet the 50-year Public Water Supply needs?

The Study will examine the 50-year demand and supply availability in the Kankakee River Basin, which is primarily located in Benton, Newton, Jasper, Starke, Marshall, Lake, Porter, LaPorte, and St. Joseph counties.

A final report will be completed by January 2026.

Updates will be posted here as they are made available.



The map displays the Kankakee River Basin, which spans across several counties in Indiana. The study area is highlighted in orange, covering Benton, Newton, Jasper, Starke, Marshall, Lake, Porter, LaPorte, and St. Joseph counties. A legend indicates that the orange shaded areas represent the 'Kankakee water study subbasins', while the white areas represent 'Kankakee water study counties'. The map also shows the surrounding states of Illinois and Michigan, and the Kankakee River. A scale bar at the bottom indicates distances in miles (0, 25, 50). An inset map shows the location of the study area within the state of Indiana.





# Indiana Regional Water Studies

<https://www.in.gov/ifa/regional-water-studies>

- Goals of the studies and study area maps
- FAQs
- Project information updates, presentations, and press releases
- Related information (e.g., water and climate monitoring networks)

Please send questions or feedback about the studies to:

[WaterResources@ifa.in.gov](mailto:WaterResources@ifa.in.gov)

# Thank You

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[Eric.Hersh@stantec.com](mailto:Eric.Hersh@stantec.com)

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Project Manager  
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Kankakee River at Shelby IN (USGS 2025)