

Regional Planning Meeting

Conducted by the Indiana Finance Authority ("IFA")



Hosted by the
Indiana Water Summit
August 12, 2020

Agenda for the next hour:

1. Overview of Regional Planning Meetings
2. One Example of a Regional Planning Group: the Central Indiana Drinking Water Collaborative
3. Alternative Approaches to Defining Regions
4. Q&A
5. Survey – completion of survey required for those utilities that need to comply with the requirement

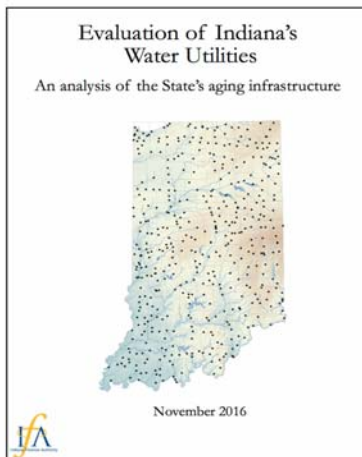
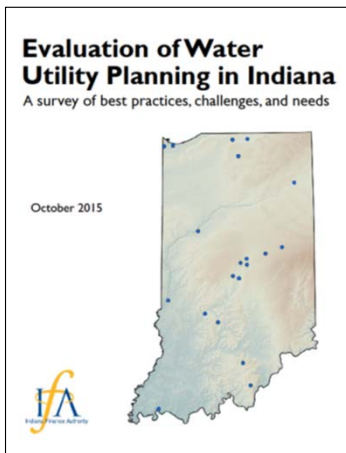
Indiana Finance Authority (“IFA”)

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



SEA 4(2019) 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



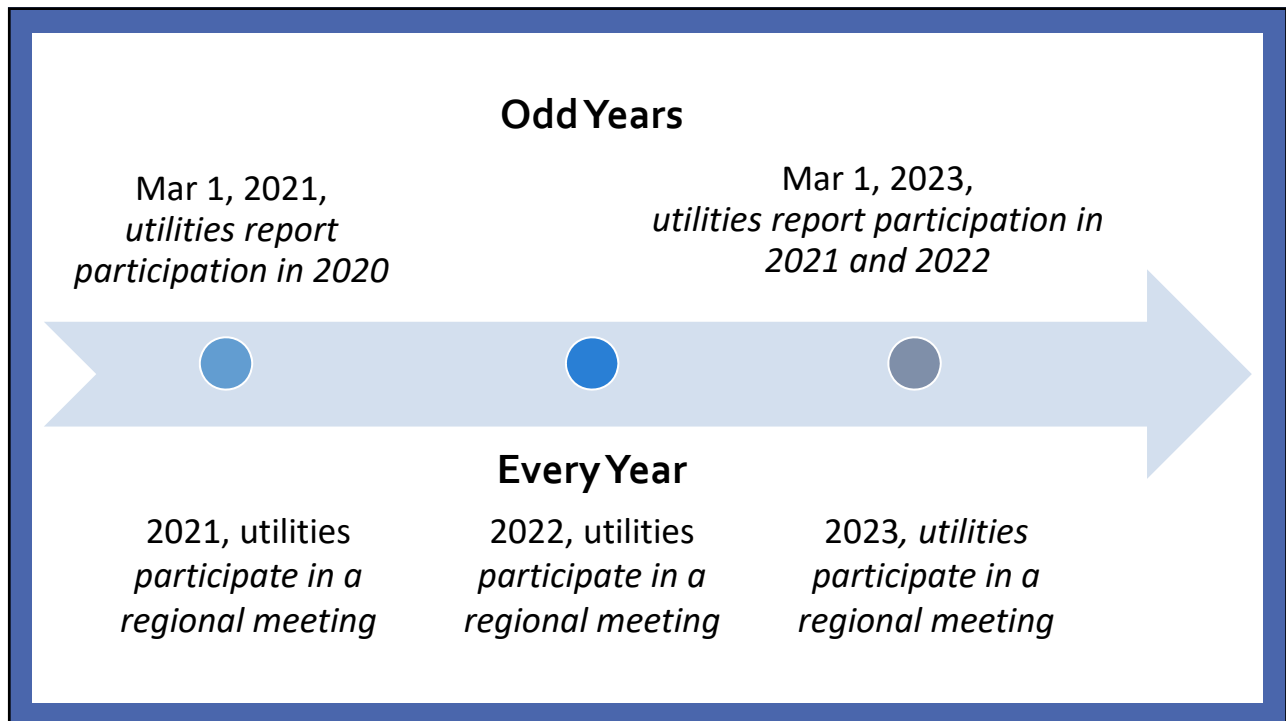
SEA 4 requirements: utilities

- 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 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



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
- Partner with existing organizations at existing meetings
- Easy reporting; complete today
- Offer CEUs




Going forward

- Utility-led, planning groups starting to form
- Annual IFA Regional Planning Meetings
- Establishing regional boundaries (“Study Areas”)



2020 IN Regional Meetings

IFA Regional Planning Survey - January 2020



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

13%

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

IFA Meeting Attendance

Which IFA Regional Planning meeting are you attending? *

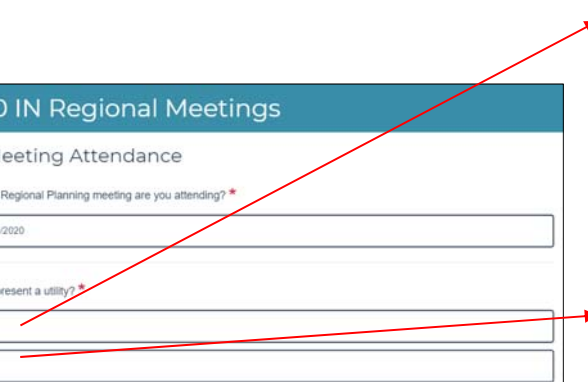
01/29/2020

Do you represent a utility? *

Yes

No

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

◀13%▶

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

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

****Survey link active until the end of today's presentations****

Questions?

IFA Water Resources and Infrastructure Planning Program

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

Sarah Hudson, Director, sahudson@ifa.in.gov

Eric Peterson*, Project Manager, epeterson@ifa.in.gov

Daniel Lundberg, Project Manager, dlundberg@ifa.in.gov

Emily Cranton, Project Manager, ecranton@ifa.in.gov

**please submit CEU forms to Eric*



Central Indiana Drinking Water Collaborative

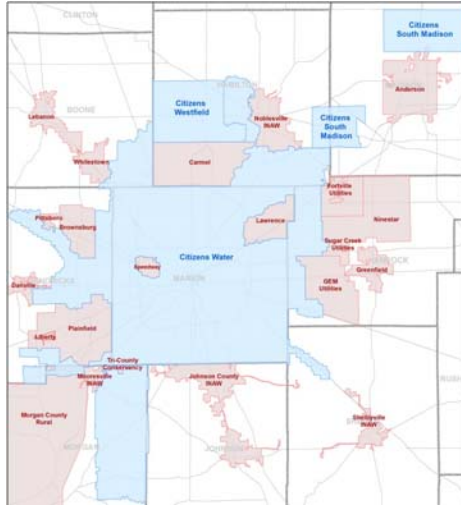
August 12, 2020

Charles Gill, Water Utility Manager
City of Greenfield

CENTRAL INDIANA DRINKING WATER COLLABORATIVE HISTORY

- Formation:
 - Kick-off Meeting held June 2015
- Who:
 - Open to all Drinking Water Utilities in the 9 County Region
- Structure:
 - Voluntary, No Rules, No Fees, Equal Voice, etc.
- Topics:
 - Utility Operations Coordination and Support (i.e. Share Data, System Interconnects, Mutual Aid, etc.)
 - Long-term Water Supply & Demand Planning
 - Drought Management and Water Conservation
 - Provide Input on Water Studies, Legislation, Policy, etc.

Drinking Water Collaborative Members



- Drinking Water Utilities: 19
- Customers Served: +500,000
- Treatment Capacity: +350 MGD

As of 2015

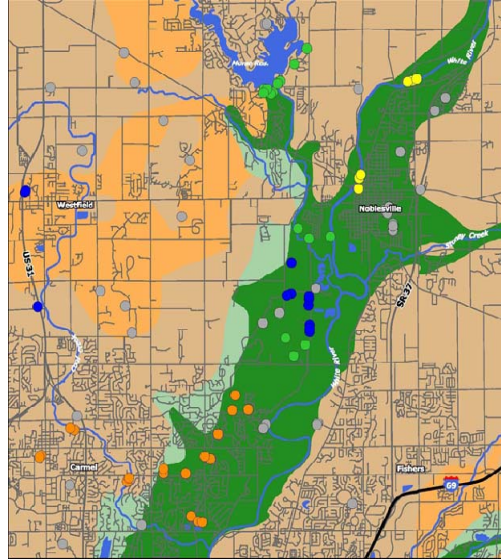
Utilities	Customers	Utilities	Customers
Citizens	315,000	Lebanon	6,200
IN American	50,000	Speedway	4,500
Carmel	27,000	Danville	3,000
Anderson	24,000	Morgan Rural	3,000
Lawrence	14,000	Fortville	1,700
Bargersville	13,500	Pendleton	1,500
CEG Westfield	11,500	Whitestown	1,300
Brownsburg	8,500	Pittsboro	1,000
Greenfield	7,300	GEM	600
Plainfield	7,000	Total	500,600

Why Was Collaborative Formed?

- Major Water Supply Concerns Following 2012 Drought.
 - Indiana Chamber Study, Indy Chamber Study, IURC, Statehouse, Public Policy, Legislative Proposals, etc.
 - Who's Responsible (Existing or New State Agency)?
- Proactive Water Utility Response
 - Best Positioned to Address Questions/Concerns
 - Best Positioned to Develop Regional Supply Plans
 - We Share Common Interests and Supply Resources
 - Plan Our Water Supply Future (or Others Will)

We Share Common Water Resources

- White River North Aquifer:
 - 48 Public Utility Wells
 - Indiana American
 - Citizens Water
 - Westfield Water
 - Carmel Utilities
 - 24 Aggregate Wells
- Collaboration Needs:
 - Monitor Groundwater Levels
 - Aquifer Protection & Recharge
 - Location of New Wells
 - Long-Term Supply Planning



Collaborative Topics & Initiatives

Date	Topics
2015	<ul style="list-style-type: none"> • Kick-Off, Introductions and Ground Rules • Water Utility Survey Results (IFA)
2016	<ul style="list-style-type: none"> • Groundwater Under The Influence (IDEM) • Economic Development (Indy Chamber, Indy MPO) • Water Utility Best Practice Survey Results (IFA) • Long-term Regional Water Supply/Demand Planning • Drought Management Plans
2017	<ul style="list-style-type: none"> • Lawn Irrigation Challenges/Awareness (Contractors) • Purdue Lawn Turf Irrigation Study (Purdue University) • Indy MPO Strategic Planning Process (Water Panel) • Environmental Summer Study Committee Testimony

Collaborative Topics & Initiatives

Date	Topics
2018	<ul style="list-style-type: none"> • Cyber Security Best Practices • Lead Service Line Replacement Programs • Non-Revenue Water Practices • Indiana Water Task Force Testimony
2019	<ul style="list-style-type: none"> • IFA Central Indiana Regional Water Study • IFA Asset Management Plan Requirements • Work Force Development and Training • Indianapolis Metropolitan Planning Organization (MPO) • Risk and Resilience Plans
2020	<ul style="list-style-type: none"> • IFA Central Indiana Regional Water Study • Proposed Lead and Copper Rules • Other topics TBD

Meeting Frequency

- Quarterly Meetings
 - COVID-19 has changed the landscape
 - Next Meeting August 25, 2020
 - Virtual meeting

Meeting Participation

- Utilities from the 9 counties
- MPO, IURC, IFA, IDEM
- Utility Consultants

Collaboration Reasons and Benefits

- We All Serve the Central Indiana Region
- We All Share Common Water Resources
- Share Operating Knowledge, Experience and Data
- Help Each Other During Times of Need (Mutual Aid)
- Evaluate New Rules & Regulation Requirements
- Coordinate During High Risk Periods (Droughts)
- Plan and Control Your Water Supply Future

Collaboration Reasons and Benefits

- Help Develop Indiana Water Policy/Practices
- Identify and discuss Common Interests and Objectives
- Discuss Regional Studies and Plans
- Build Relationships, Support & Trust
- Plan our Region's Future (or Others Will)

Regional Water Supply Planning in Indiana

Defining Regions

Mark Basch & Allison Mann
DNR, Division of Water

August 12, 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.



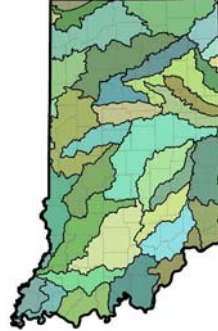
Many options for Indiana Regions



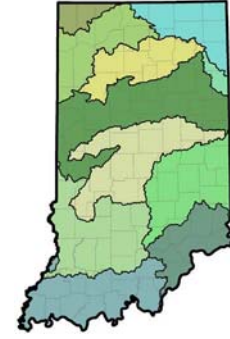
a) Climatic regions



b) Indiana AWWA districts



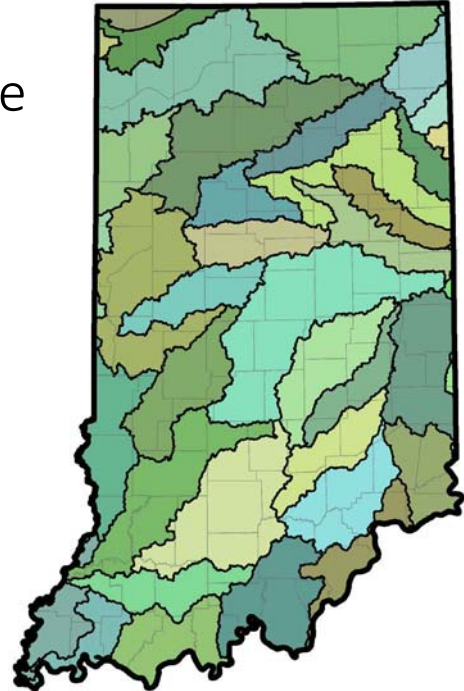
c) Watersheds



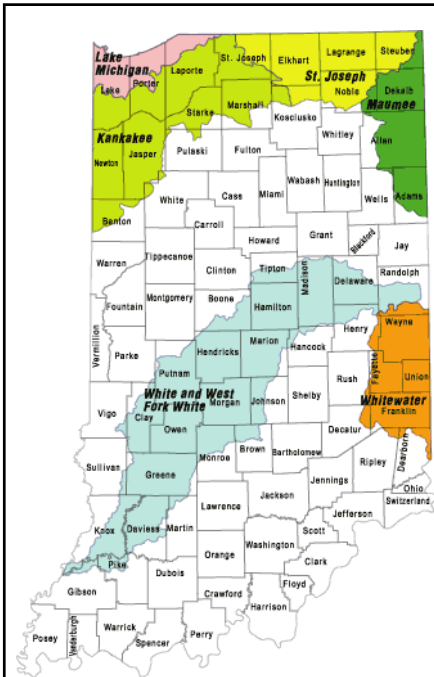
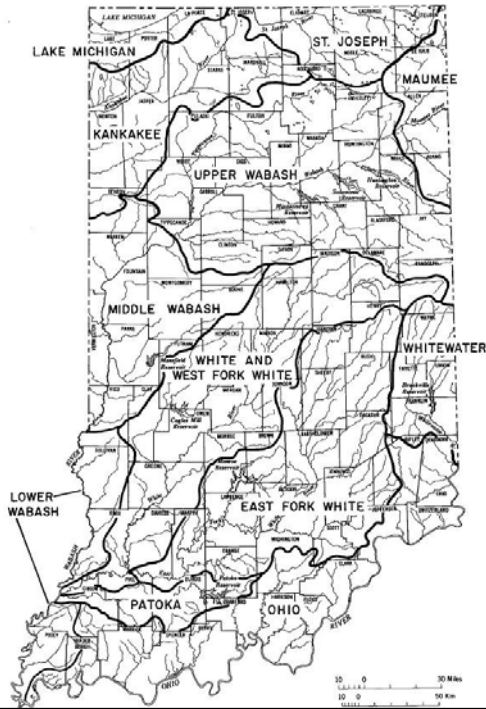
d) Combined watersheds

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

A collage of six DNR Basin Study report covers. Each cover features the DNR logo, the title 'WATER RESOURCE AVAILABILITY IN THE [Basin Name] RIVER BASIN, INDIANA', and various images related to the basin. The reports are for: Lake Michigan (1990), White and West Fork White (1990), Whitewater (1996), Kankakee (1996), St. Joseph (1996), and Maumee (1996). The covers include photos of water, birds, and landscapes.

IC 14-25-7: Water Resources Management Act

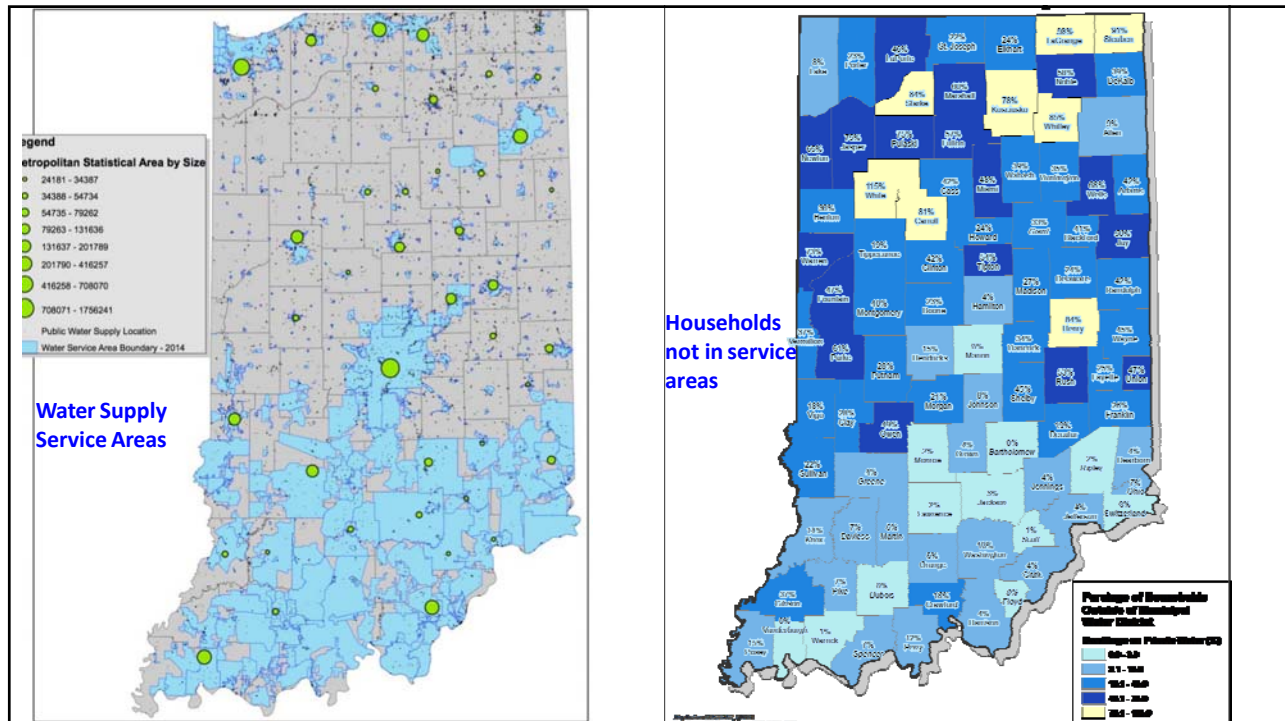
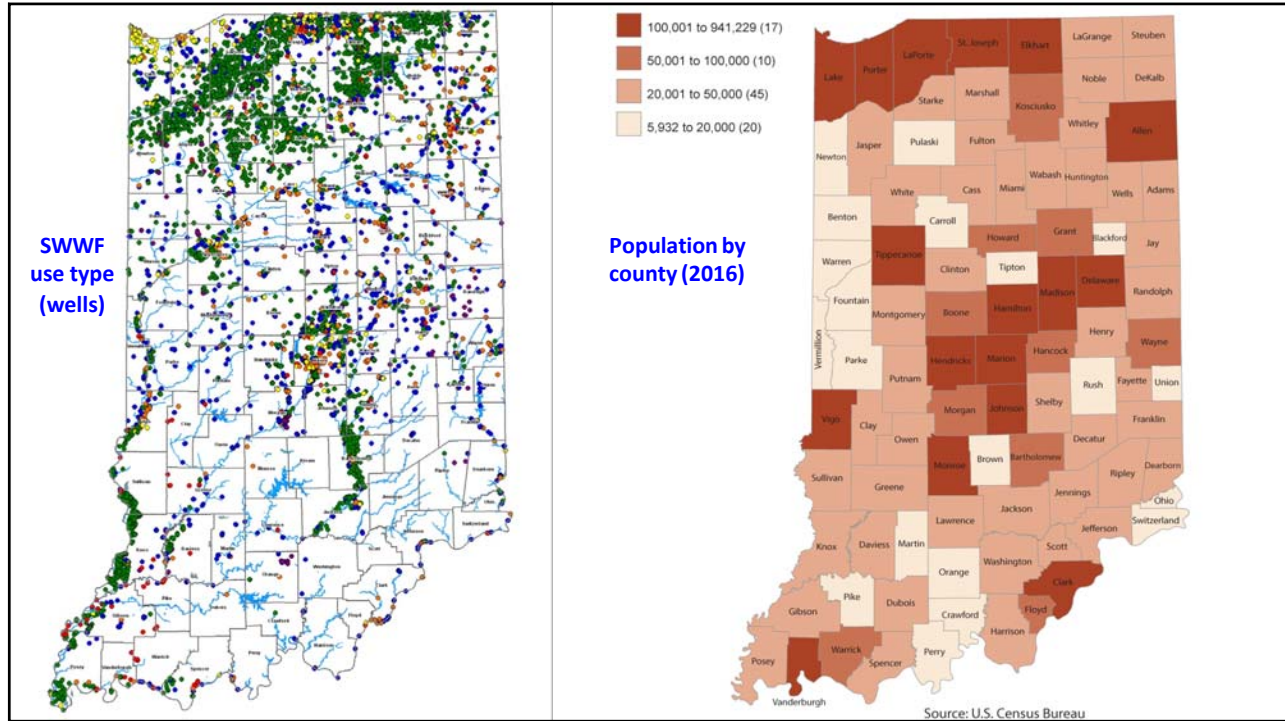
- Enacted in 1983
- Requires registration of all SWWF (GW & SW)
- Facility defined as greater than 100,000 GPD capability
- Capability is aggregate of all wells & intakes
- Annual water use reporting required
- Approximately 4200 SWWFs currently registered

Significant Water Withdrawal Facility Source Locations in Indiana

SWWF use type (wells)

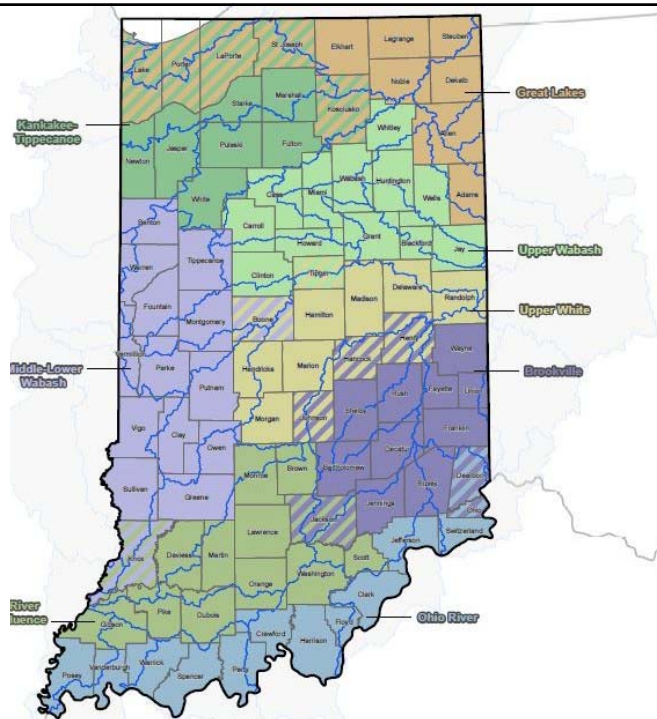
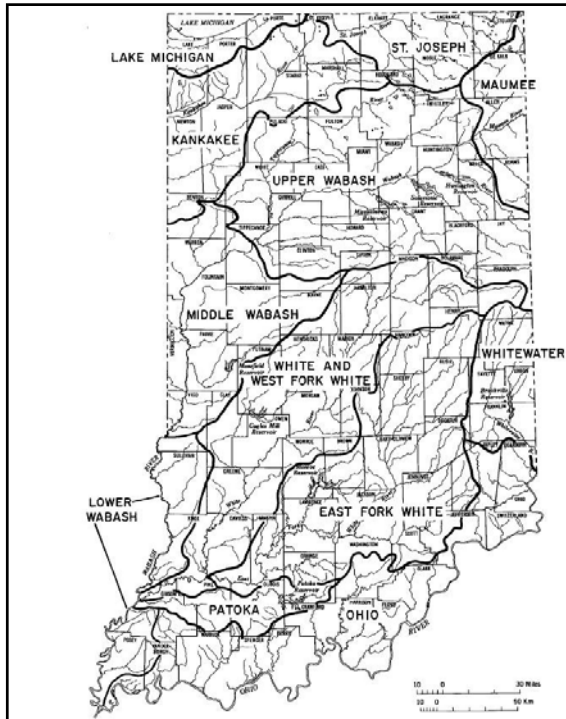
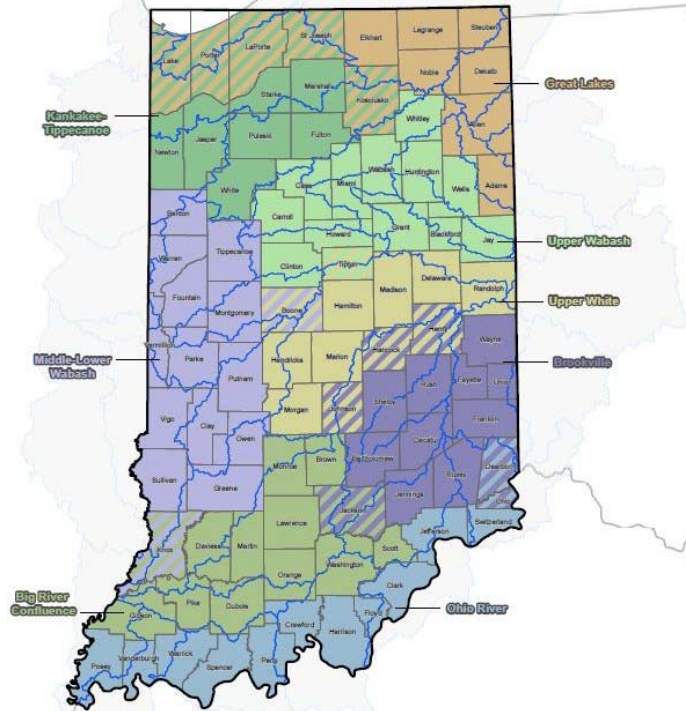
SWWF use type by County (wells)

Public Supply
Irrigation
Industrial
Energy Prod.



Proposed Planning Regions

(Jack Wittman, 2018)



Southeastern Indiana Regional Water Supply

Indiana Finance Authority Report
2018

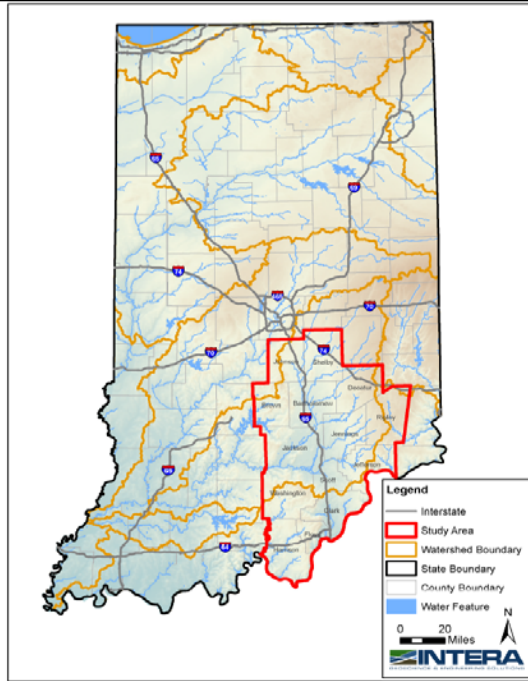
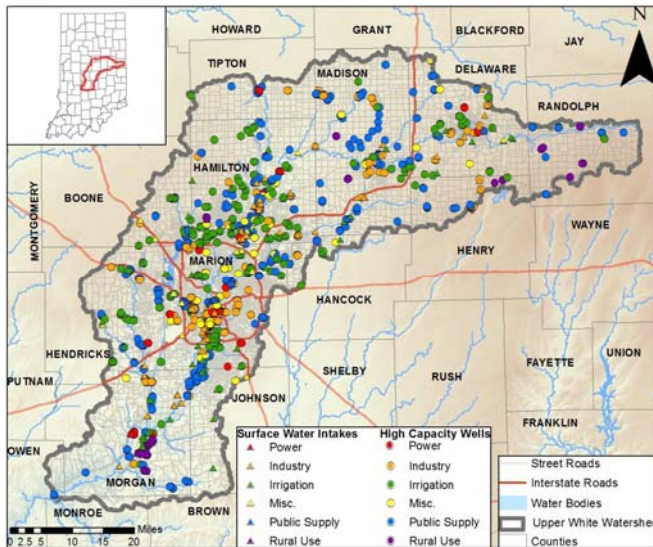


Figure 1. Southeastern Indiana study area and major watersheds.

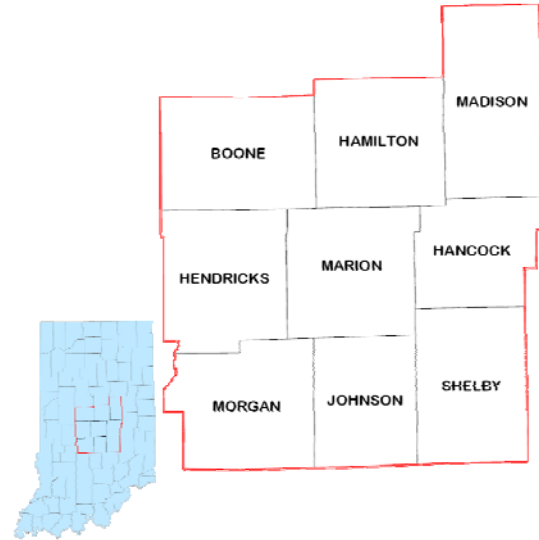
Upper White Fork – Potential Pilot Basin



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 Determine Regions for Water Supply Planning?

- Hydrologic (River Basins)
- Political (counties; number/area/population)
- Type of Water Use (AG/IN/PWS/EP)
- Existing infrastructure (Central IN, Patoka, SE IN)
- Combination of above or other criteria?

Any questions?

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

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