

Ohio River and Southeast Regional Water Study

August 18, 2025





State Revolving Fund Loan Program

SFY 2025

31 Drinking Water Loans

\$437 Million

Executive Order 25-63 (2025)

- Water data inventory (i.e., regional water studies)
 - Water data collection networks
 - Water data sharing
 - Framework for water planning
- Deadline (October 2026)
- Remainder of state

List of Studies

Four regions completed (2021-2025)

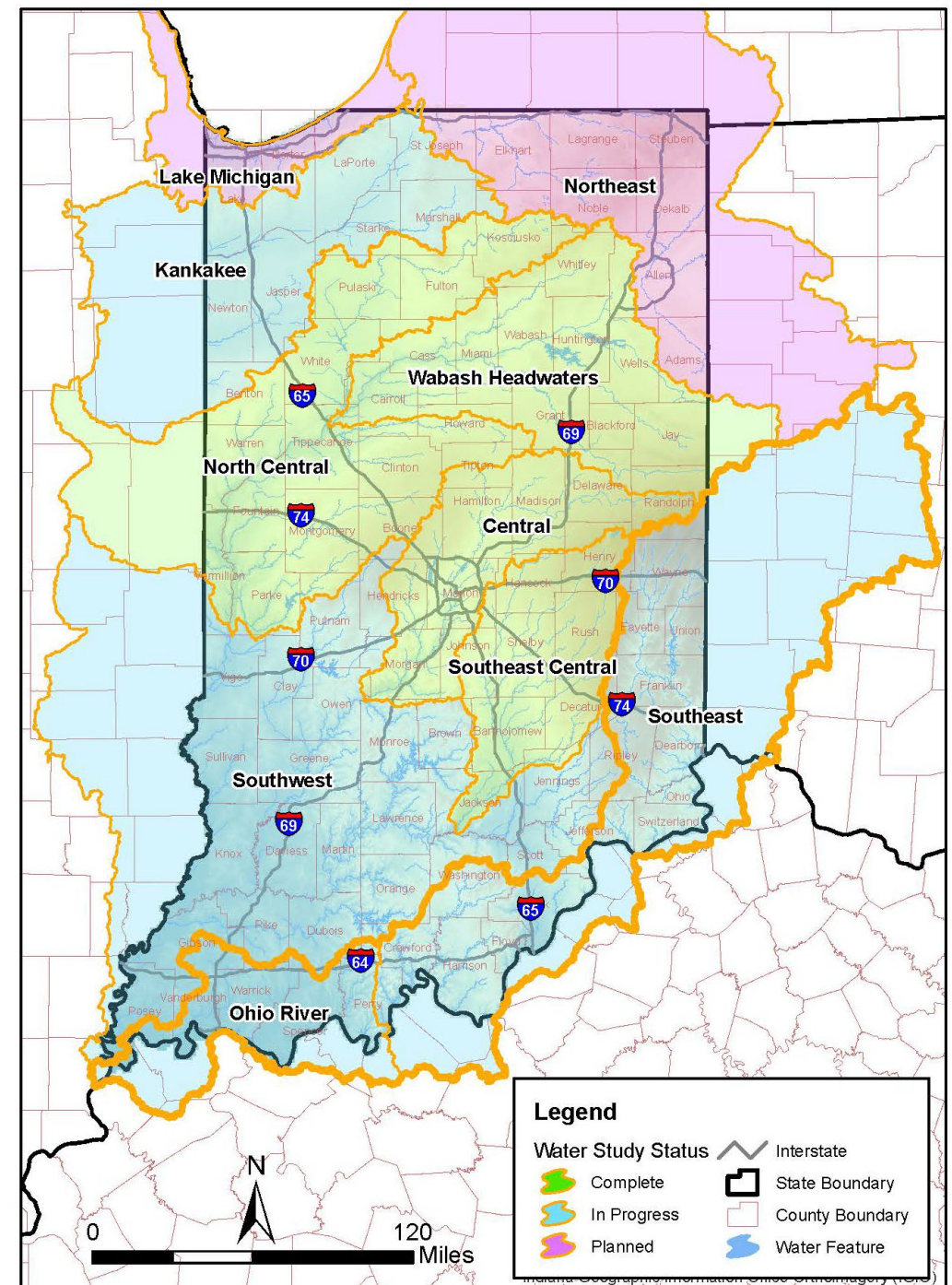
- Central Indiana
- Southeast Central
- Wabash Headwaters
- Wabash North Central

Four regions in progress (2025)

- Kankakee (kick off 5/21)
- Ohio River (kick off 8/18)
- Southeast (kick off 8/18)
- Southwest (kick off September TBD)

Two planned for Fall 2025

- Northeast
- Lake Michigan (regional summary study)



Ohio River and Southeast Indiana Regional Water Study



Presented to Regional Stakeholders

August 18, 2025





Agenda

1

Project Team Introduction

2

Previous Experience

3

Regional Study Approach and Structure

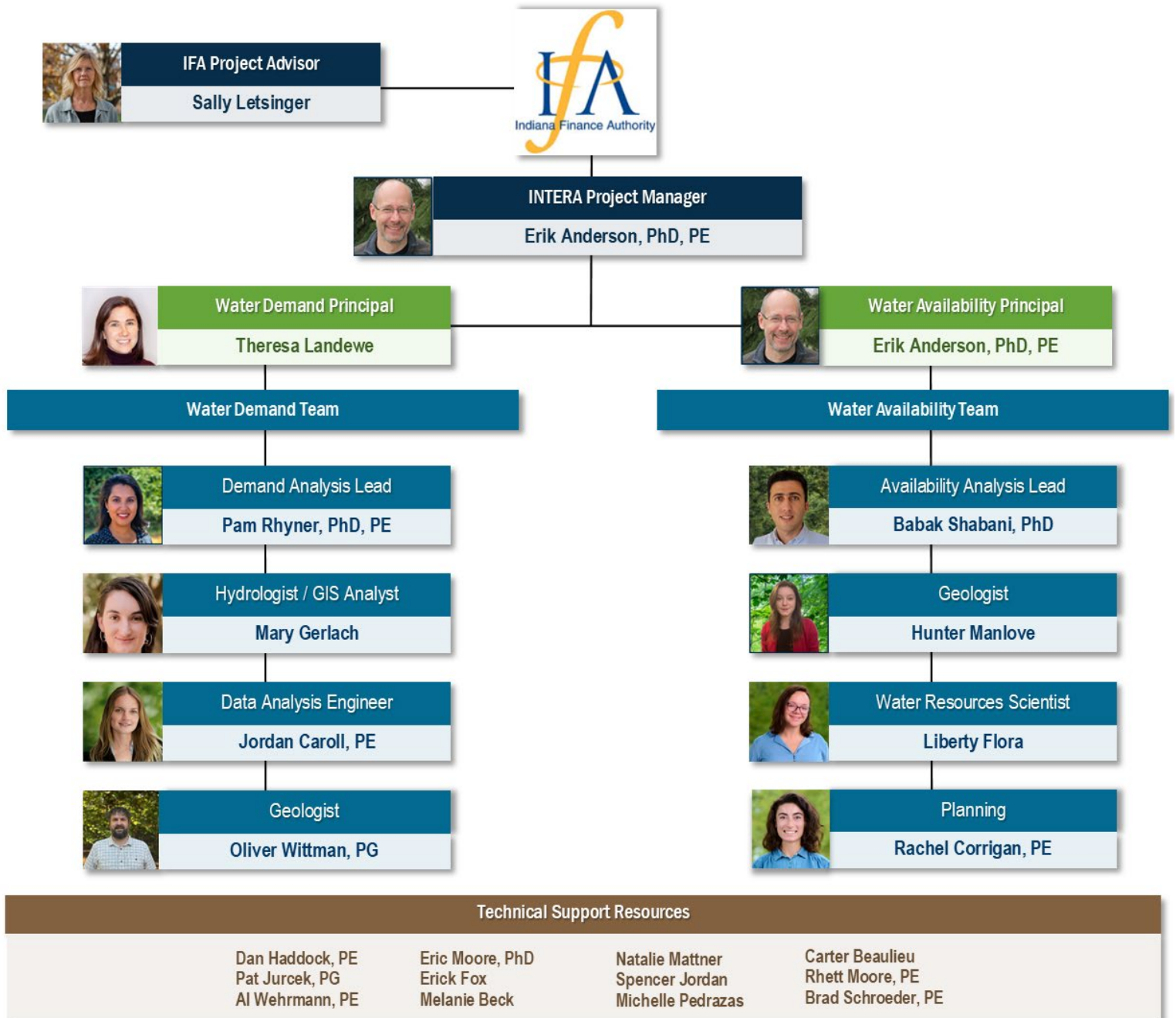
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Ohio River and Southeast Regional Study Specifics

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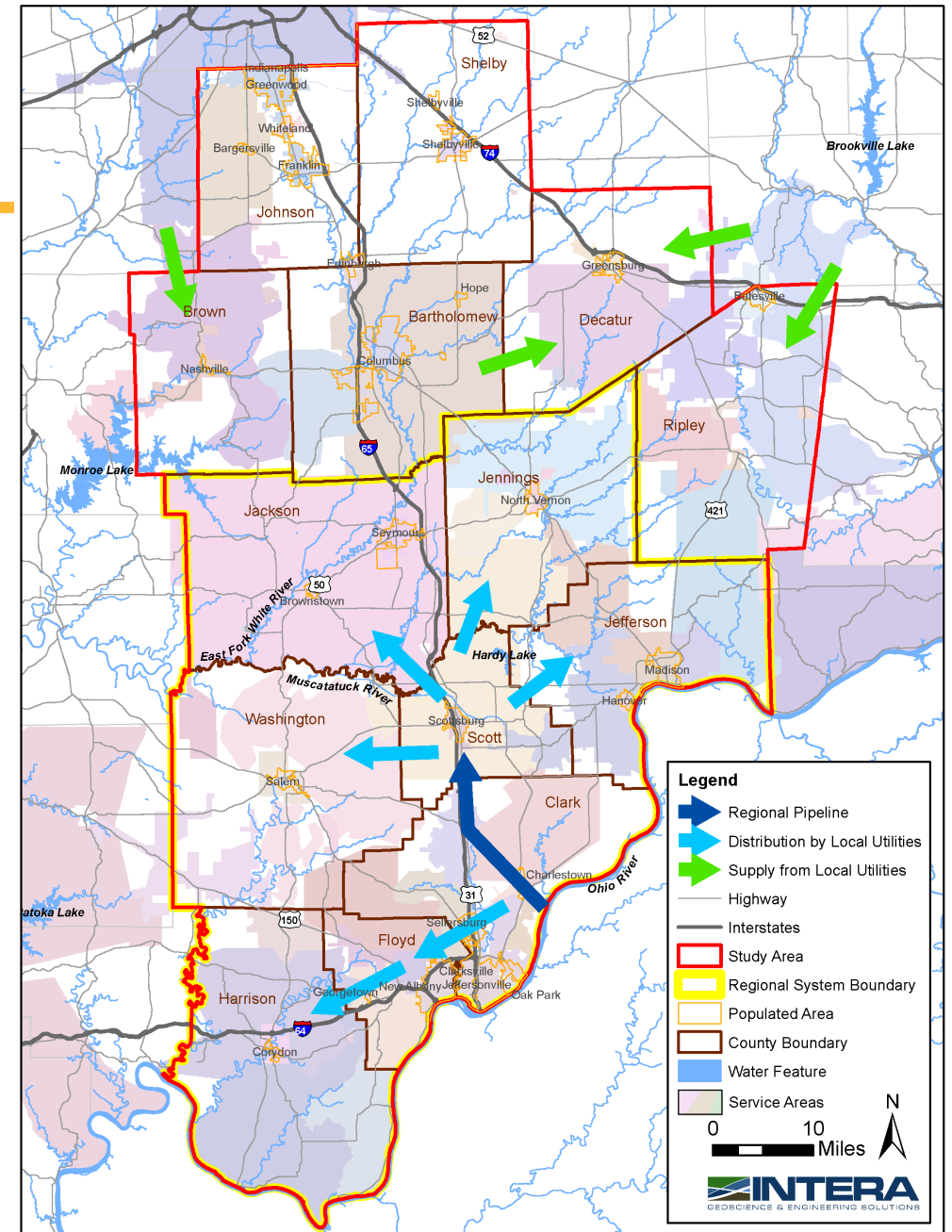
Website and Next Steps

Project Team



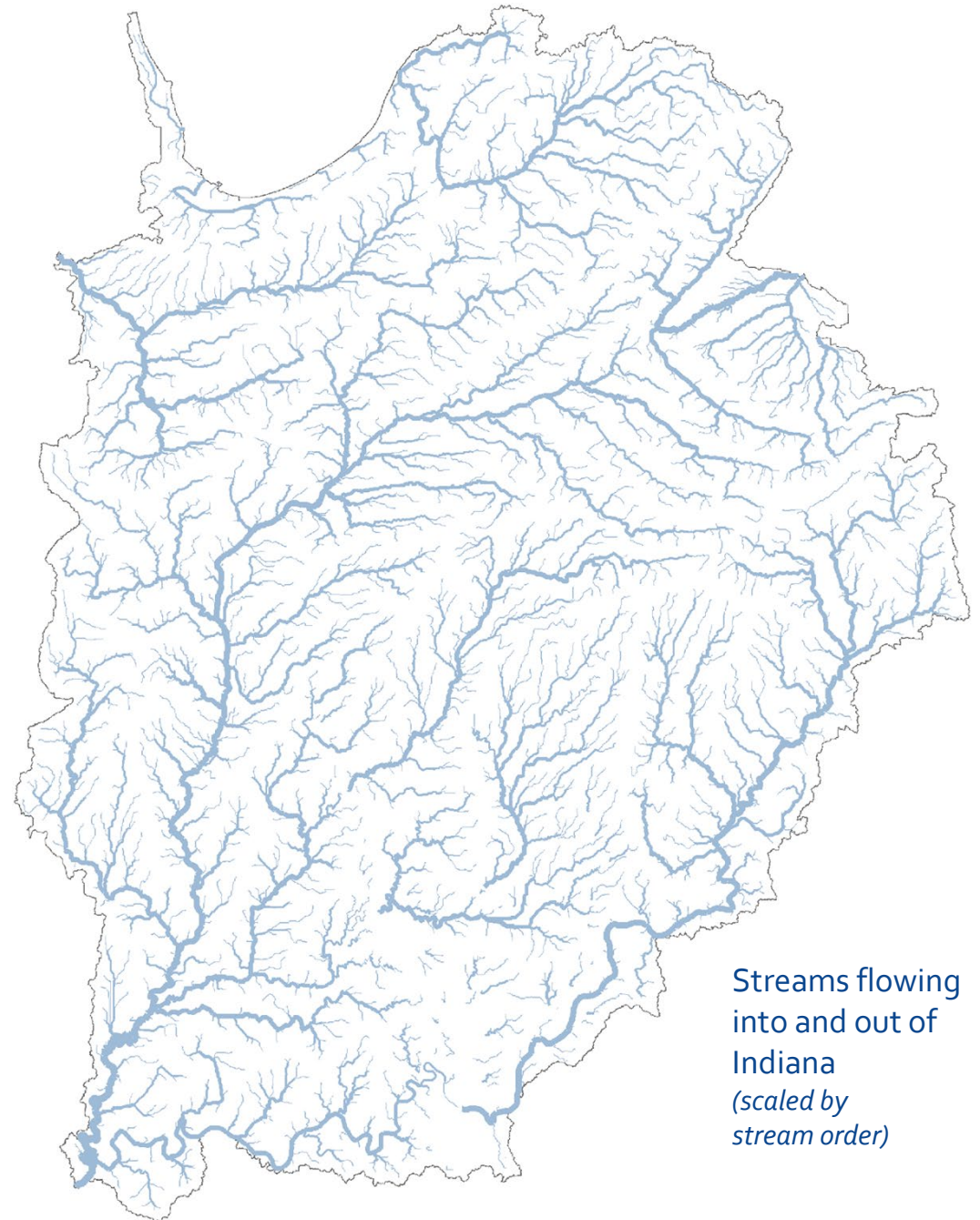
Previous Experience

- IFA Central Indiana Regional Study
- I-65 Corridor Water Study
- Charlestown Water Supply Investigations
- Water Supply Utility Investigations



Approach: Data-driven and Science-based

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



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

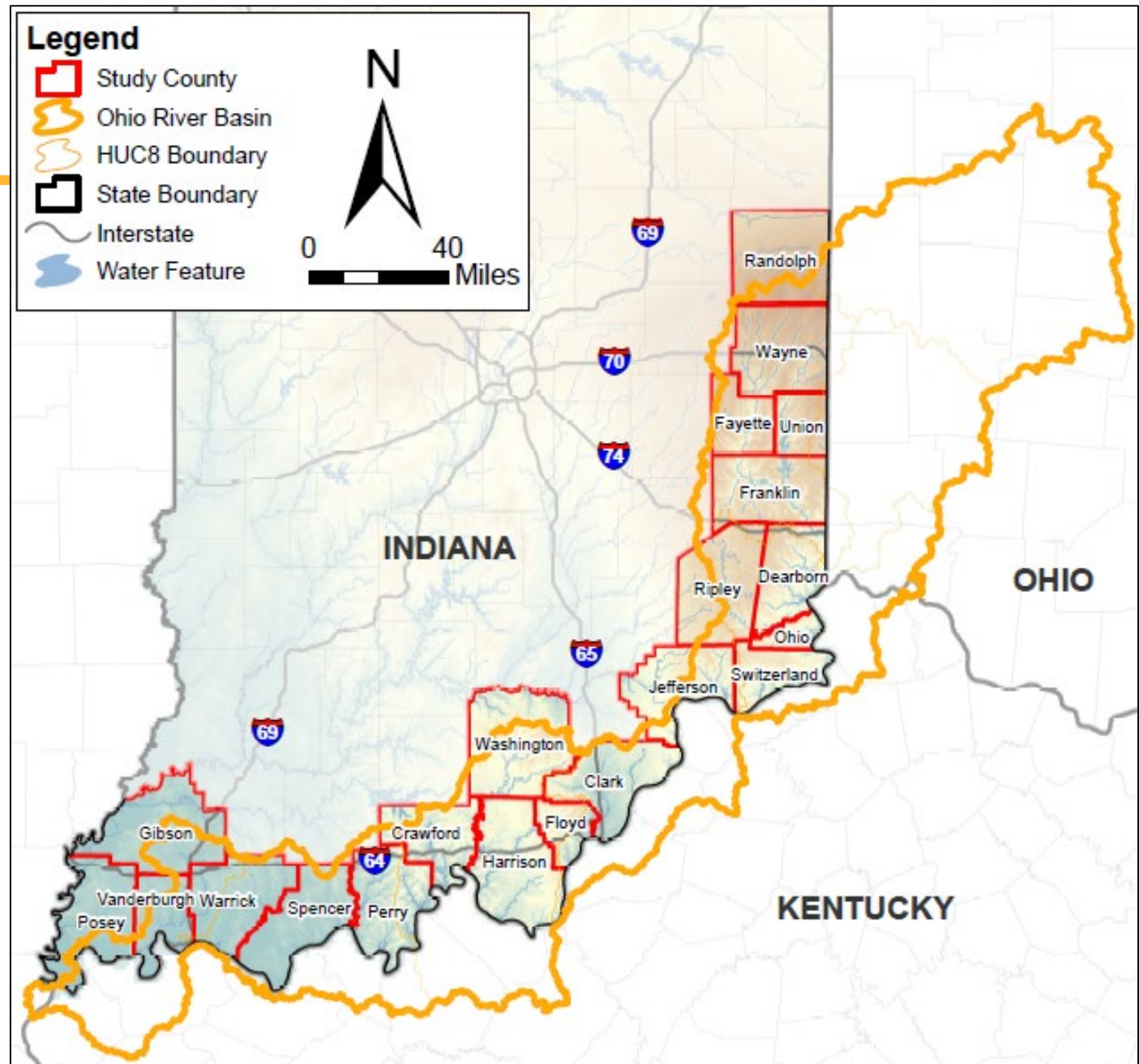
Advisory Committee Members

- Indiana Finance Authority – Lead
 - Jim McGoff, Sarah Hudson
- Indiana Department of Natural Resources
 - Ryan Mueller, Mark Basch, Garth Lindner, Allison Mann
- Indiana Department of Environmental Management
 - Christian Walker, Alex Powers
- U.S. Geological Survey
 - Dave Lampe, Aubrey Bunch, Jeff Woods
- Indiana Farm Bureau
 - Caitlin Smith
- Indiana University
 - Sally Letsinger

Stakeholders – Ohio River and Southeast Indiana Region

- Indiana Finance Authority – Lead
- Water utilities
- City/town/county governance officials
- Development groups
- Army Corps of Engineers
- Indiana Farm Bureau
- Ports of Indiana
- ORSANCO

Ohio River and Southeast Regional Water Study



Water Study: Objectives



Establish historical and future projections of water demand and availability



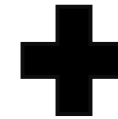
Support a 50-year regional water planning horizon

Water Study Approach: Water Balance

Natural water balance



Human alterations



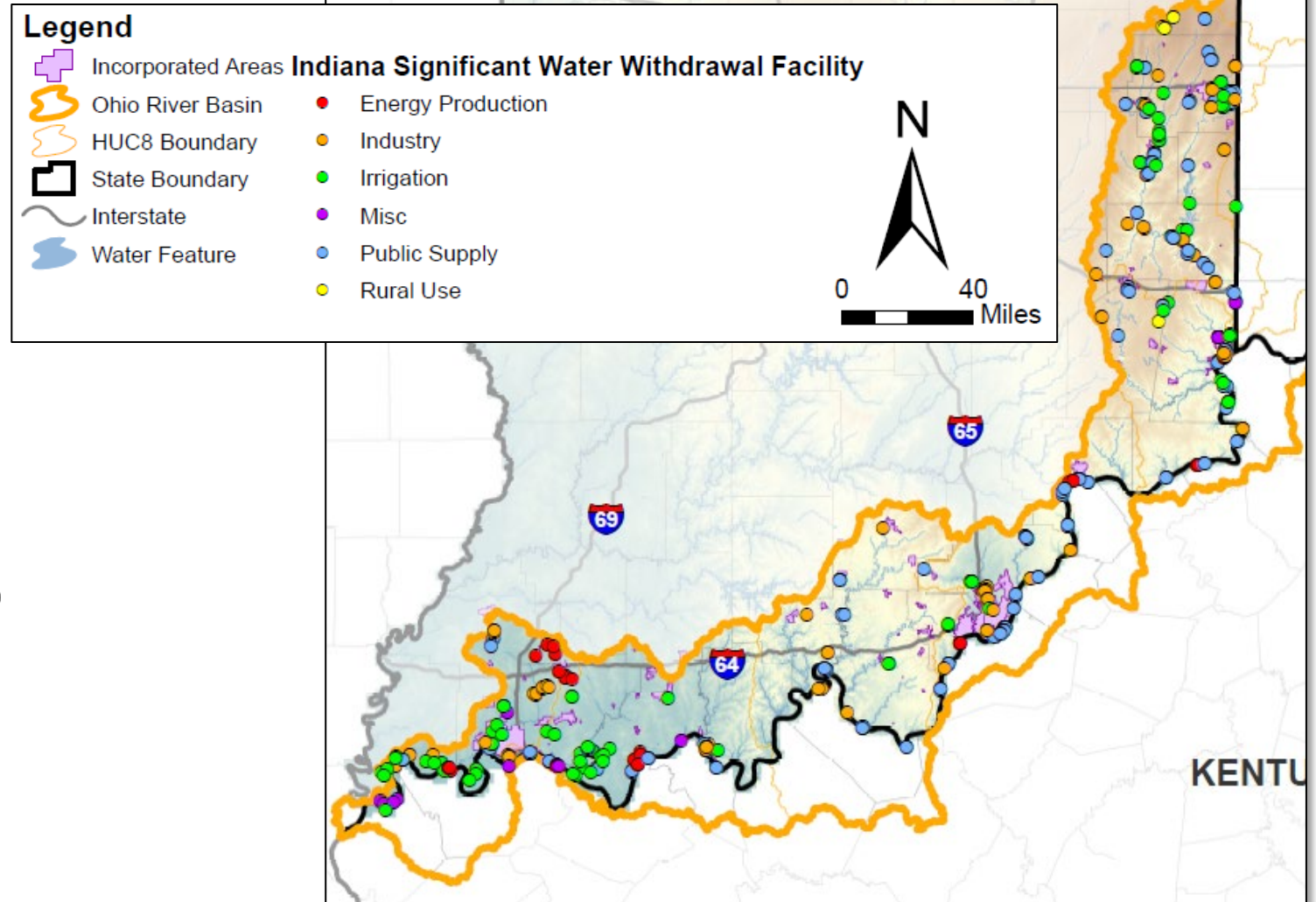
Climate change



Historical Water Demand

- 50-year water demand for all water-use sectors
- Historical data from IDNR (1985-2023)
 - Energy Production (EP)
 - Industrial (IN)
 - Irrigation (IR)
 - Public Water Supply (PS)
 - Rural (RU)

Residential (estimated)



Water Demand Future Forecasts

COMPARE

- Compare historical water use by sector and location to potential influential factors, such as:
 - Economic variables (population trends, income, inflation)
 - Climate variables (temperature, precipitation, atmospheric thirst, crop demands, drought indices)

RELATE

- Identify mathematical relationships between water use and economic and climate variables

MODEL

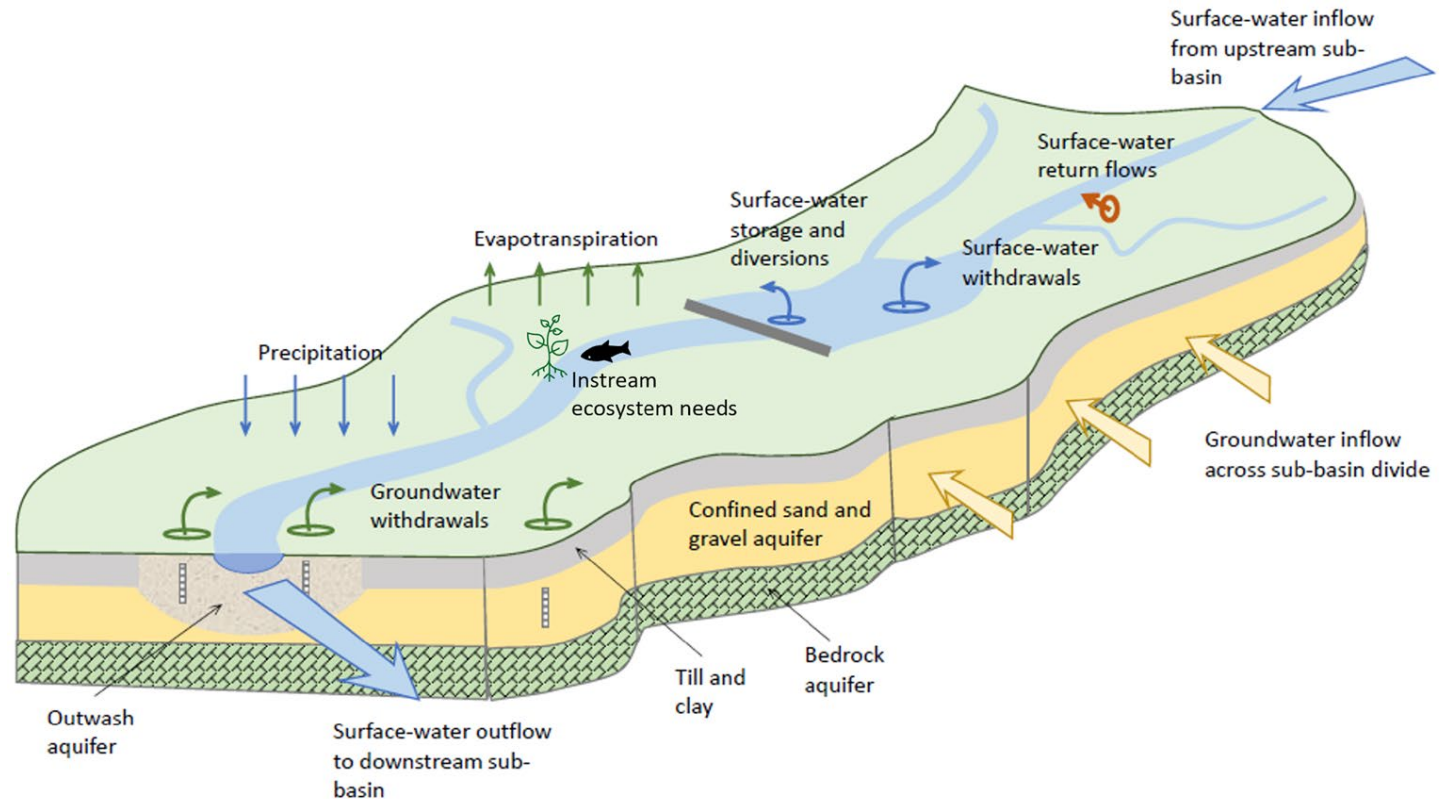
- Use the relationships to estimate potential future water use by applying projections of the economic and climate variables.

Assumptions:

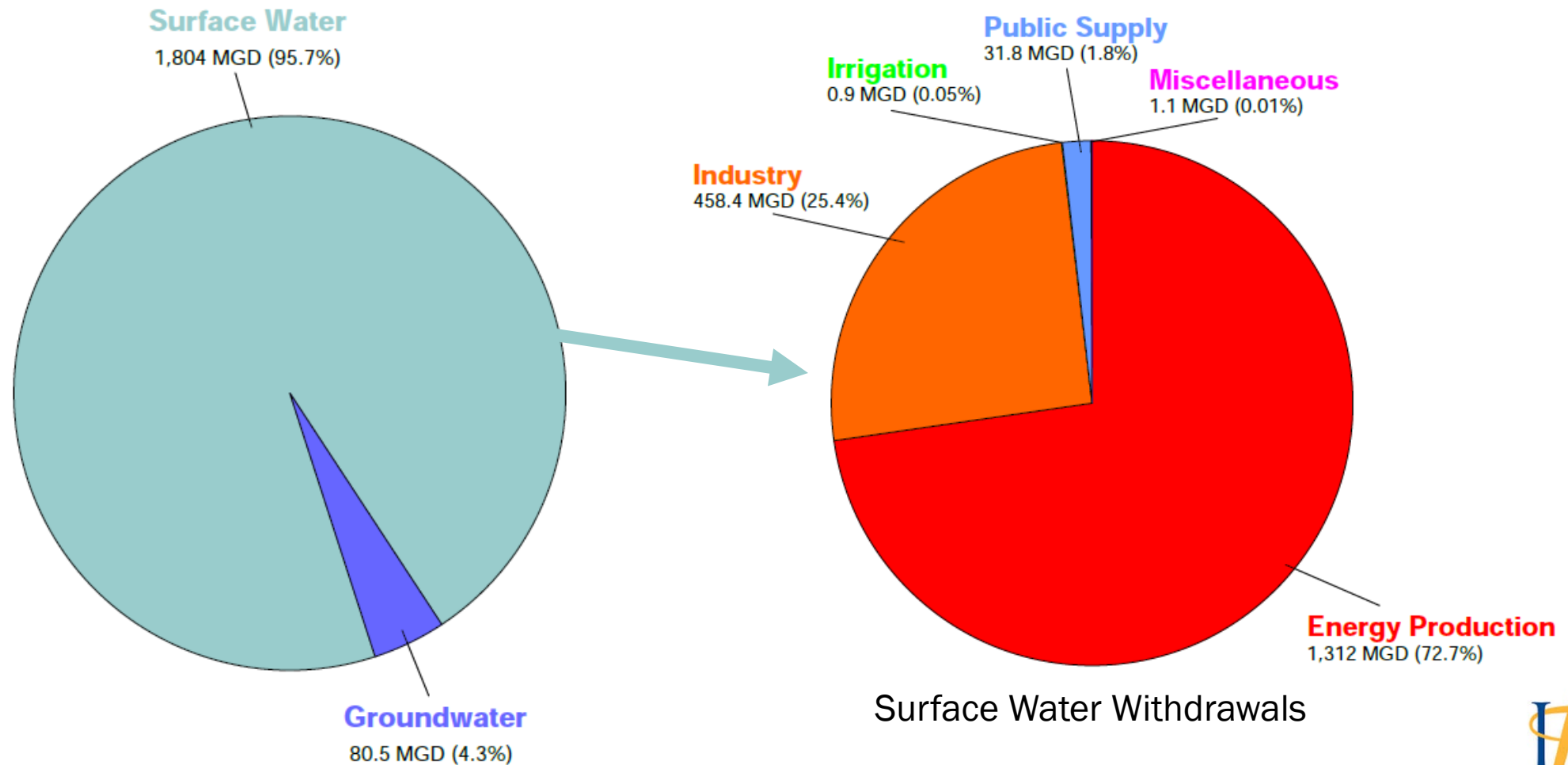
- Water sources (groundwater, surface water) used in the past by sectors or facilities will be the same in the future
- Future climate models provide an opportunity to calculate the likely hydrological response to changes in timing and magnitude of precipitation and temperature

Water Availability

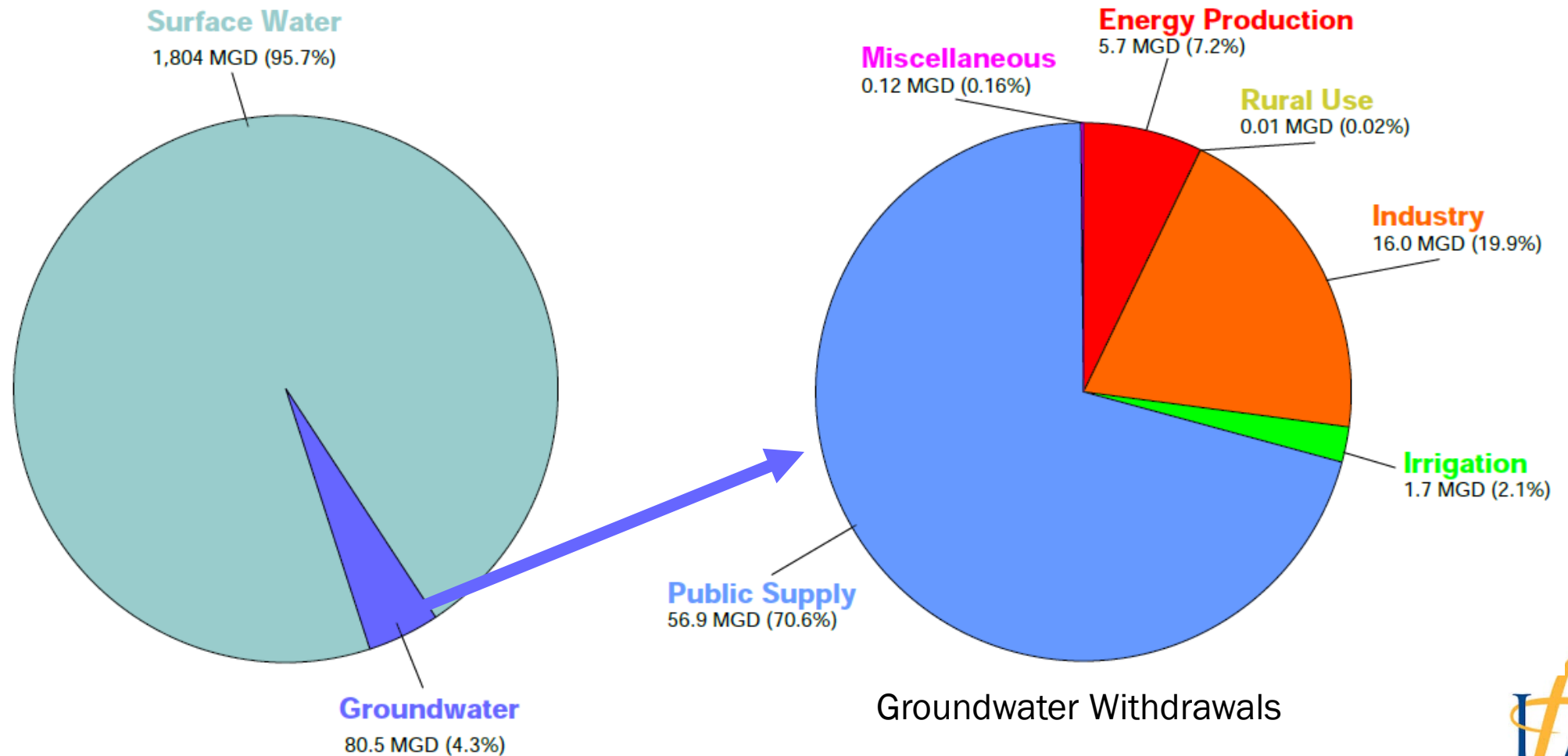
- Data driven assessment of historical Water Availability
- Projection into the future, incorporating climate change predictions



2023 SWWF Reported Withdrawals



2023 SWWF Reported Withdrawals



IFA Website Information

- Ohio River and Southeast Indiana Region website is available!
 - Goals of the study
 - Study area maps
 - Project updates
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- Email for feedback
 - WaterResources@ifa.in.gov



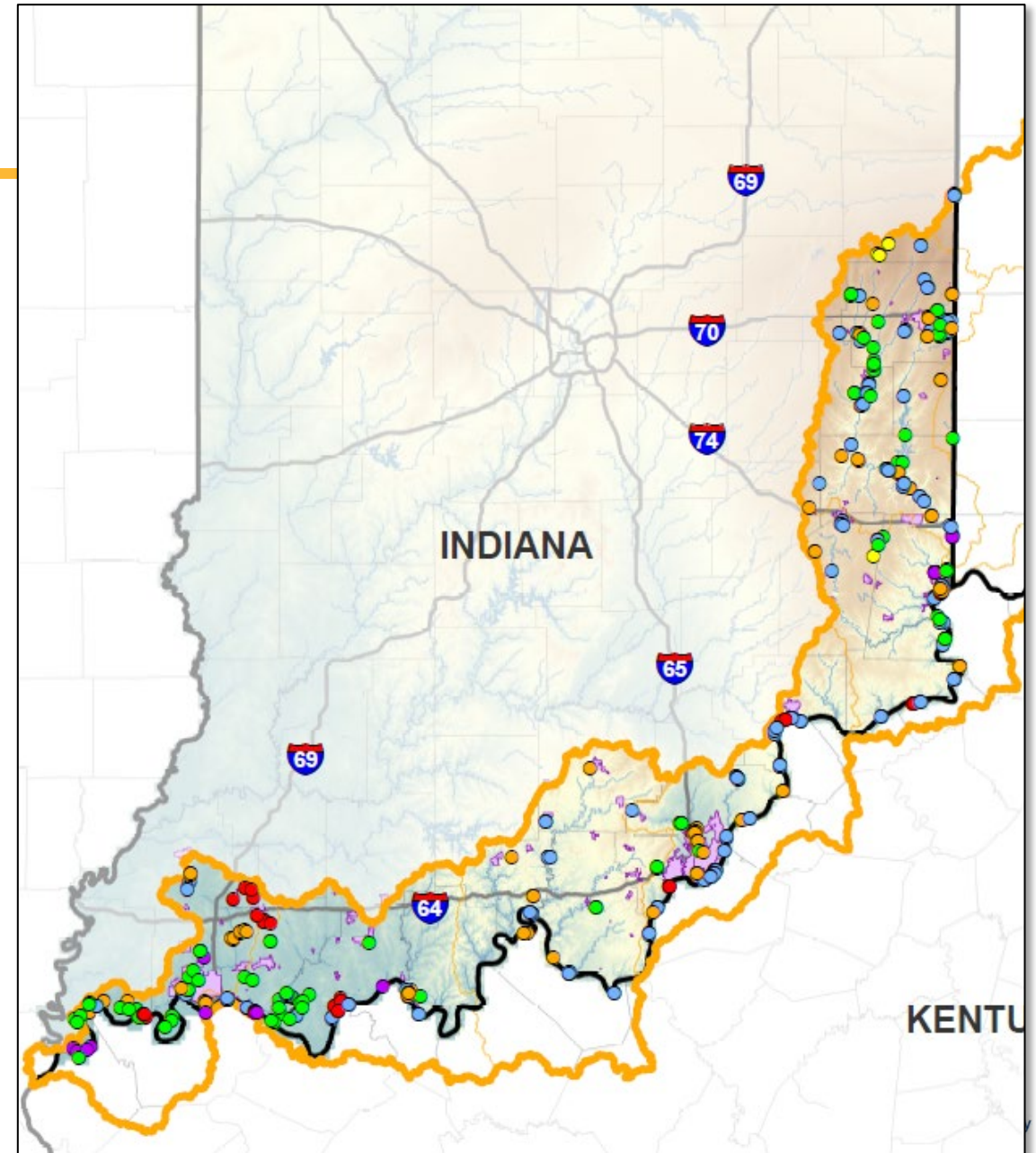
<https://bit.ly/IFA-OH-SE-Regional-Study>

Next Steps

- INTERA may reach out if they have specific questions
- For one-on-one meeting with INTERA reach out to:

Theresa Landewe

TLandewe@intera.com



Discussion
