

# Regional Planning Meeting

Conducted by the Indiana Finance Authority (“IFA”)



Hosted by the  
Southern Indiana Water Professionals Association  
February 21, 2020

*Please sign in using IFA attendance sheet*

# Today's Agenda

1. Overview of Regional Planning Meetings
2. One Example of a Regional Planning Group: the Southern Indiana Water Professionals
3. Break
4. Alternative Approaches to Defining Regions
5. Group Discussion and Survey

Please sign in and ask questions!

# Indiana Finance Authority (“IFA”)

## IFA Environmental Programs:

- Brownfield clean-up assistance
- SRF Loans for drinking water and wastewater infrastructure needs
- Coordinate Executive Branch activities related to the State’s water program

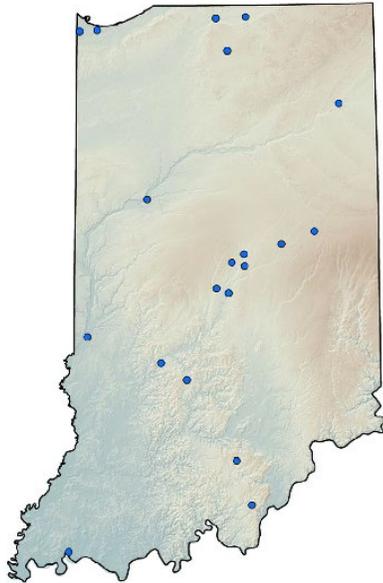


# IFA Water Studies: 2015, 2016, 2018

## Evaluation of Water Utility Planning in Indiana

A survey of best practices, challenges, and needs

October 2015



## Evaluation of Indiana's Water Utilities

An analysis of the State's aging infrastructure



November 2016



## Southeastern Indiana Regional Water Supply

Feasibility and cost analysis



January 2018



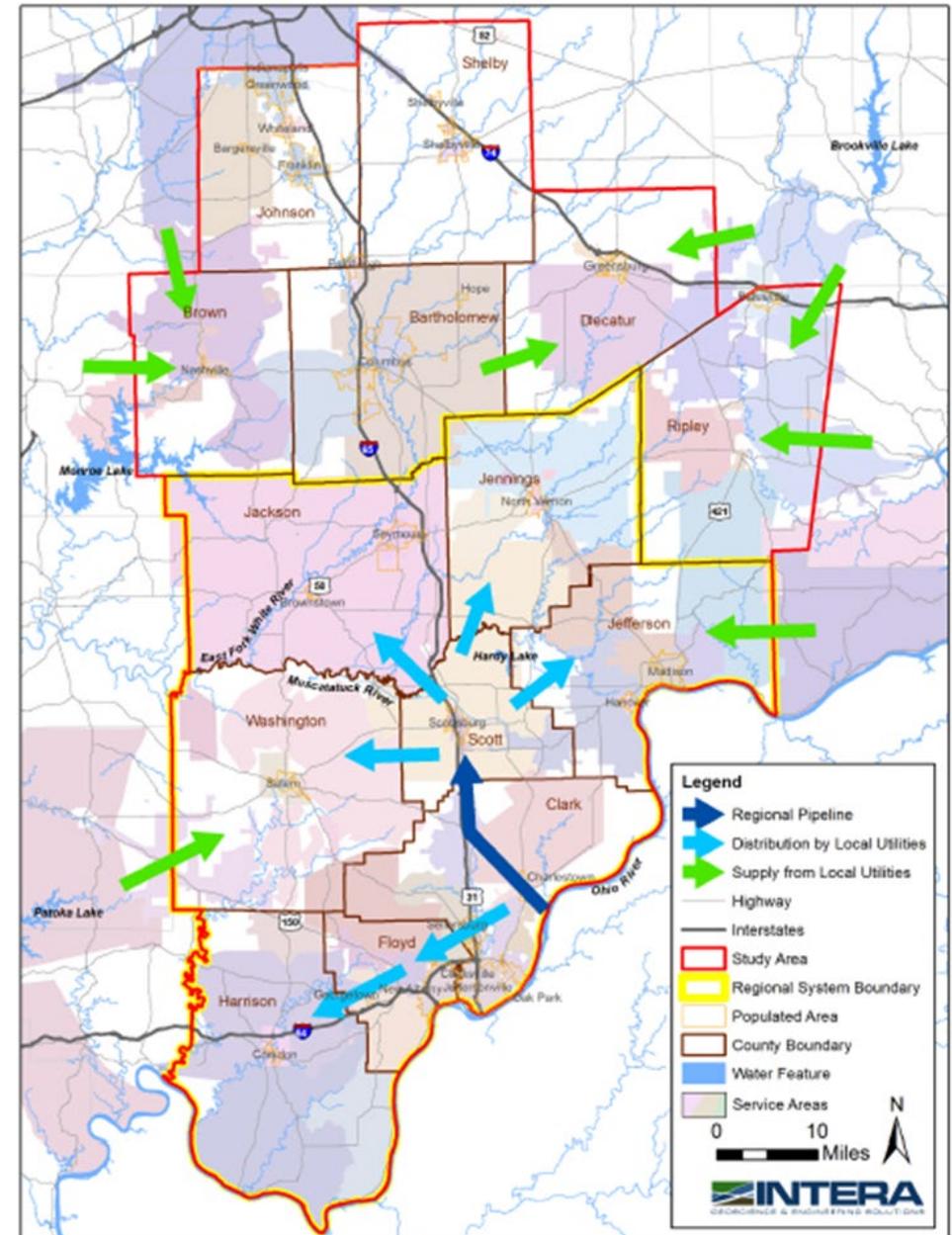
# “Southeastern Indiana Water Supply” SEA 416 (2017)

- Purpose – to evaluate the viability of a regional drinking water utility in Southeastern Indiana
- Assessed the economic development opportunities and future supply and demand needs
- 75-targeted utilities in the 14-county area
- Three alternatives considered
- Each alternative evaluated by affordability, cost to construct and maintain, regulatory compliance, and support of economic development



# 2017 Study: Finding

- A number of regional solutions were identified.
- The study itself demonstrated that utilities working together can identify regional solutions



# 2018 Water Infrastructure Task Force Final Report

“The Executive Branch should **establish State Water Infrastructure Study Areas.**

The purpose of these areas will be to **study supply and demand, drought preparedness, and infrastructure needs, as well as opportunities for utility collaboration** within a region.”



## SEA 4 requirements: IFA

- IFA divide state into Study Areas (i.e. regions)
  - Based on: watershed, water source, or other relevant factors
- IFA conduct annual meetings with utilities in regions
  - Set expectations, provide training, conduct communications
  - Community Water Systems
  - NPDES Municipal Major and Minor sanitary-type permit holders



## SEA 4 requirements: utilities

- Utilities set meeting agendas
- Utilities determine the water and wastewater priorities for the region
- Consider matters like:
  - Promoting cooperation
  - Promoting mutual assistance
  - Facilitating infrastructure investment
  - Protecting public health
  - Management of water resources
  - Projecting water supply and demand

# SEA 4 requirements: reporting

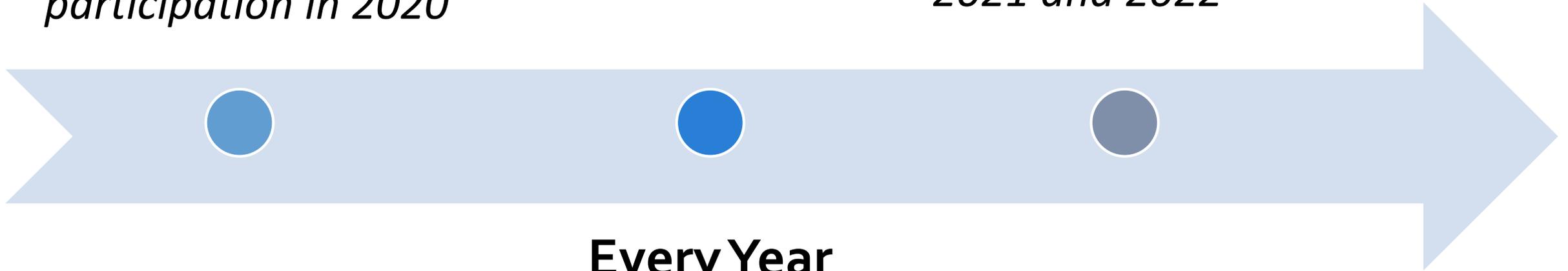
- Utilities report to IFA by March 1, 2021 (and March 1 of each odd-numbered year thereafter)
  - Completing today's survey and signing attendance sheet meets the March 1, 2021 requirement
- IFA reports to Legislature by November 1, 2021 (and March 1 of each odd-numbered year thereafter)
- Required for assistance from the DW and WW SRF Loan Programs



## Odd Years

Mar 1, 2021,  
*utilities report  
participation in 2020*

Mar 1, 2023,  
*utilities report participation in  
2021 and 2022*



## Every Year

2021, utilities  
*participate in a  
regional meeting*

2022, utilities  
*participate in a  
regional meeting*

2023, *utilities  
participate in a  
regional meeting*

# Our goals

- Formation of utility-led, independent, long-term regional planning groups
- Regional Planning = local utilities working together on long-term issues
- Do not re-create the wheel; invite us to your existing utility-led regional planning meeting
- Easy reporting; complete today
- Offer CEUs
- Partner with existing organizations at existing meetings



# Today

- Hear from a utility-led planning group
- Hear options for dividing up the state into study areas (i.e. regions)
- Submit online survey to meet the March 1, 2021 reporting requirement
- Also on survey, give feedback:
  - How the state should be divided into regions?
  - What topics should be discussed at future regional meetings?
  - Who should be invited to future regional meetings?

# Going forward

- Utility-led, planning groups starting to form
- Annual IFA Regional Planning Meetings
- Establishing regional boundaries (“Study Areas”)
- Indiana Water Summit - White River Alliance
  - State-wide forum
  - All water representatives (industrial, commercial, agricultural, regulators, advocacy groups, universities, scientists, legislators, policy-makers, etc.)

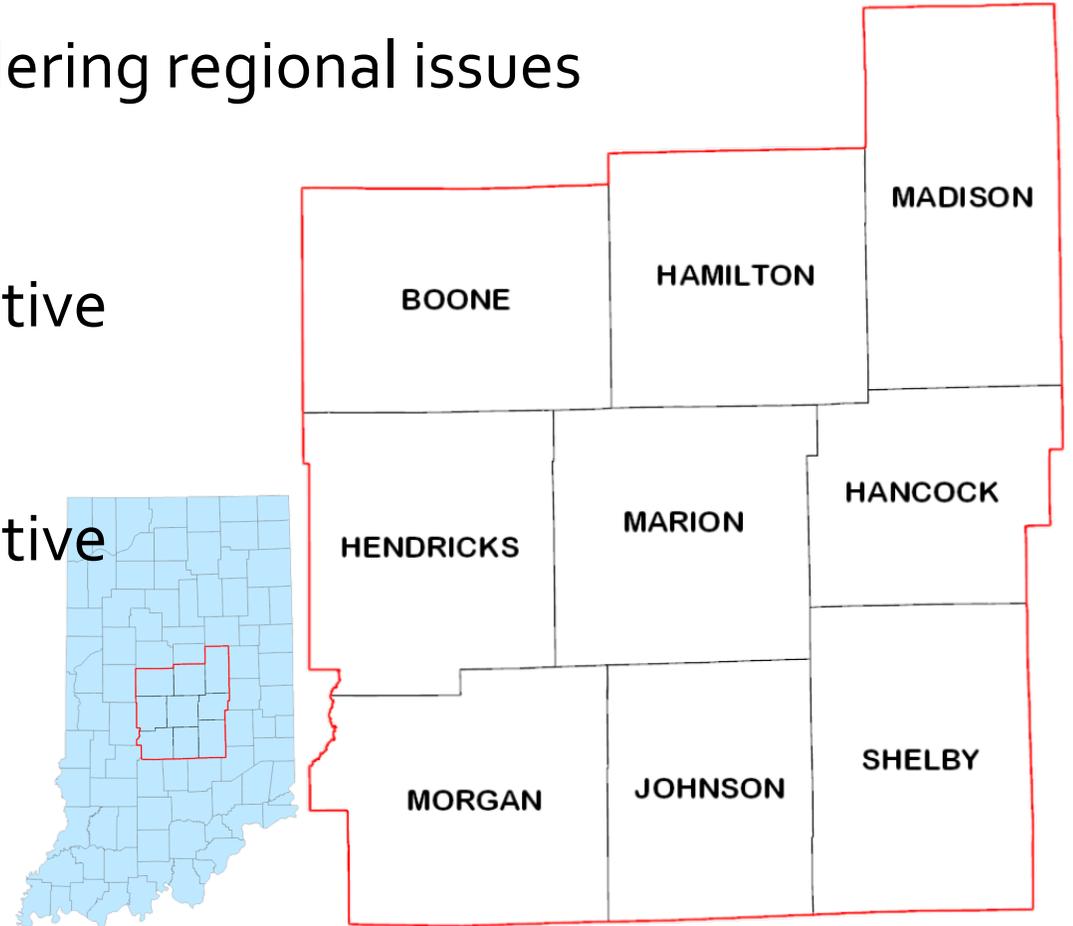
# Regional Water Studies

- Recommendation of 2018 Water Task Force Final Report and directive from Governor's office
- First regional study: 2017 Southeastern Indiana Water Study
  - Evaluated a regional supply along the I-65 corridor
- Our goals:
  - Help drinking water utilities better plan for their regional, long-term needs
  - All counties will be studied



# Regional Water Studies: Central Indiana

- Which part of the state?
  - Existing group of engaged utilities considering regional issues
- What study area boundaries to use?
  - Central Indiana Drinking Water Collaborative
- What to study?
  - Central Indiana Drinking Water Collaborative
  - IDNR
  - IDEM
  - USGS



# Central Indiana Water Study

- Phase I – Regional Water Demand
- Phase II – Regional Water Supply
- Phase III – Water Availability Modeling and Optimization
- Phase IV – Infrastructure and Cost Analysis
- Phase V – Public Education and Outreach

# Central Indiana Water Study: next steps

- Except for Phase IV, all phases underway
- Updates and final work products will be posted on website
- Completion targeted for December 2020
- Next region: TBD

# Questions?

IFA Water Resources and Infrastructure Planning Program

<https://www.in.gov/ifa>

Sarah Hudson, Director, [sahudson@ifa.in.gov](mailto:sahudson@ifa.in.gov)

Eric Peterson, Project Manager, [epeterson@ifa.in.gov](mailto:epeterson@ifa.in.gov)

Daniel Lundberg, Project Manager, [dlundberg@ifa.in.gov](mailto:dlundberg@ifa.in.gov)



# **Regional Water Supply Planning in Indiana**

## **Defining Regions**

**Mark Basch & Allison Mann**  
DNR, Division of Water

February 21, 2020

# What are the questions answered by regional water supply planning?

- How much water in the basin?
  - How much groundwater, surface water, wastewater volumes?
  - Where and when is this available?
- How much need, where, when?
- What are the infrastructure alternatives?

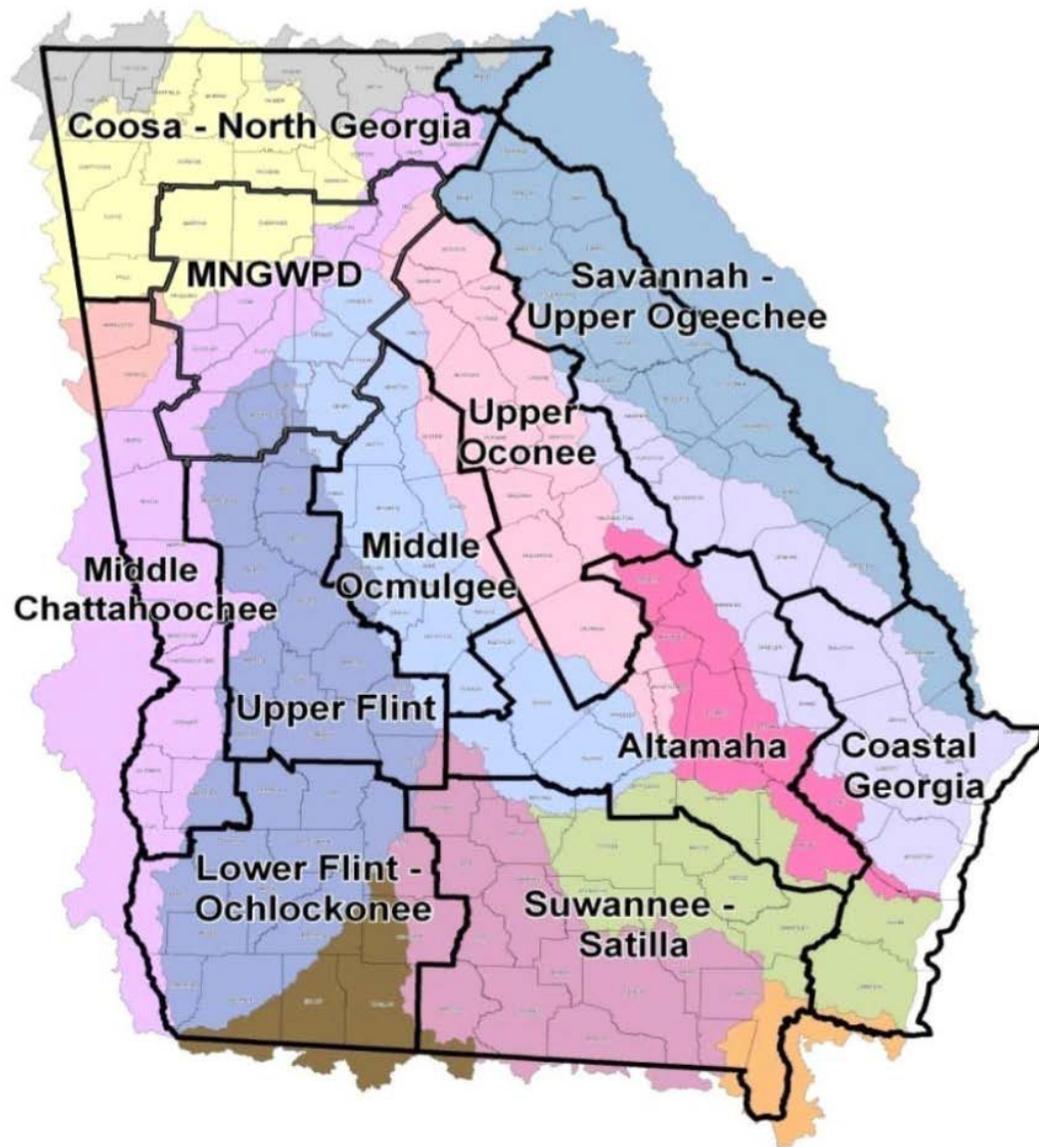
# What are the critical factors in delineating a water supply planning region?

- Who are the users?
  - Are users different in surface water and groundwater?
  - How has use changed over time?
- Does other infrastructure drive changes in use?

# Principles of Regional Water Supply Planning

- In riparian states *cooperation is critical to resource management.*
- A water supply planning *region* needs to *share a river or an aquifer.*
- Regions need to identify *common goals and priorities.*
- A water supply planning region needs to *share problems.*
  - Growth in demand
  - Increases in seasonal peak withdrawals
  - Local competition for regional supply
  - Wastewater treatment capacities
- Number of Regions – Avoid too many or too few plans within the the state.
- Population clusters – Municipal systems in larger towns are important but ideally, there are not too many people or too few in each region.

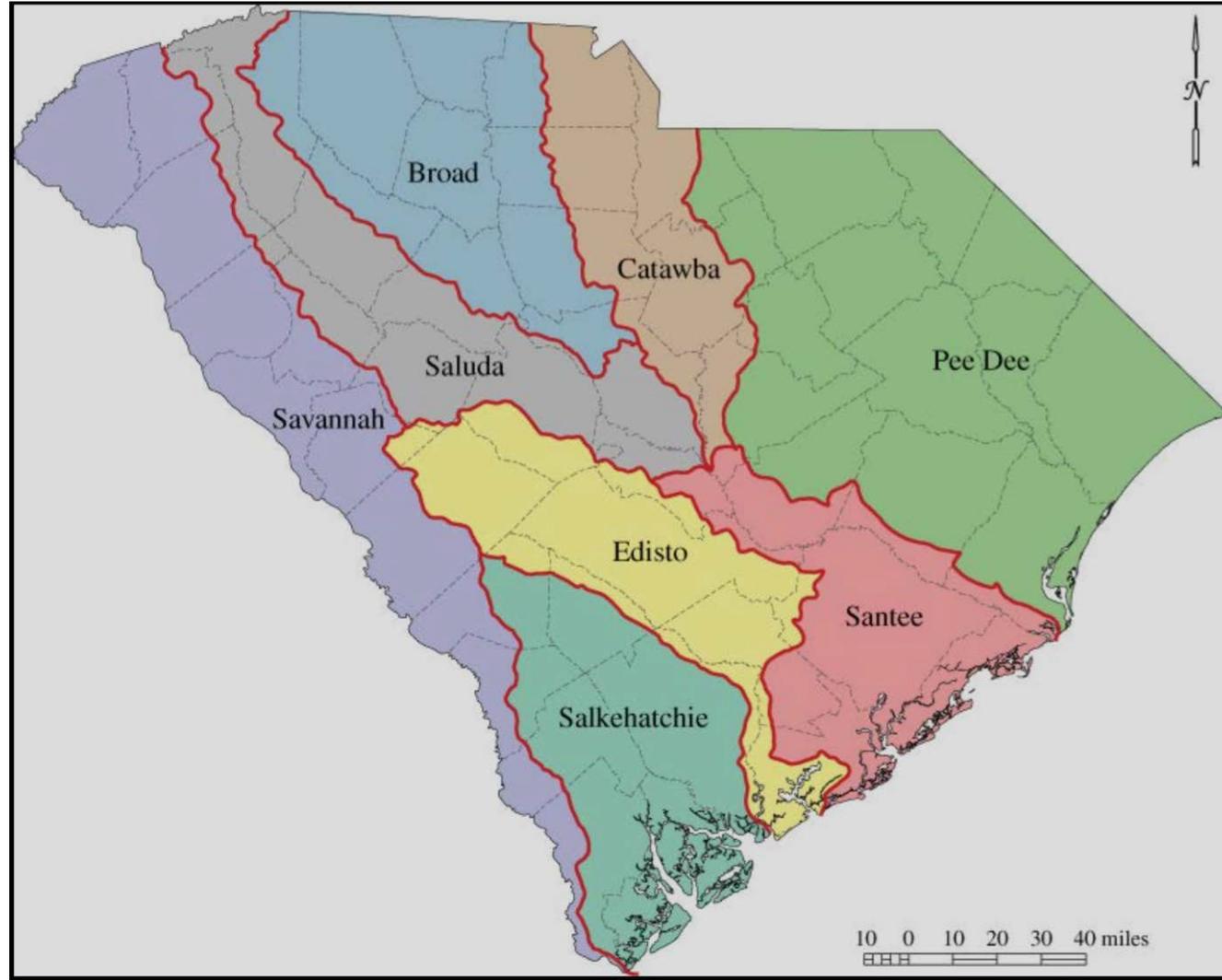
# Georgia Planning Regions



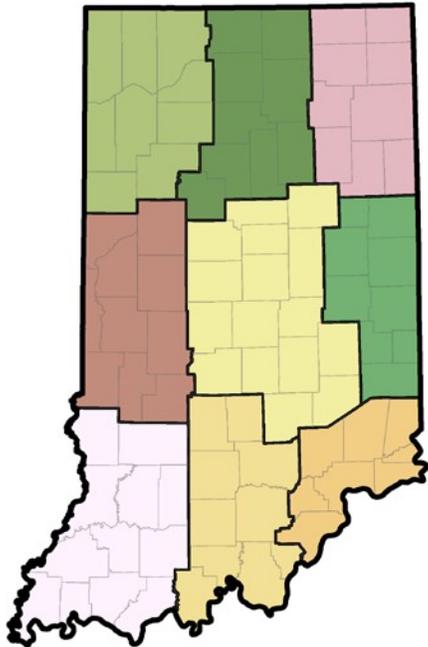
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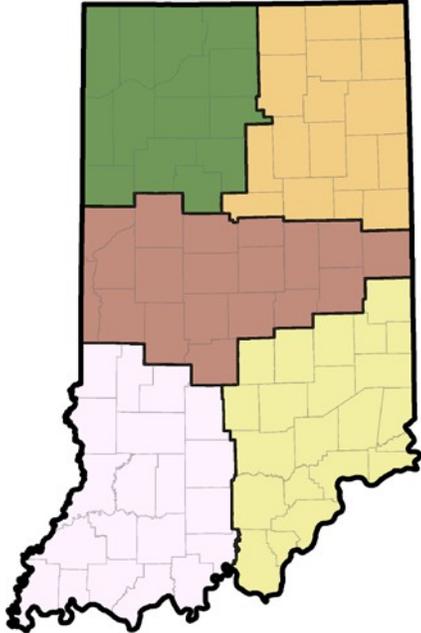
# Proposed South Carolina Planning Regions



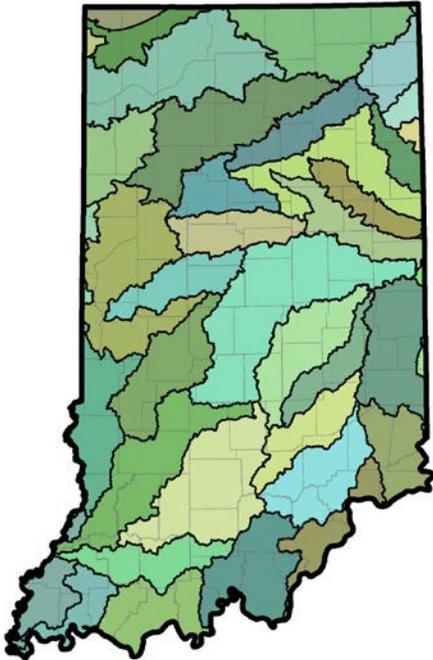
# Many options for Indiana Regions



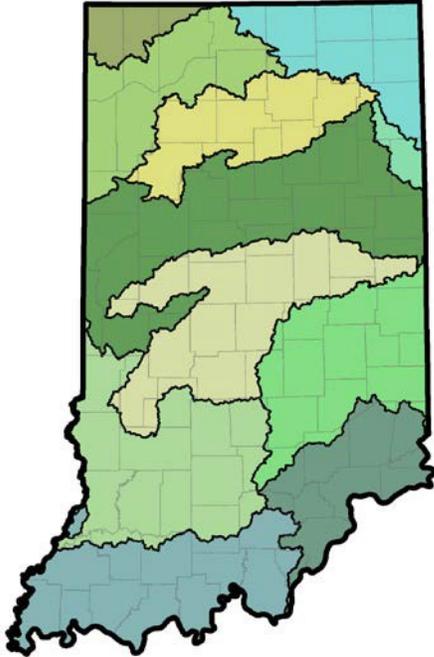
*a) Climatic regions*



*b) Indiana AWWA districts*



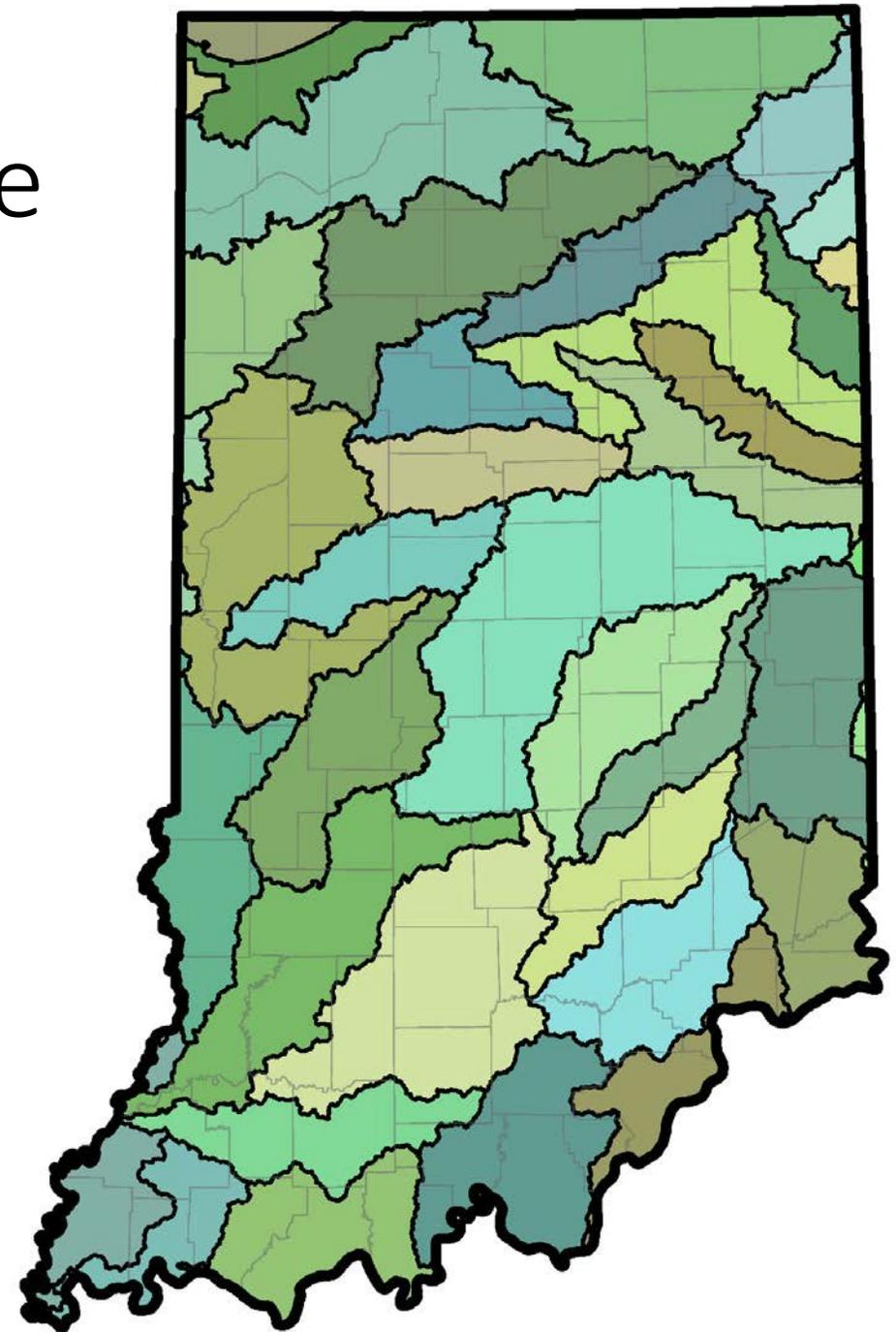
*c) Watersheds*



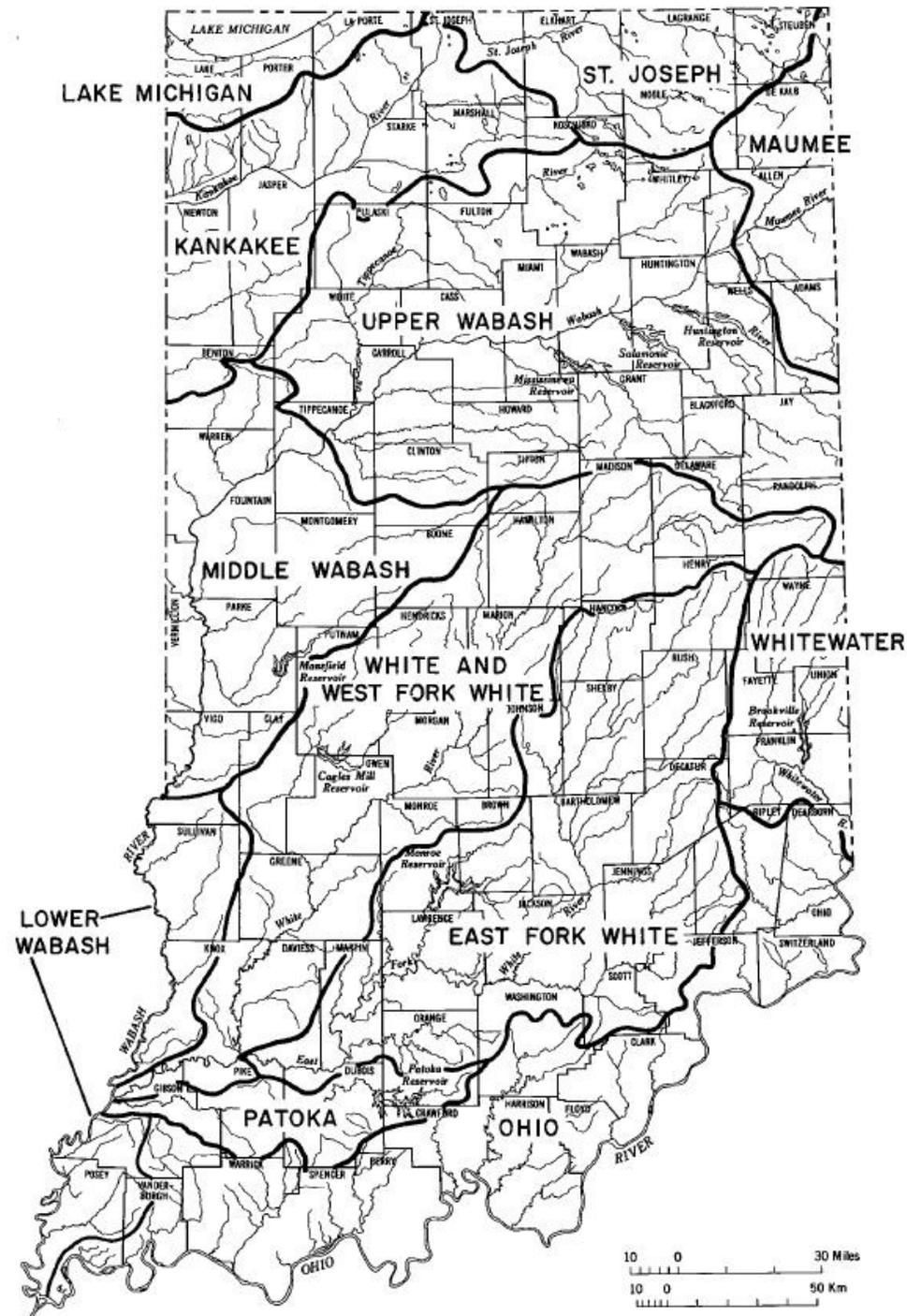
*d) Combined watersheds*

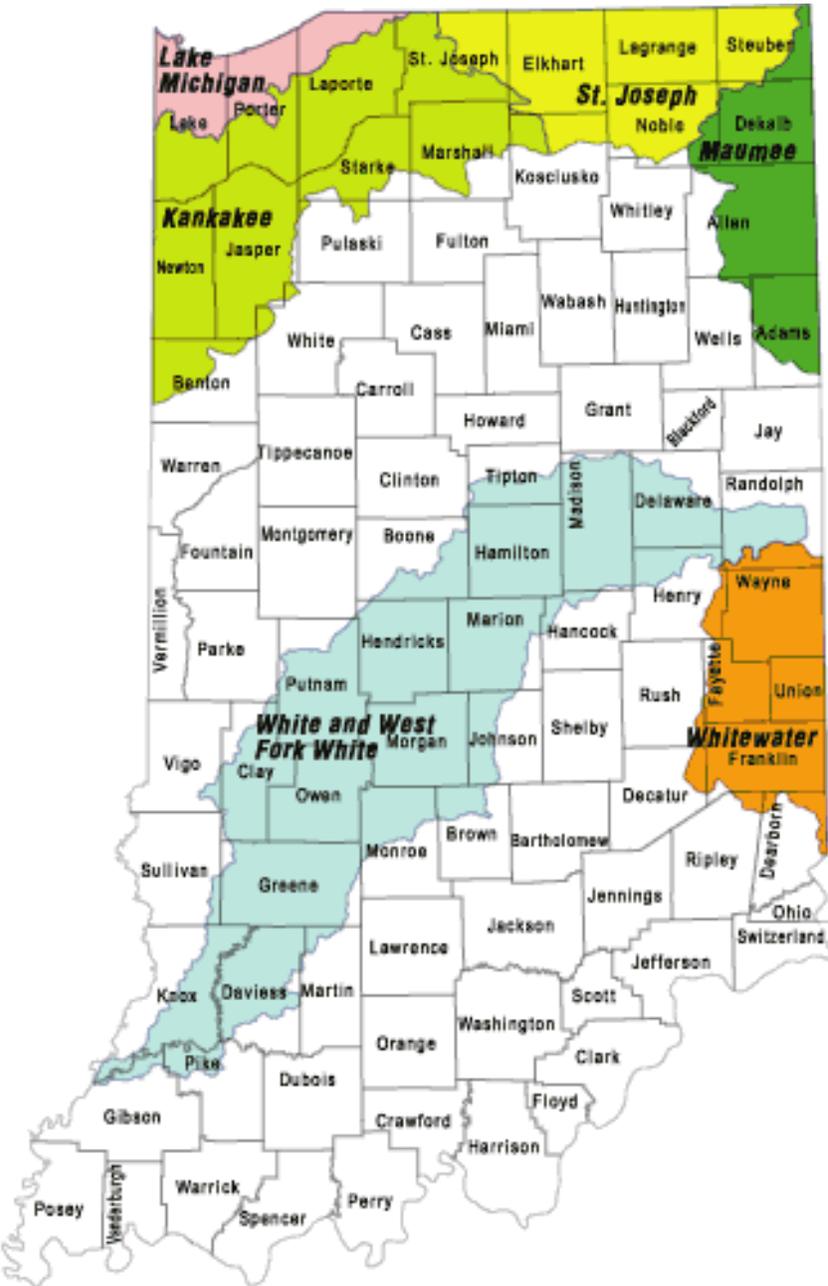
# Watersheds scale makes sense

- Grouping watersheds would be practical
  - Water availability
  - Demand forecasts
- Sustainability / adequate supply evaluation
- Water shortage investigations



# DNR Water Management Basins





## DNR Basin Studies 1987-2002 Six Completed

**DNR** WATER RESOURCE AVAILABILITY  
IN THE LAKE MICHIGAN REGION,  
INDIANA



**DNR** WATER RESOURCE AVAILABILITY  
IN THE WHITewater RIVER BASIN,  
INDIANA



**DNR** WATER RESOURCE AVAILABILITY  
IN THE KANKAKEE RIVER BASIN,  
INDIANA



STATE OF INDIANA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WATER  
1990

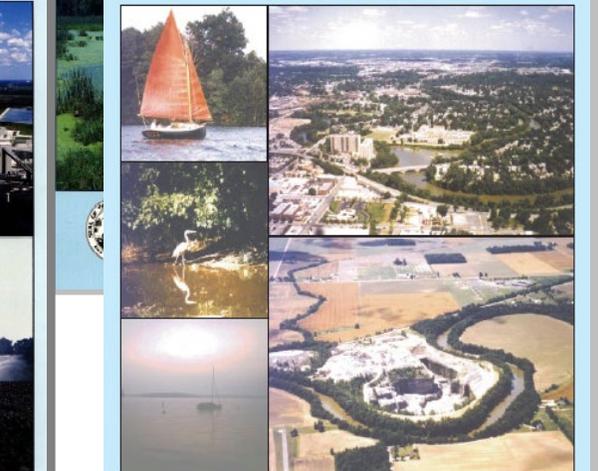
**DNR** GROUND-WATER RESOURCES IN  
THE WHITE AND WEST FORK  
WHITE RIVER BASIN, INDIANA



**DNR** WATER RESOURCE AVAILABILITY  
IN THE ST. JOSEPH RIVER BASIN,  
INDIANA



**DNR** WATER RESOURCE AVAILABILITY  
IN THE MAUMEE RIVER BASIN,  
INDIANA

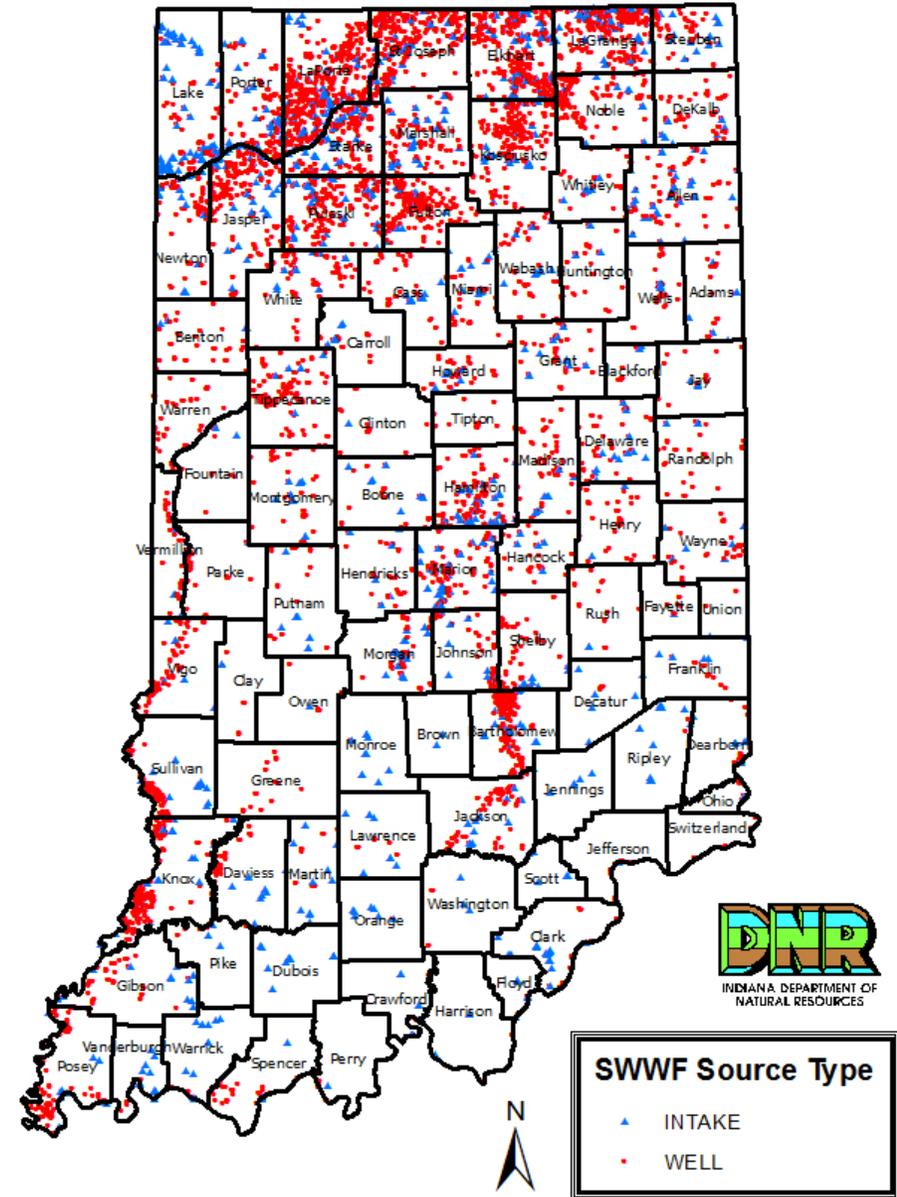


STATE OF INDIANA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WATER  
1996

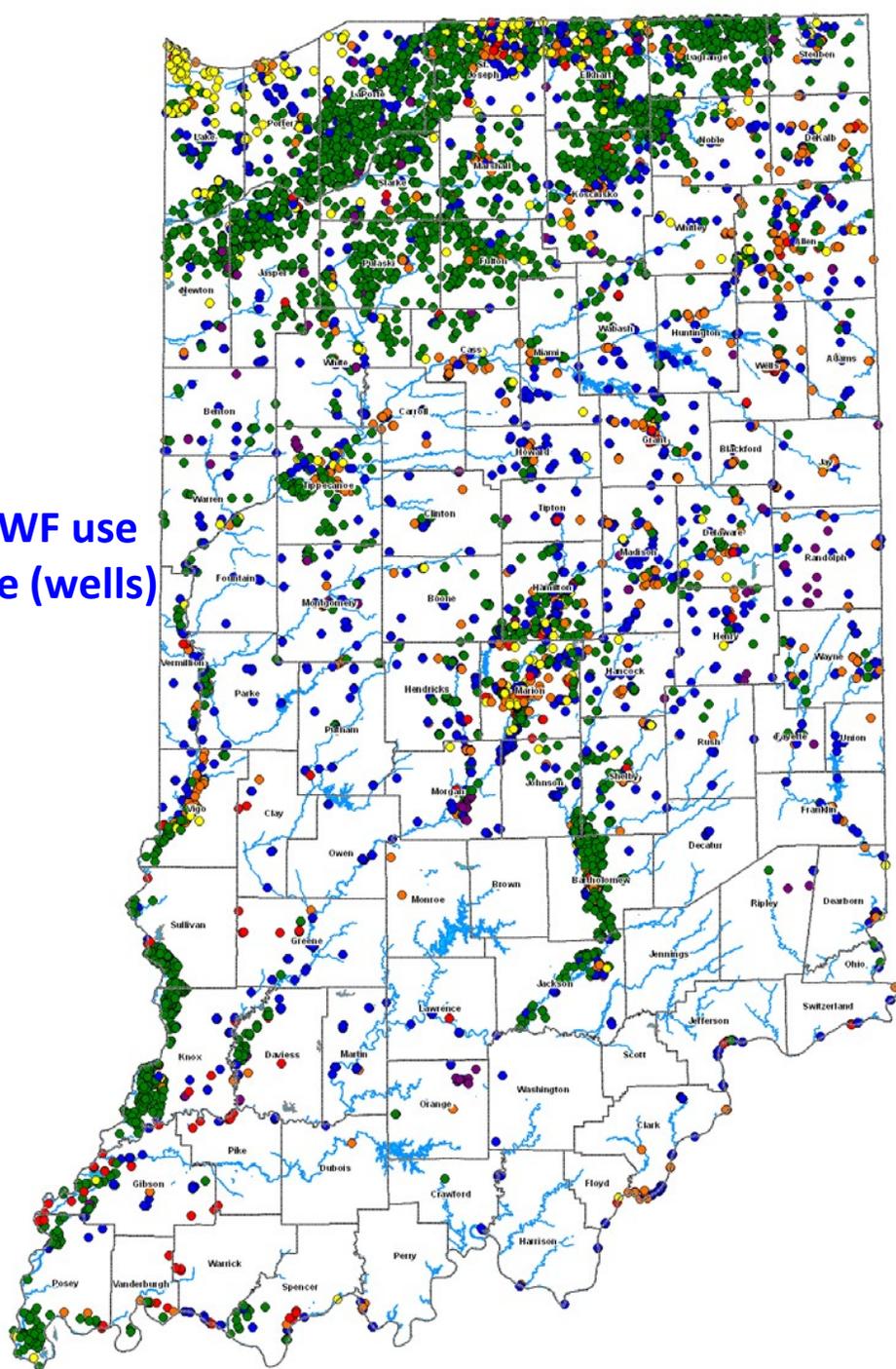
## Significant Water Withdrawal Facility Source Locations in Indiana

# IC 14-25-7: Water Resources Management Act

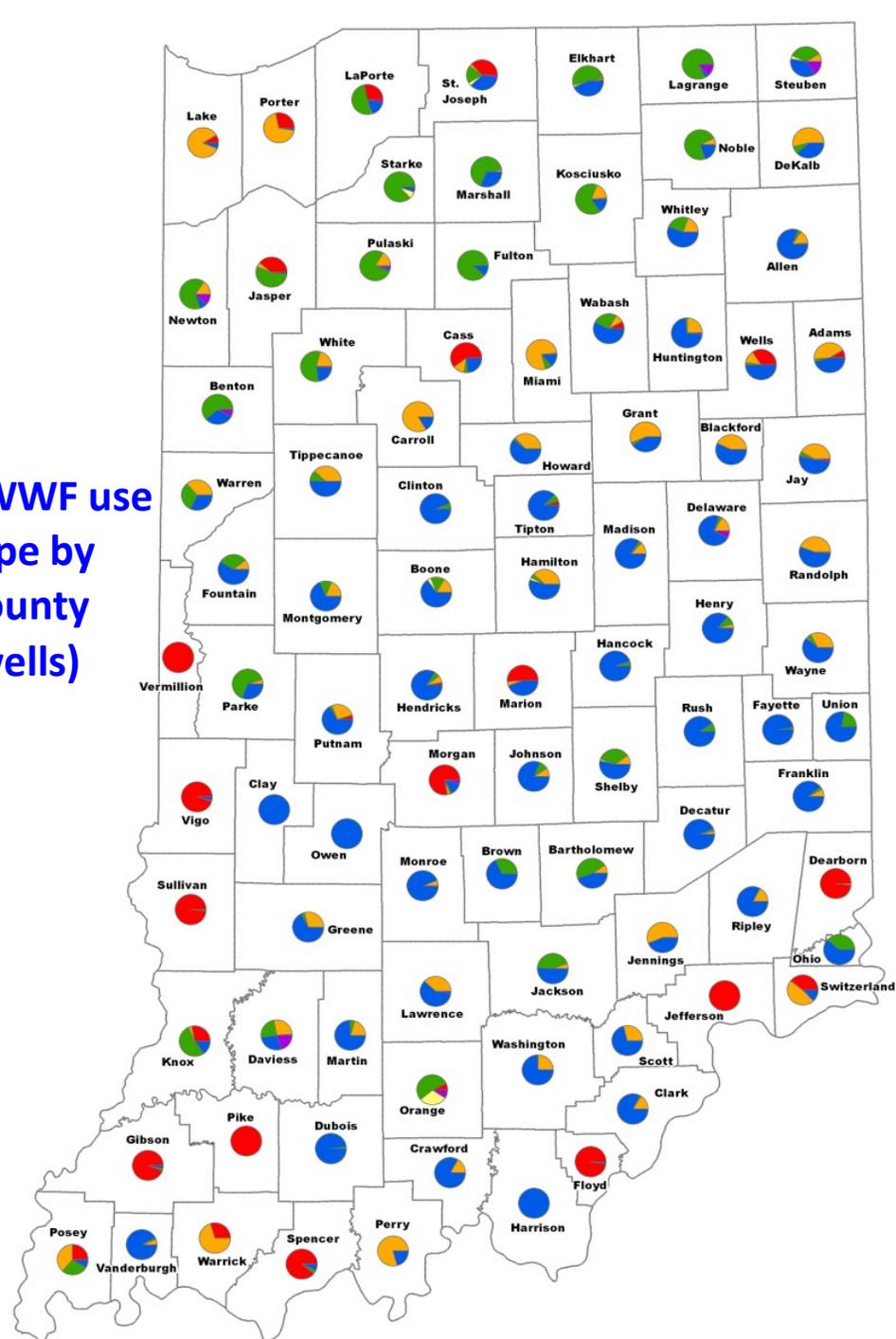
- Enacted in 1983
- Requires registration of all SWWF (GW & SW)
- Facility defined as greater than 100,000 GPD capability
- Capability is aggregate of all wells & intakes
- Annual water use reporting required
- Approximately 4200 SWWFs currently registered



SWWF use  
type (wells)

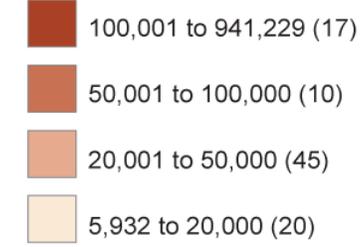
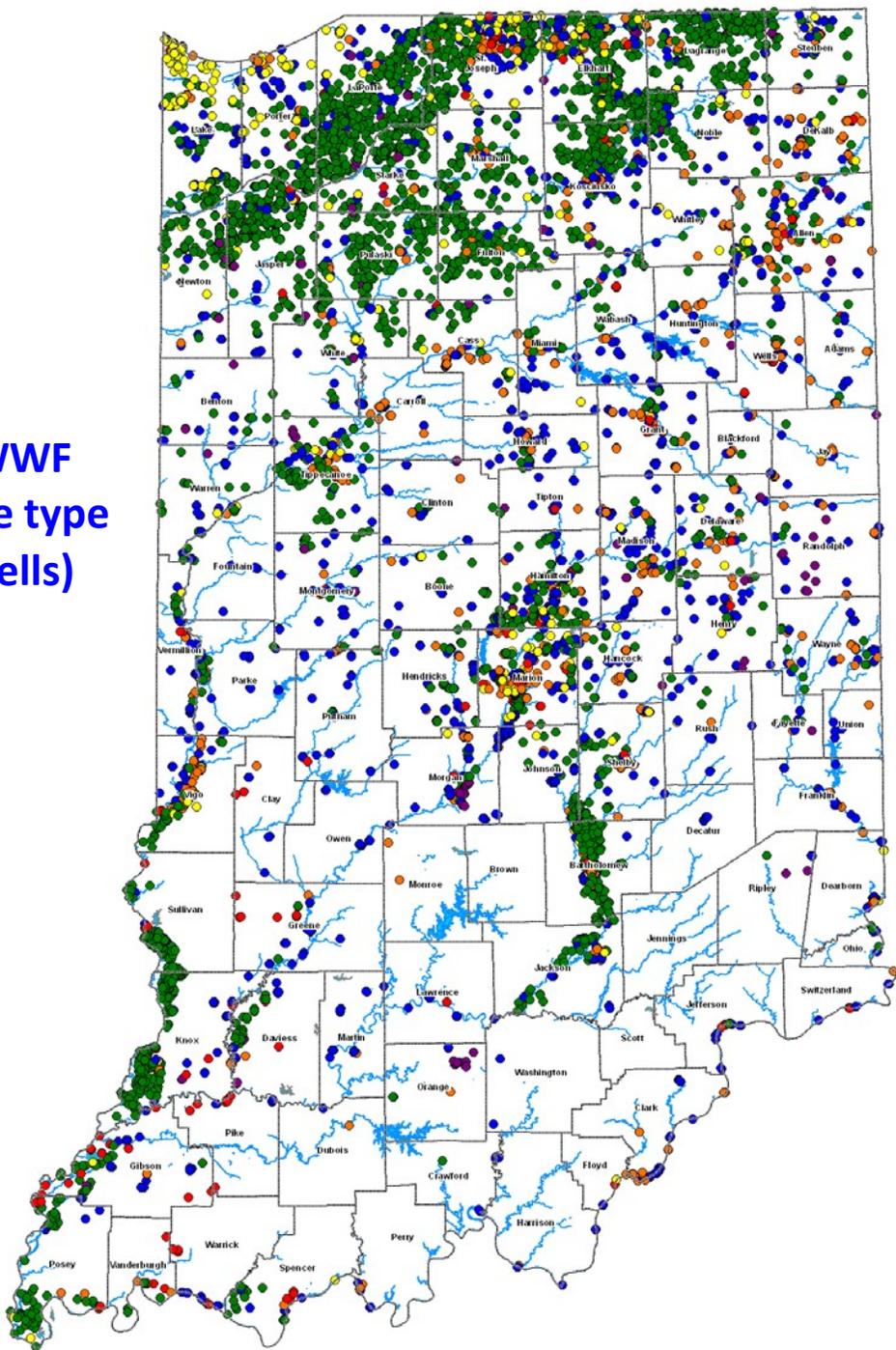


SWWF use  
type by  
County  
(wells)

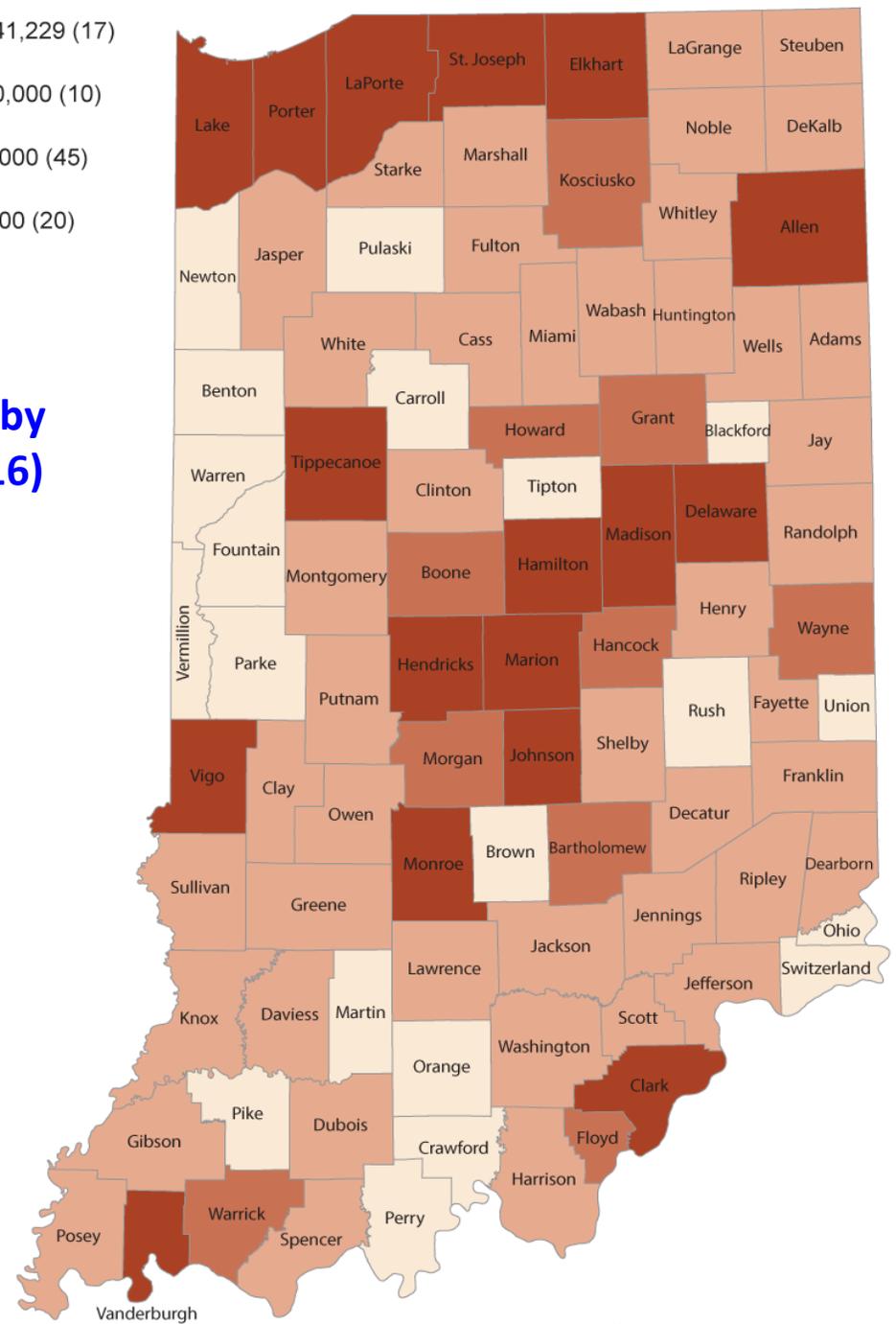


Public Supply  
Irrigation  
Industrial  
Energy Prod.

SWWF  
use type  
(wells)



Population by  
county (2016)

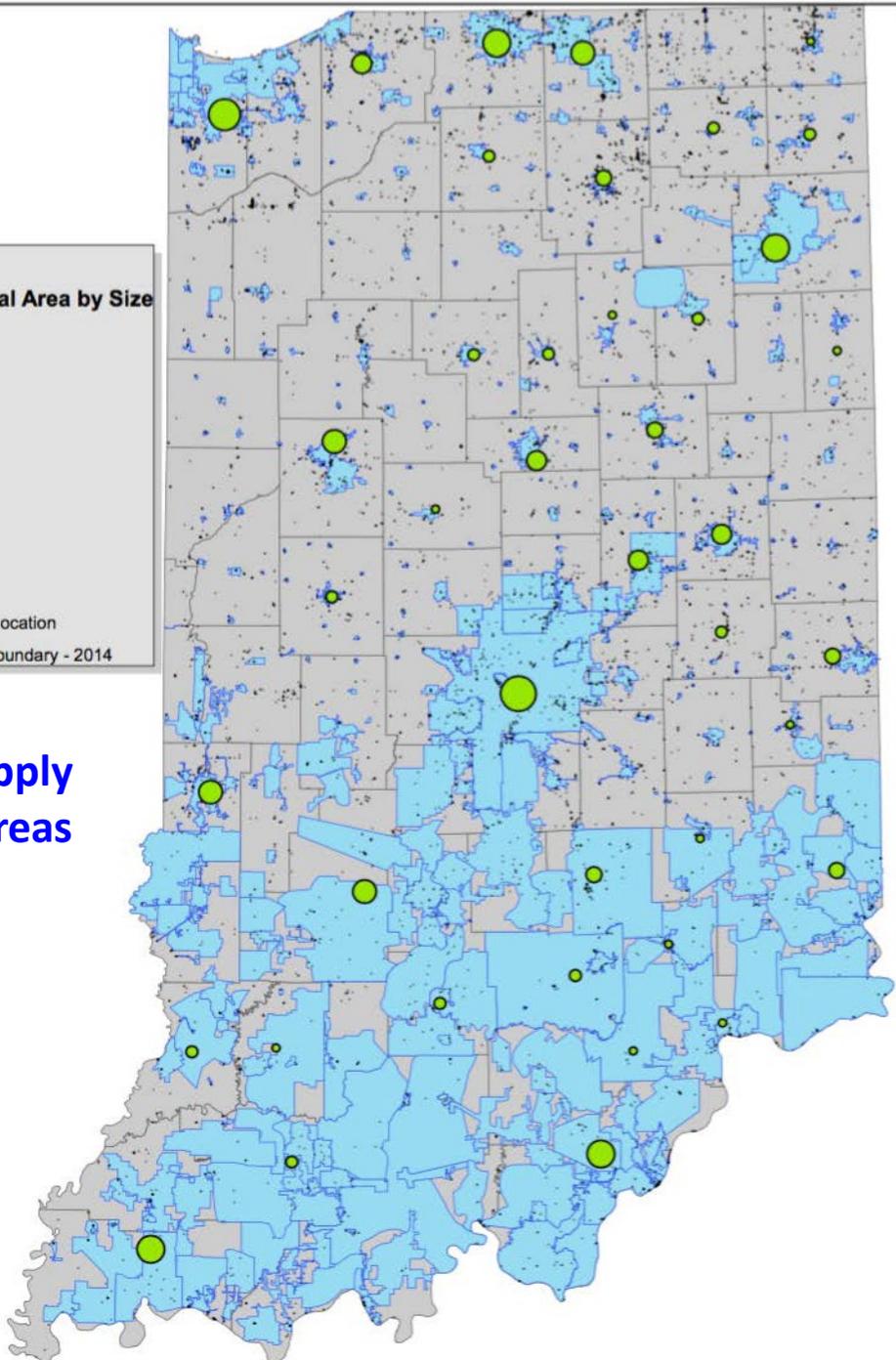


Source: U.S. Census Bureau

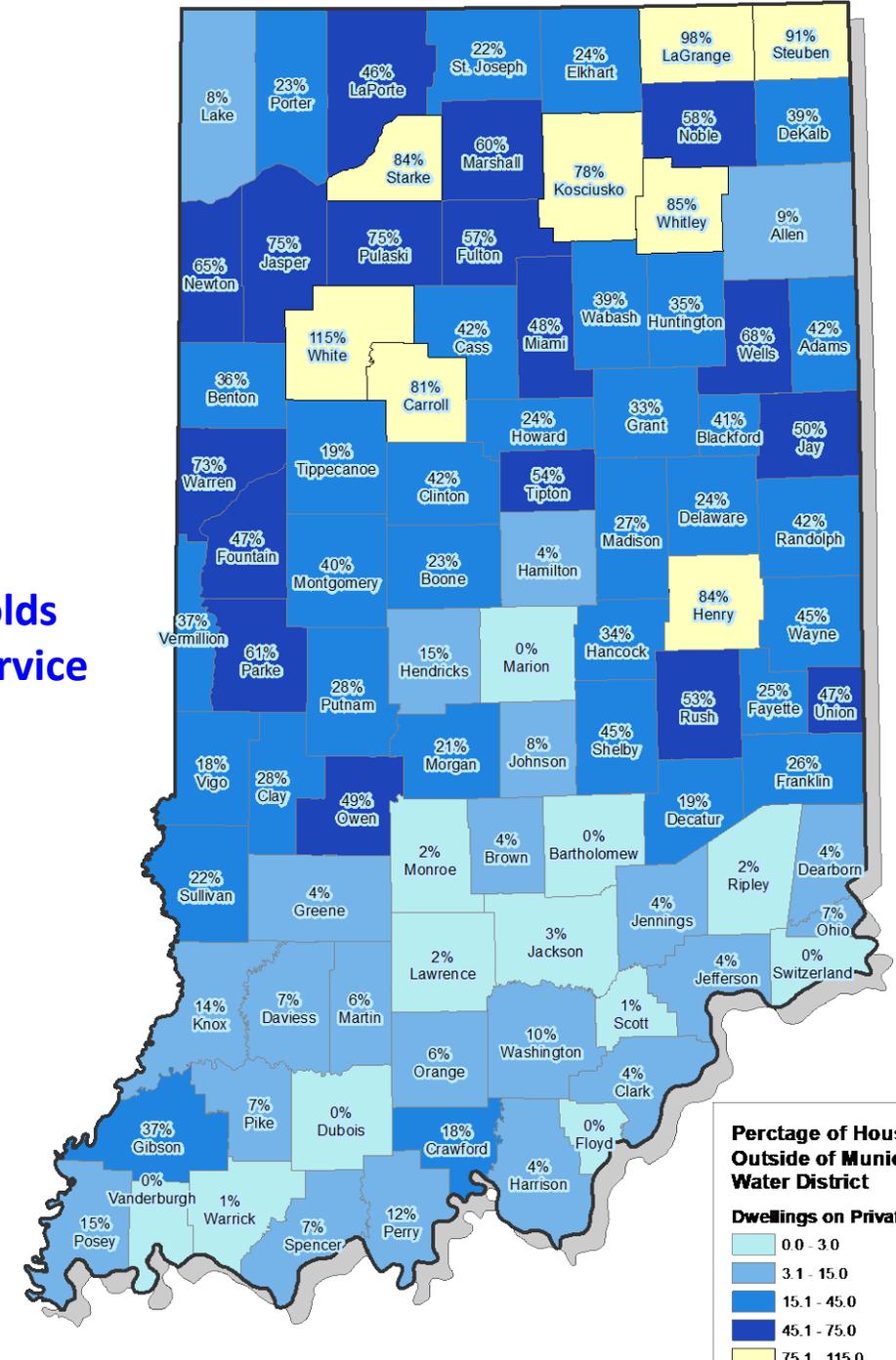
**Legend**  
**Metropolitan Statistical Area by Size**

- 24181 - 34387
  - 34388 - 54734
  - 54735 - 79262
  - 79263 - 131636
  - 131637 - 201789
  - 201790 - 416257
  - 416258 - 708070
  - 708071 - 1756241
- Public Water Supply Location  
 Water Service Area Boundary - 2014

**Water Supply Service Areas**



**Households not in service areas**



**Percentage of Households Outside of Municipal Water District**

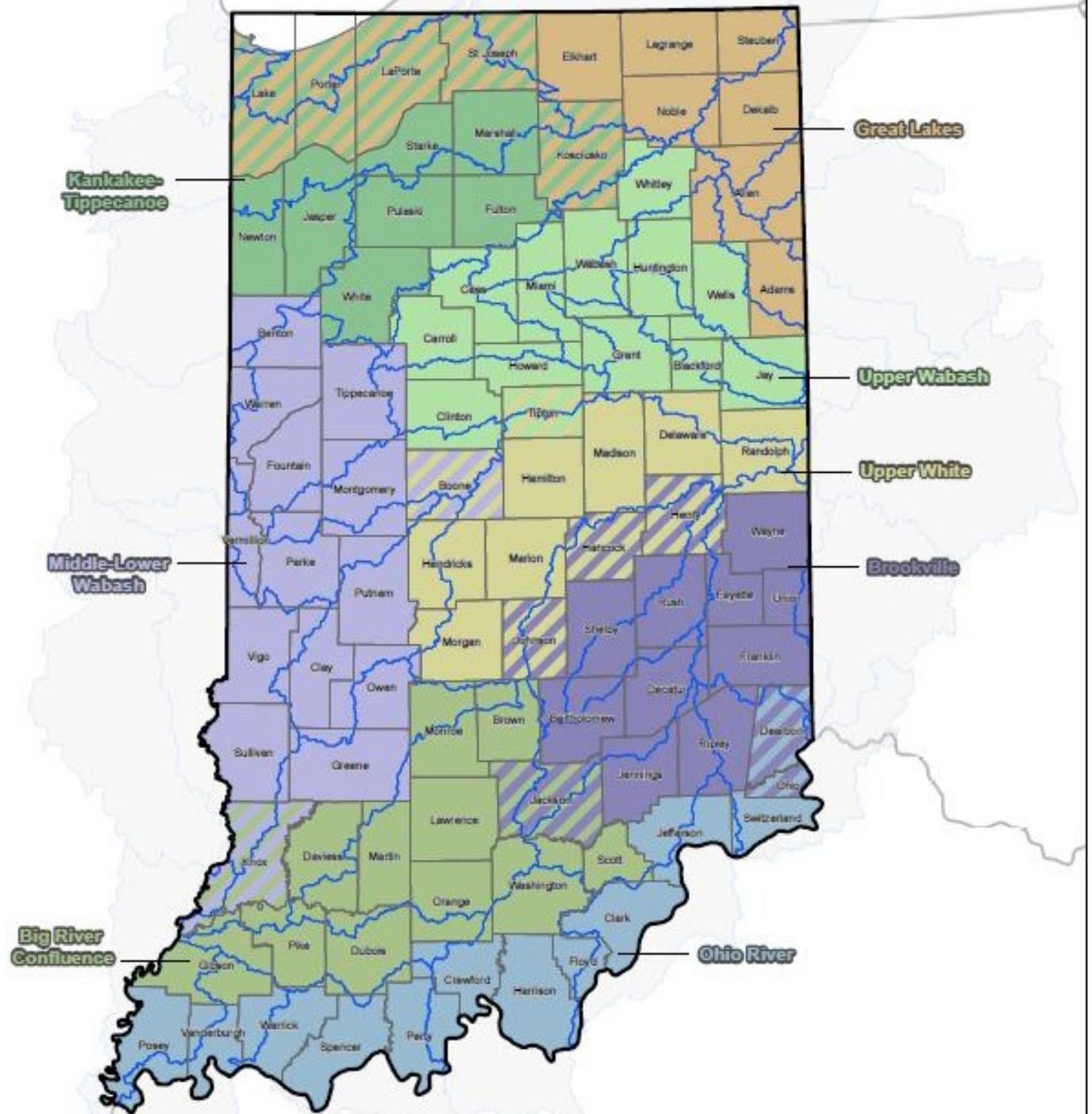
**Dwellings on Private Water (%)**

- 0.0 - 3.0
- 3.1 - 15.0
- 15.1 - 45.0
- 45.1 - 75.0
- 75.1 - 115.0

Map Author: USDI 11/19/11, 9/2018  
 Data Source: U.S. Census Bureau, 2016-11-08, 2016

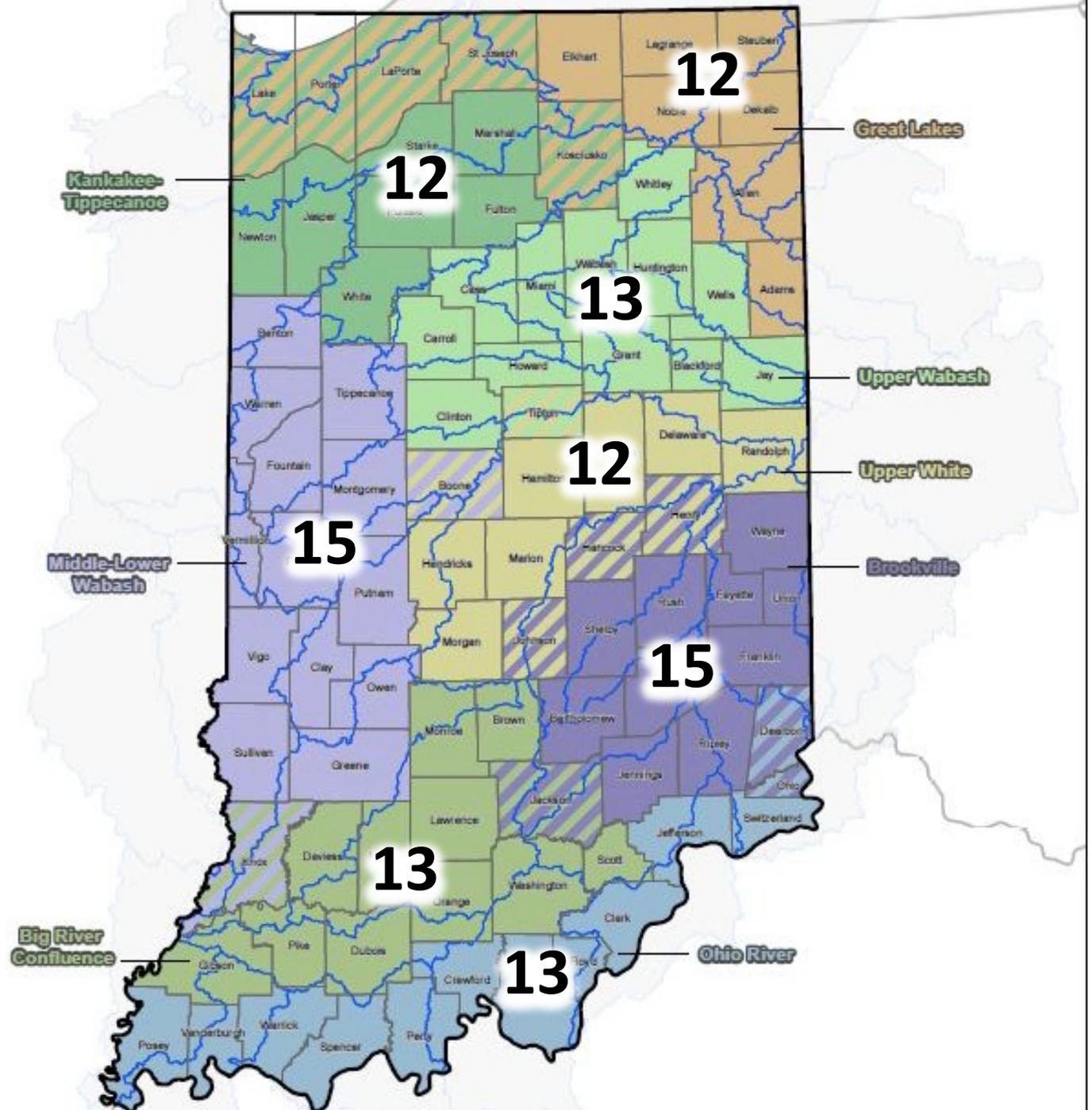
# Proposed Planning Regions

Suggested by Dr. Jack Wittman, INTERA, as part of the 2018 Water Infrastructure Task Force

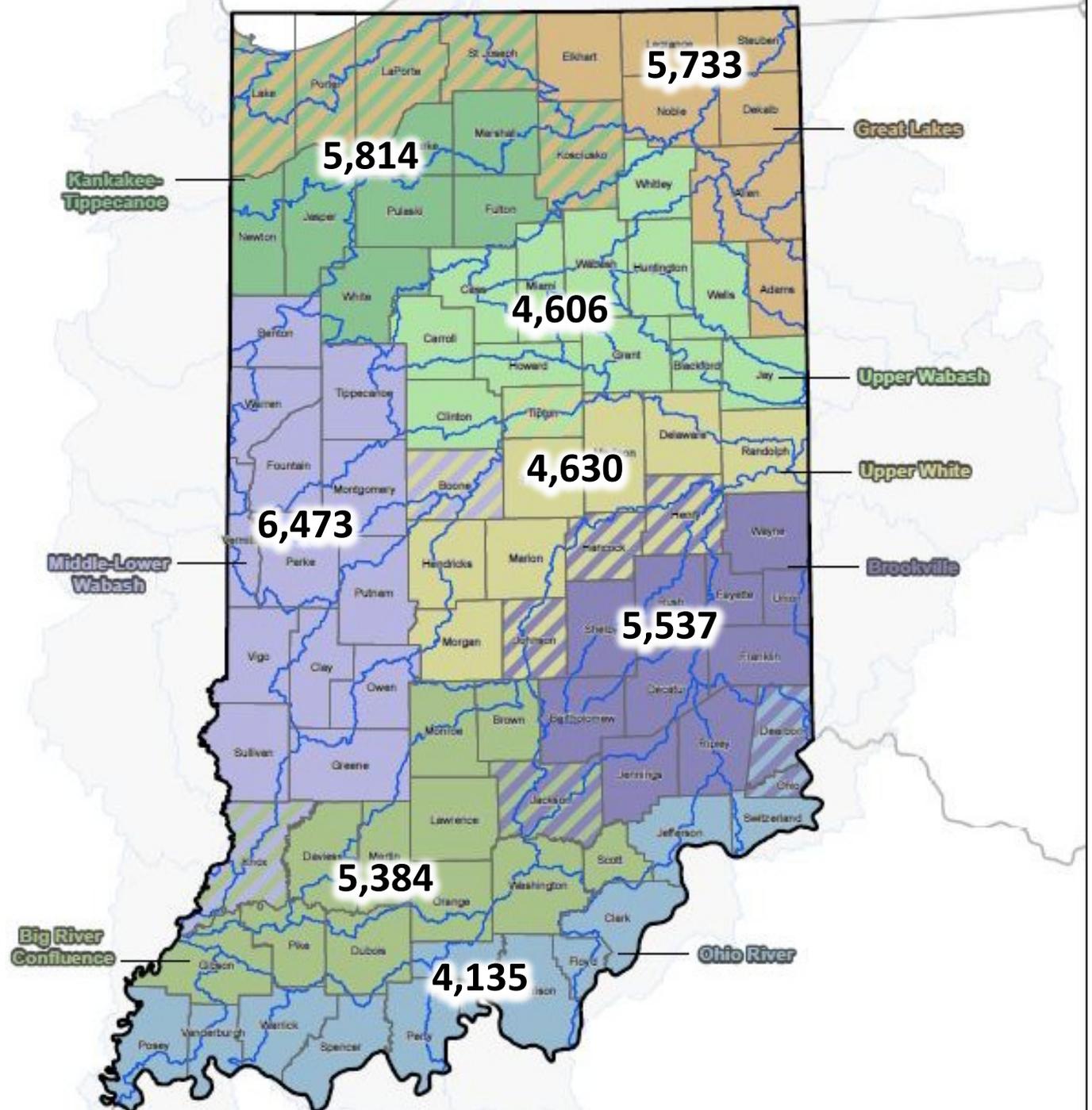




# Number of Counties

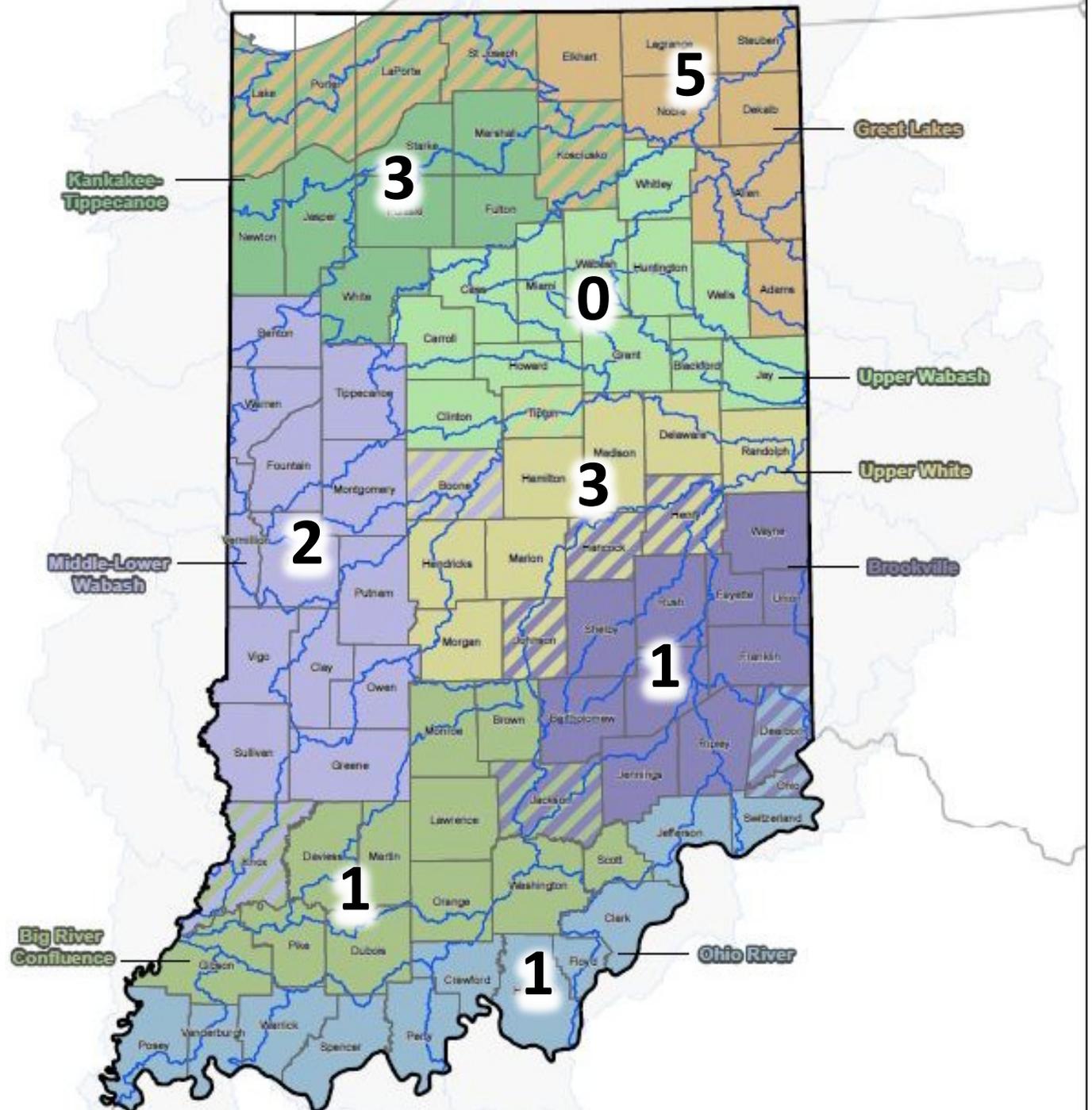


Area (sq. mi.)





Number of Cities  
~50,000 people



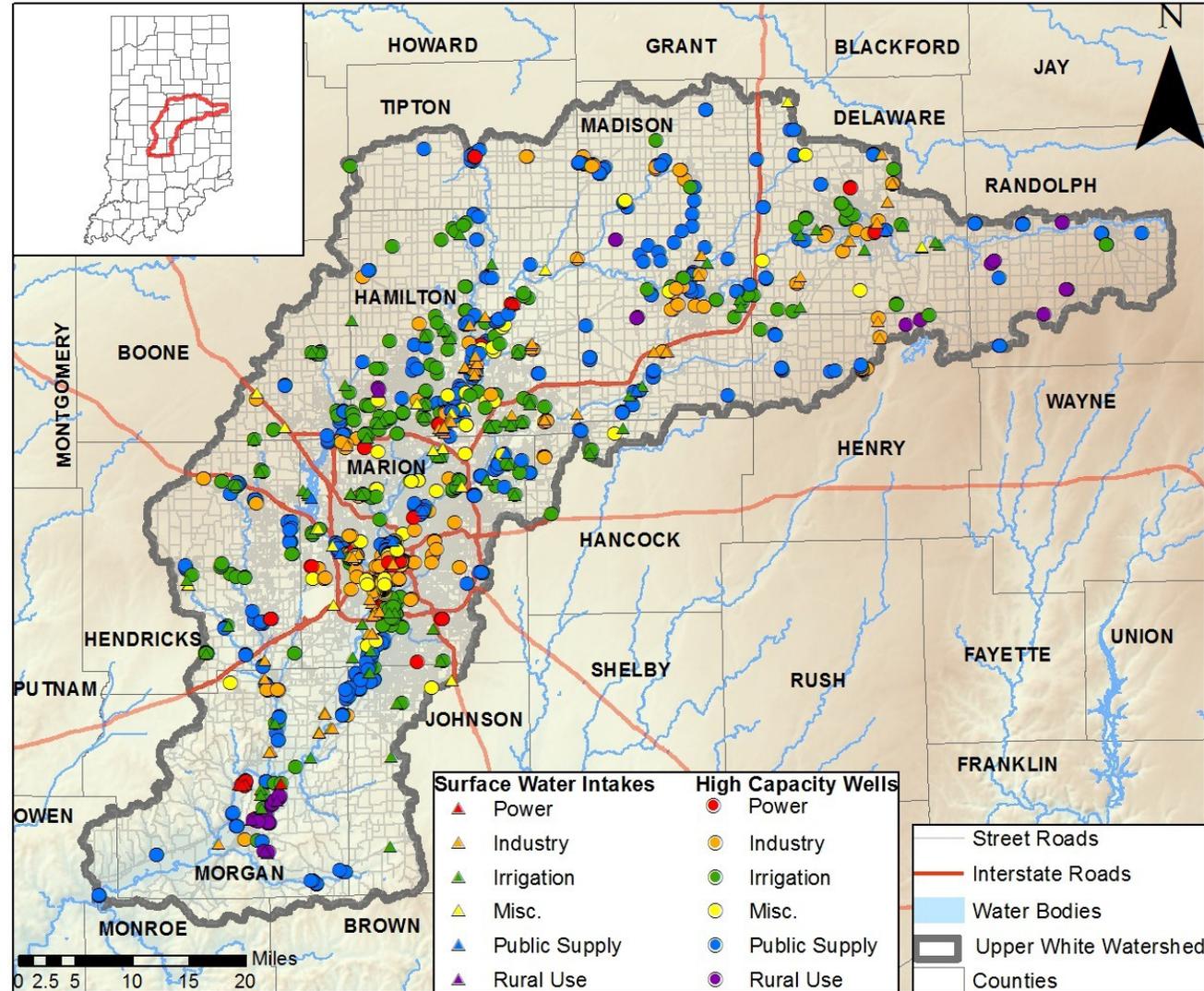
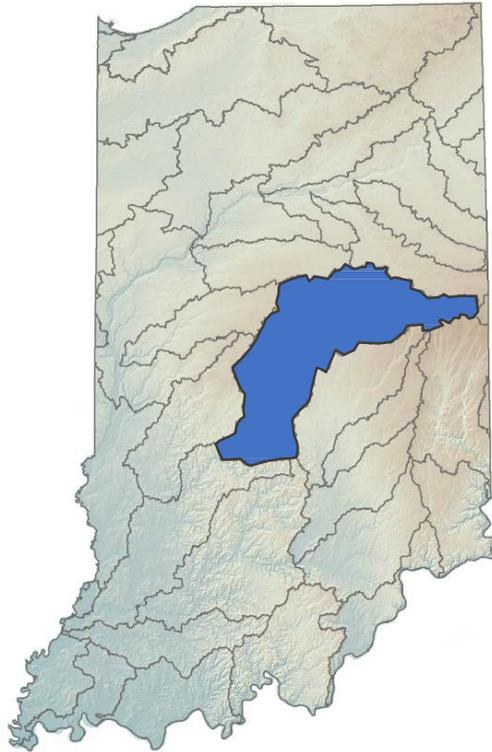
# Southeastern Indiana Regional Water Supply

Indiana Finance Authority Report  
2018



Figure 1. Southeastern Indiana study area and major watersheds.

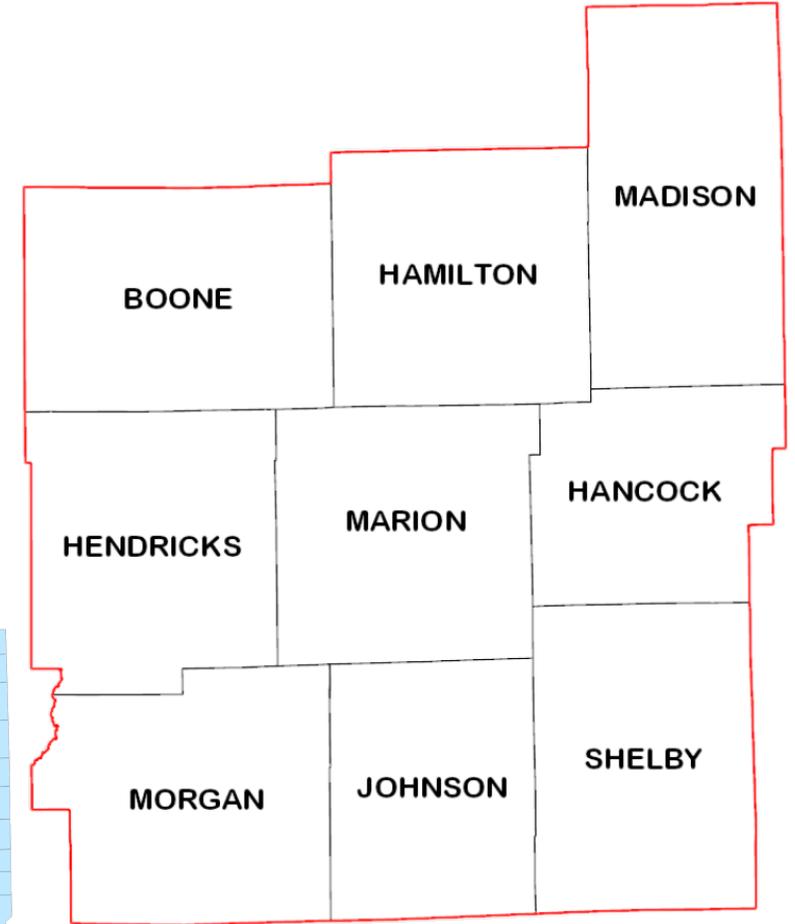
# Upper White Fork – Potential Pilot Basin



# Central Indiana Water Study

## Why study this region first?

- Supplies are shifting with metro demographics.
- Local competition is inefficient. Regional systems could help.
- Regional decisions and growth affect options.
- The increase in groundwater use is driven by growth in PWS use.
- Groundwater use is increasing and we need to manage this asset.
- Is it always wise to plan.



How to begin?

# Any questions?

*DNR, Division of Water  
Water Rights & Use Section*

Mark Basch

[mbasch@dnr.in.gov](mailto:mbasch@dnr.in.gov)

Allison Mann

[almann@dnr.in.gov](mailto:almann@dnr.in.gov)

# Survey Instructions

- Use link to complete the survey:

<http://bit.ly/ifa221regmtg>

- Discuss with the people around you
- Link will be live until the end of the meeting (11:00 am)
- Please sign in using IFA attendance sheet

## 2020 IN Regional Meetings

IFA Regional Planning Survey - January 2020



Next

0%

### Contact Information

#### 1. Contact Info

First Name

Last Name

Title

Email Address

Phone Number

Please add my email address to the IFA Regional Meeting contact list

Yes

No

Back

Next

13%

<http://bit.ly/ifa221regmtg>

## 2020 IN Regional Meetings

### IFA Meeting Attendance

Which IFA Regional Planning meeting are you attending? \*

01/29/2020

Do you represent a utility? \*

Yes

No

<http://bit.ly/ifa221regmtg>

## 2020 IN Regional Meetings

### Utility Organizations

Utility Info

Utility Name \*

What type of utility do you represent? \*

drinking water

storm water

waste water

13%

## 2020 IN Regional Meetings

### Non-Utility Organizations

What type of organization do you represent? \*

Local government

State government

Federal government

University

Advocacy Group

Other - Write In

13%

# 2020 IN Regional Meetings

## Regional Boundaries

1. In your opinion, what is the best to divide up the state into regions for water planning?  
Check all that apply.

County

Populated Areas

Water source

Water use

Watershed

Other - Write In

<http://bit.ly/ifa221regmtg>

## Current Regional Planning

2. If you **currently** participate in regional planning, who/what other groups **currently** participate with you?

Check all that apply

- County Surveyors
- Elected officials
- Economic development/Chamber of Commerce
- Farmers/agricultural groups
- Neighboring utilities
- Planning groups
- Soil and Water Conservation Districts
- State/Federal officials (IDEM, DNR, USGS, FEMA, etc.)
- Watershed groups
- Other - Write In

3. If you **currently** participate in regional meetings, what topics are discussed?

Check all that apply.

- Economic development
- Employment (recruitment, retention, etc.)
- Flooding
- Irrigation (agricultural & residential usage)
- Mutual aid agreements
- Regulatory compliance
- Supply/demand (population growth, drought planning, etc.)
- Water quality (PFAS, algal blooms, fluvial erosion, etc.)
- Other - Write In

<http://bit.ly/ifa221regmtg>

## Future Regional Planning

4. Who/what groups should be invited to participate in **future** regional planning that may not currently participate?

Check all that apply.

- County Surveyors
- Economic development/Chamber of Commerce
- Elected officials
- Farmers/agricultural groups
- Neighboring utilities
- Planning groups
- Soil and Water Conservation Districts
- State/Federal officials (IDEM, DNR, USGS, FEMA, etc.)
- Watershed groups
- Other - Write In

5. What topics should be discussed at **future** regional planning meetings?

Check all that apply.

- Economic development
- Employment (recruitment, retention, etc.)
- Flooding
- Irrigation (agricultural & residential usage)
- Mutual aid agreements
- Regulatory compliance
- Supply/demand (population growth, drought planning, etc.)
- Water quality (PFAS, algal blooms, fluvial erosion, etc.)
- Other - Write In

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