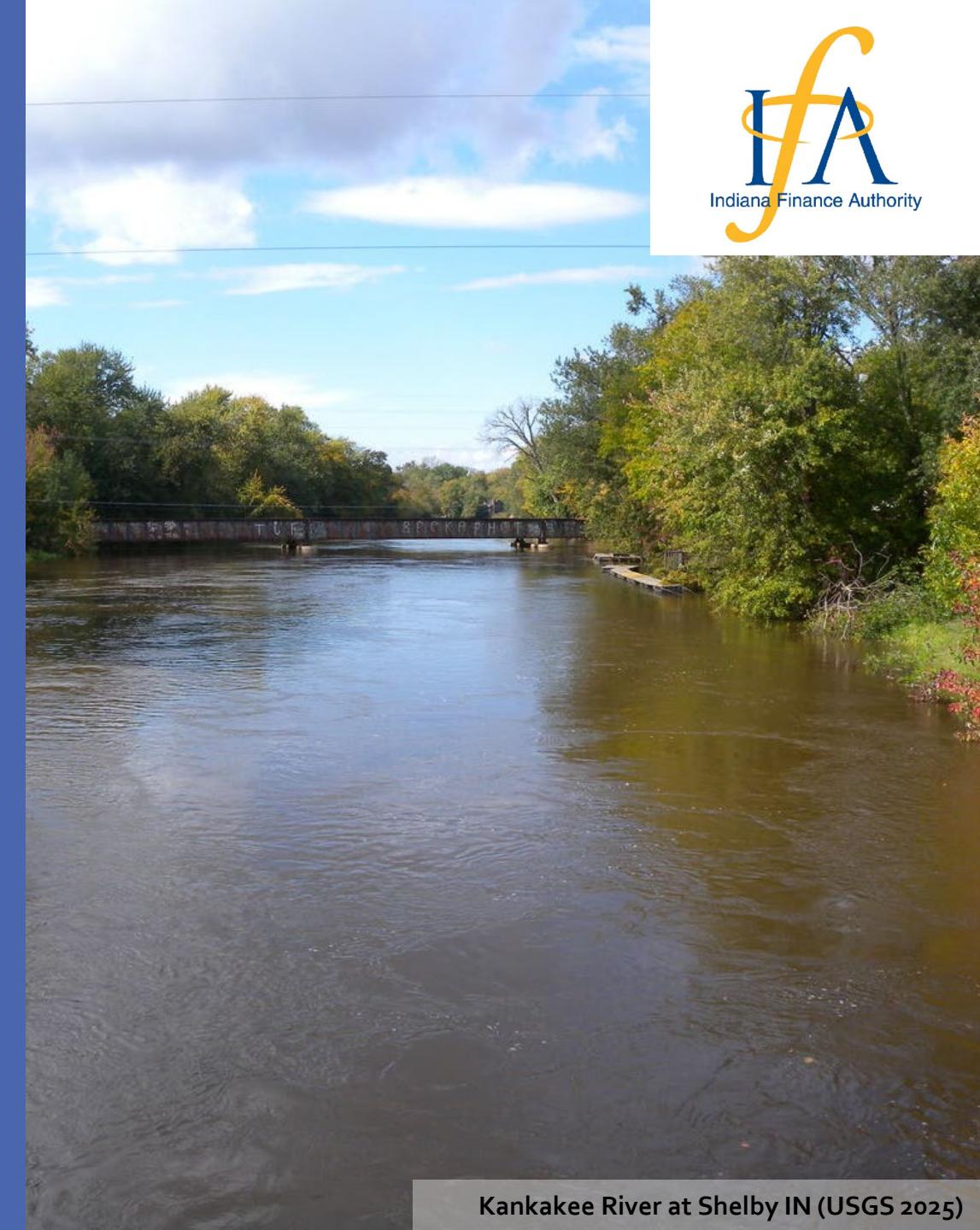


Kankakee Basin Regional Water Study



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

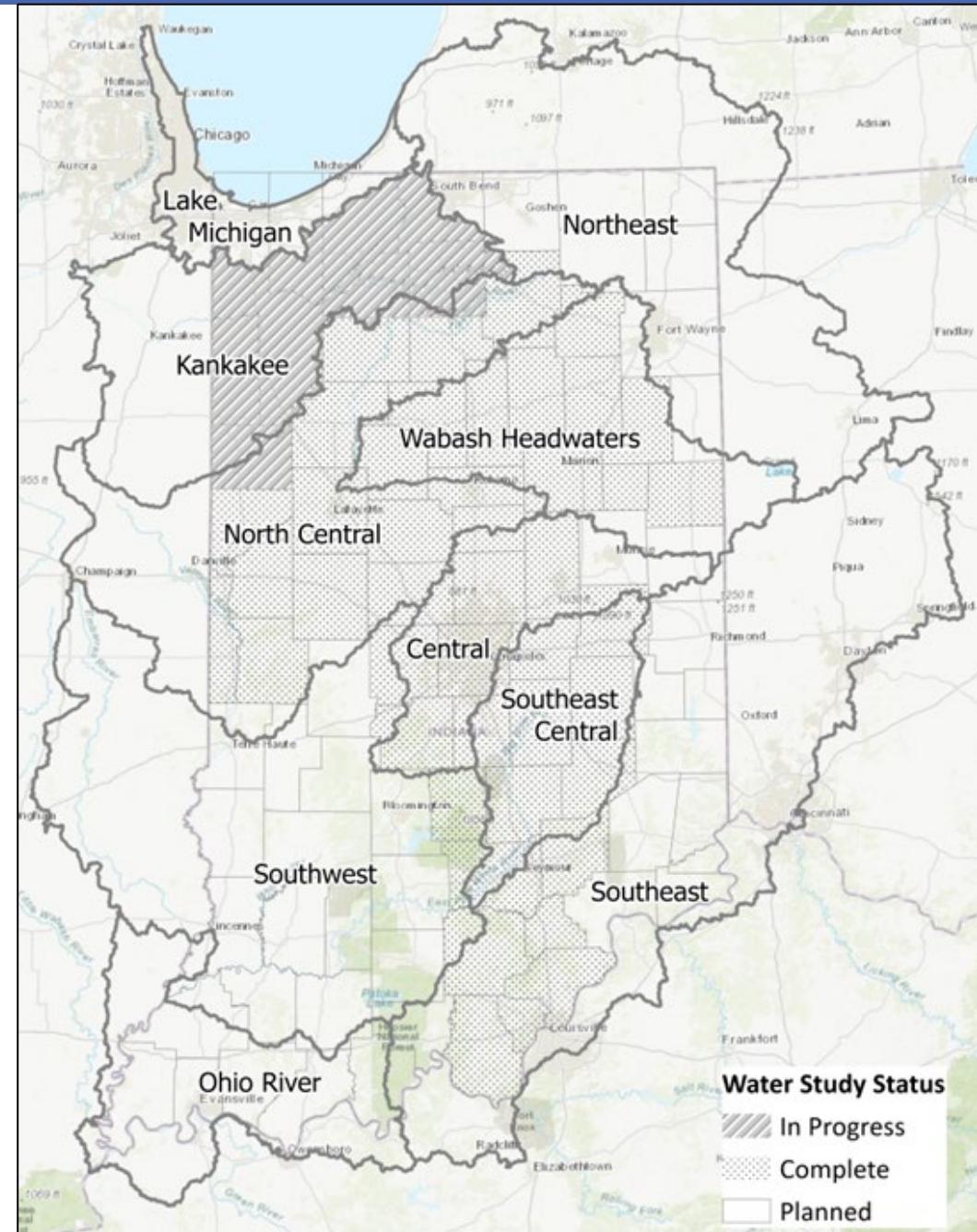
- Statewide understanding of water resources and needs
- Water studies provide data to support water supply planning
- Organized outreach with utilities, public officials, the public, economic development interests, other stakeholders
- Standardized process/comparable across regions

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

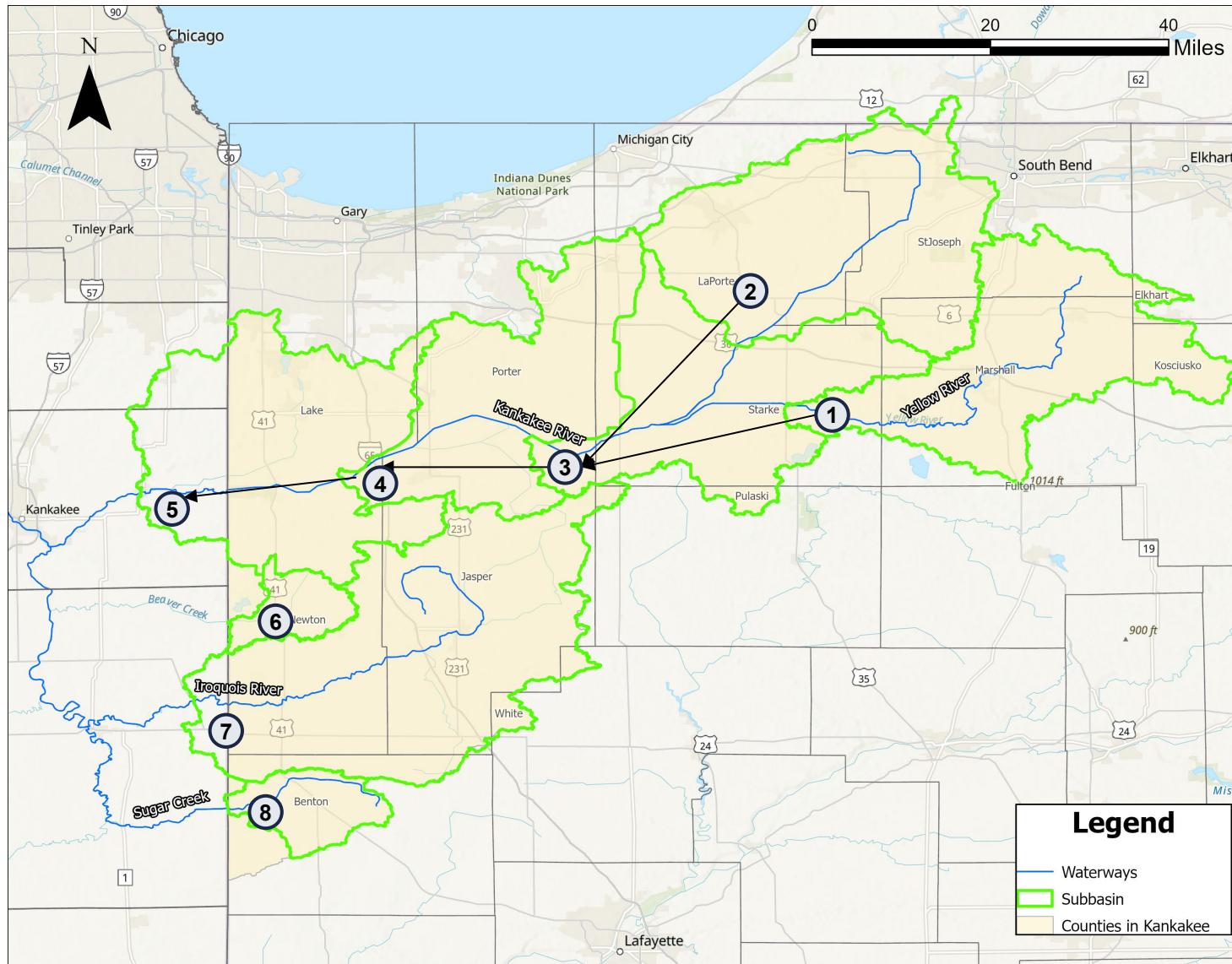
1. Inventory current usage, availability of surface and groundwater resources and forecasting of future demand.
2. Develop a statewide water planning framework at a regional scale.
3. Develop recommendations for enhancement and optimization of Indiana's water resource monitoring networks.
4. Create a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



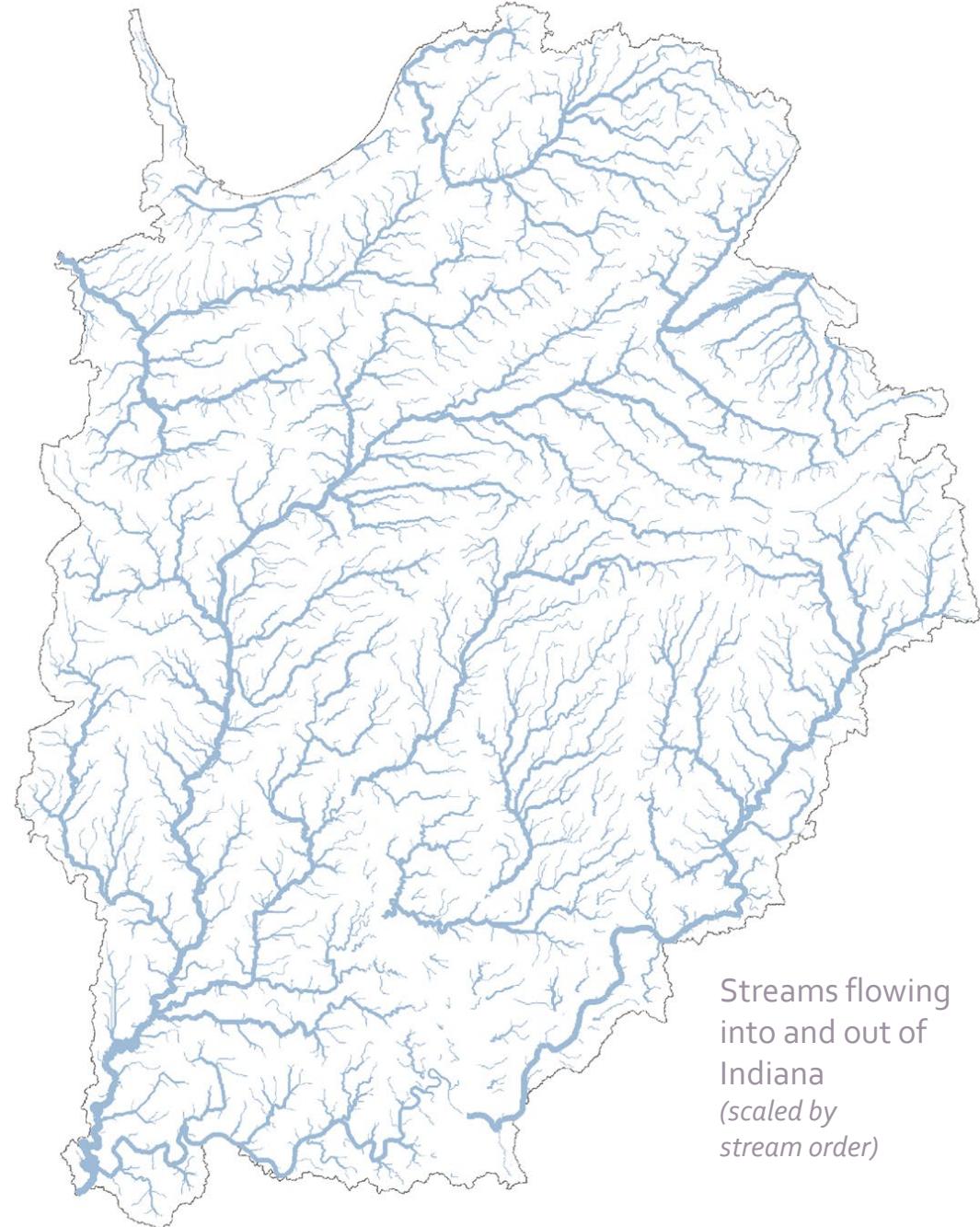
Kankakee Basin Regional Water Study – Study Area



| 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



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

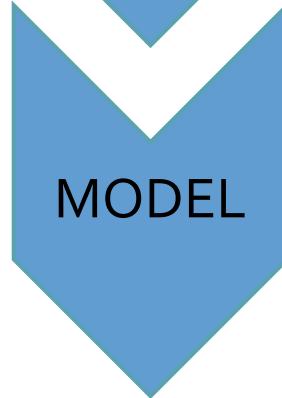
Approach: Water Demand – Future Forecasts



- Compare historical water use by sector and location to potential influential factors such as economics, population trends, and climate



- Identify mathematical relationships (i.e., regressions) between water use and variables



- Use the relationships to estimate potential future water use by applying projections of economic and climate variables

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

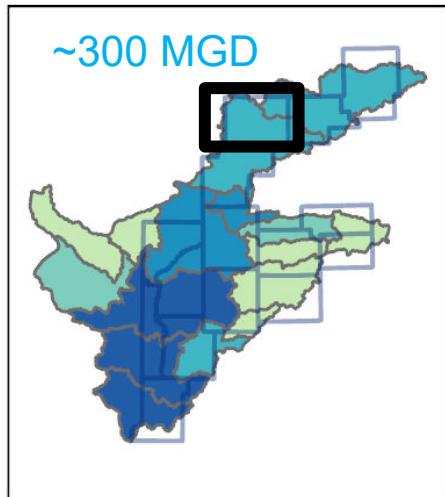
- Written report, anticipated December 2025, including:
 - Executive summary
 - Historical and projected future water demand by county and by subbasin
 - Historical and projected future water availability by subbasin

Example Output from North Central Indiana RWS - Projected

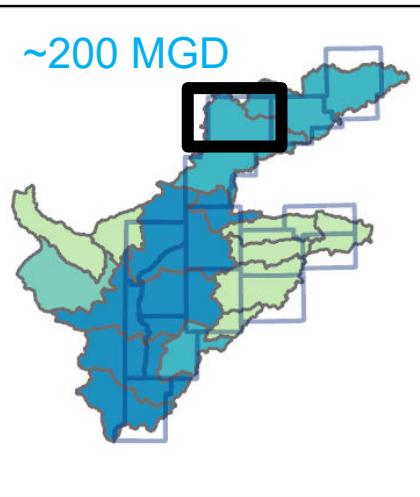
Future Water Availability (Pulaski County)

Historical

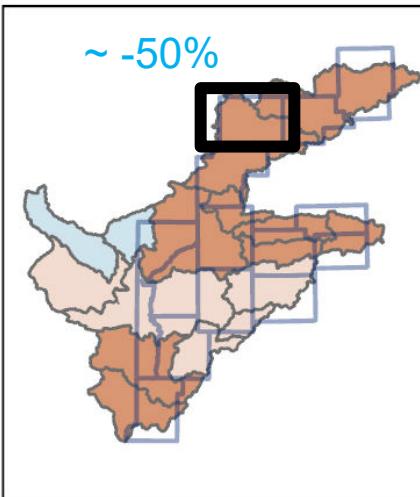
'Typical' Years
(median)
Fall (Sep-Nov)



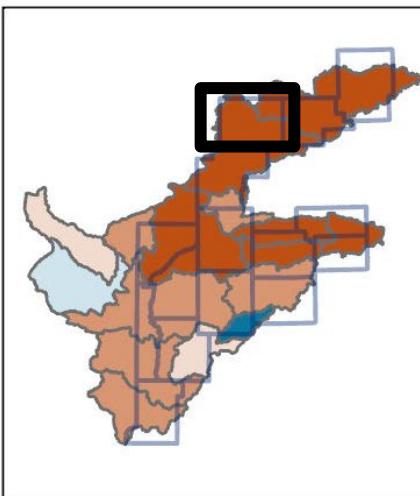
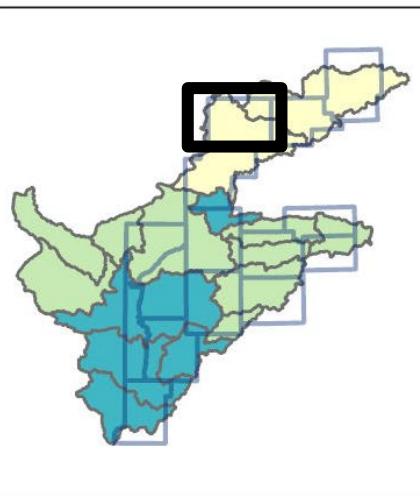
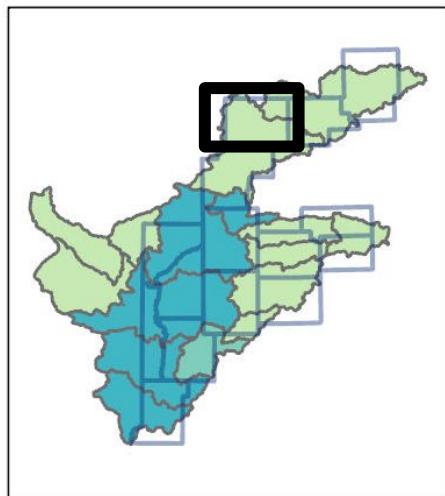
Future (2060s)



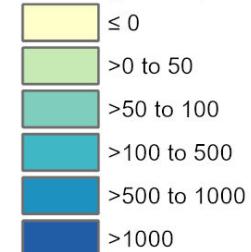
Change (%)



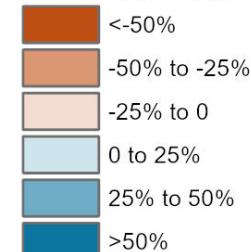
Drought Years
(95th percentile)
Fall (Sep-Nov)



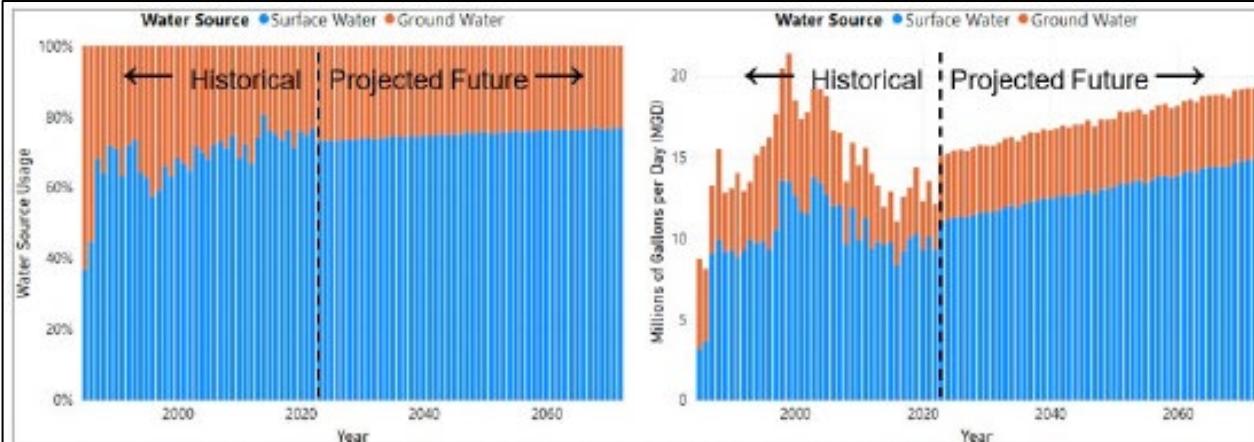
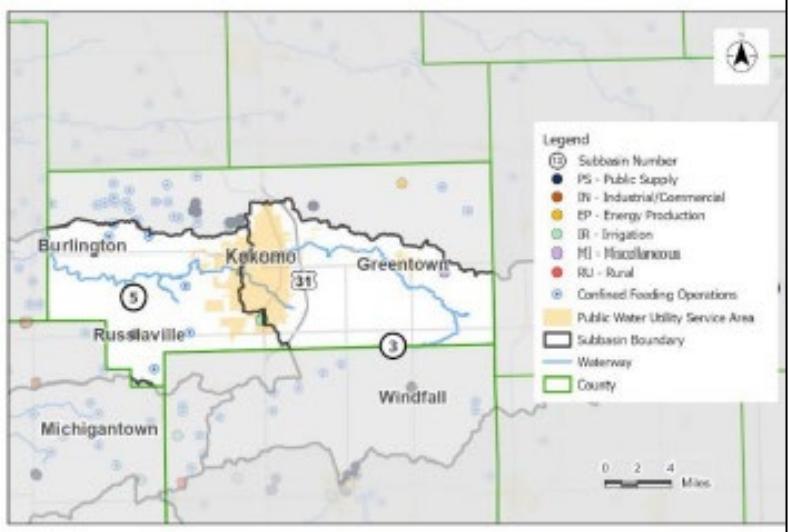
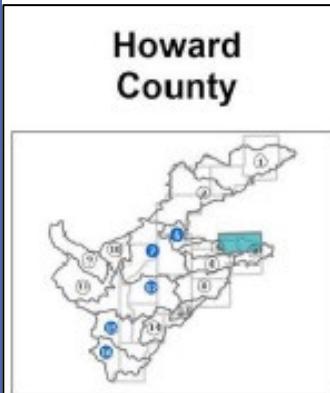
Cumulative excess water availability
(million gallons per day)



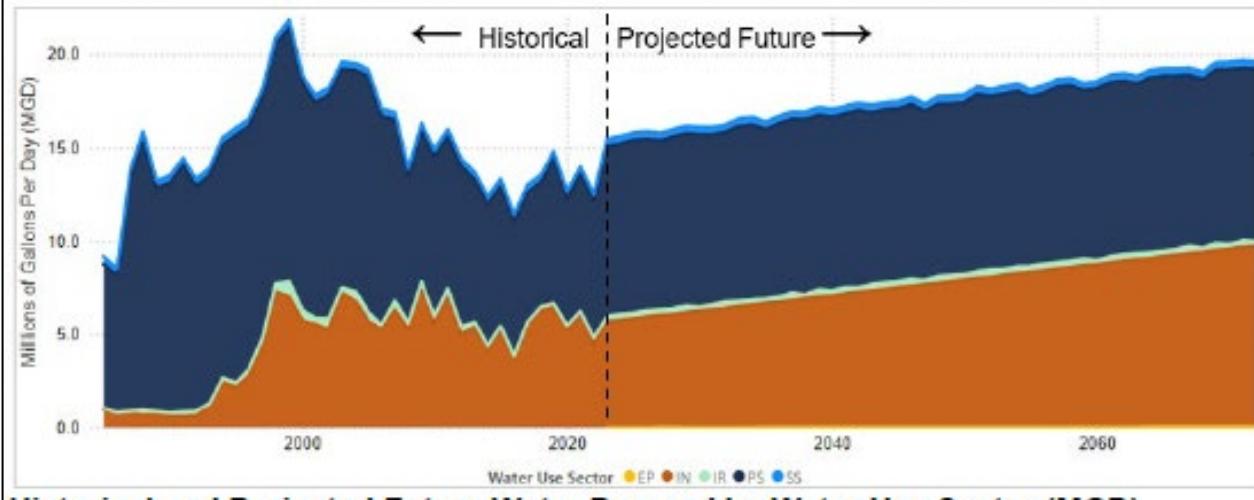
Future Change in Cumulative
Excess Water Availability



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



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

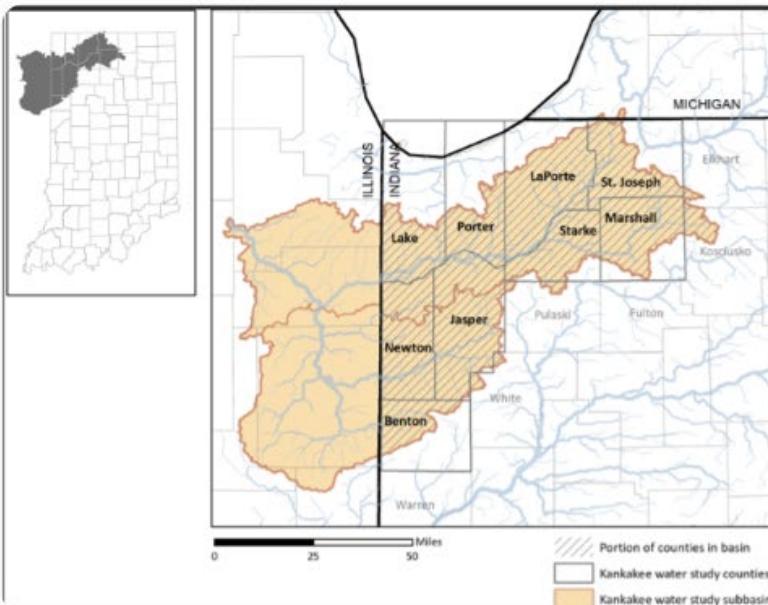
Overview

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.





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

Thank You

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