

VINCE GRIFFIN

VICE PRESIDENT

**ENVIRONMENTAL & ENERGY
POLICY**

INDIANA CHAMBER OF COMMERCE

317/264-6881

vgriffin@indianachamber.com



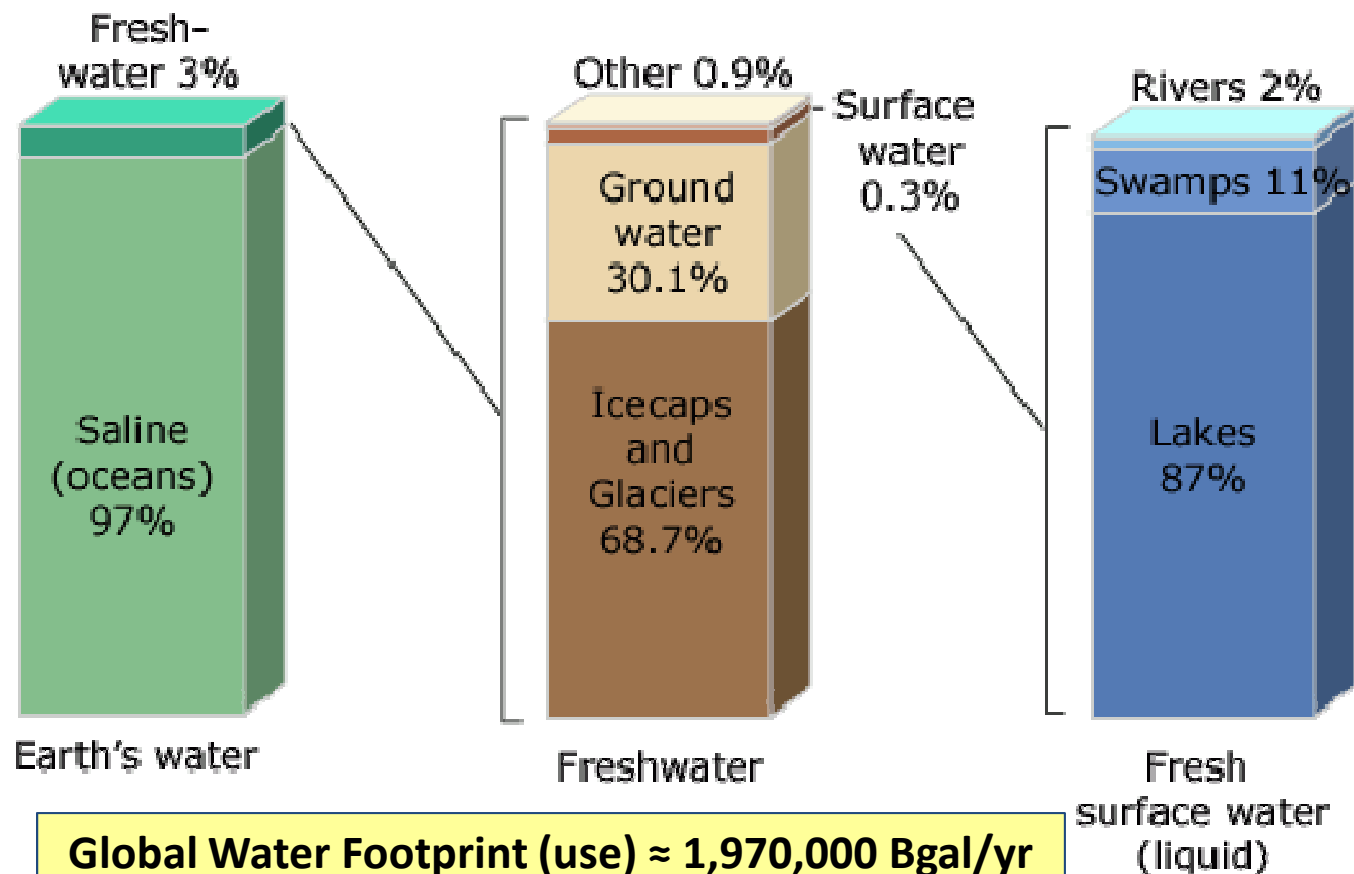
WATER

**“WHISKEY’S FOR DRINKING
AND
WATER’S FOR FIGHTING”**

(Mark Twain upon returning from California)

**Water and Electricity Are
The Backbone Of ANY
Economy**

**NO Water OR Electricity =
NO Economy**



**Global Water Footprint (use) \approx 1,970,000 Bgal/yr
 \approx 330,000 gal/yr/person**

Indiana Water Facts

- We presently have no plan for our “water future”.
- Water “**challenges**” from Central Indiana to the Ohio River.
- We need to identify 1) where is the water 2) who needs the water 3) how to get the water to **where** it is needed.
- There is a need for **strong leadership** in this area.
- A **clear and concise plan** needs to be developed outside of a crisis-initiated scenario.

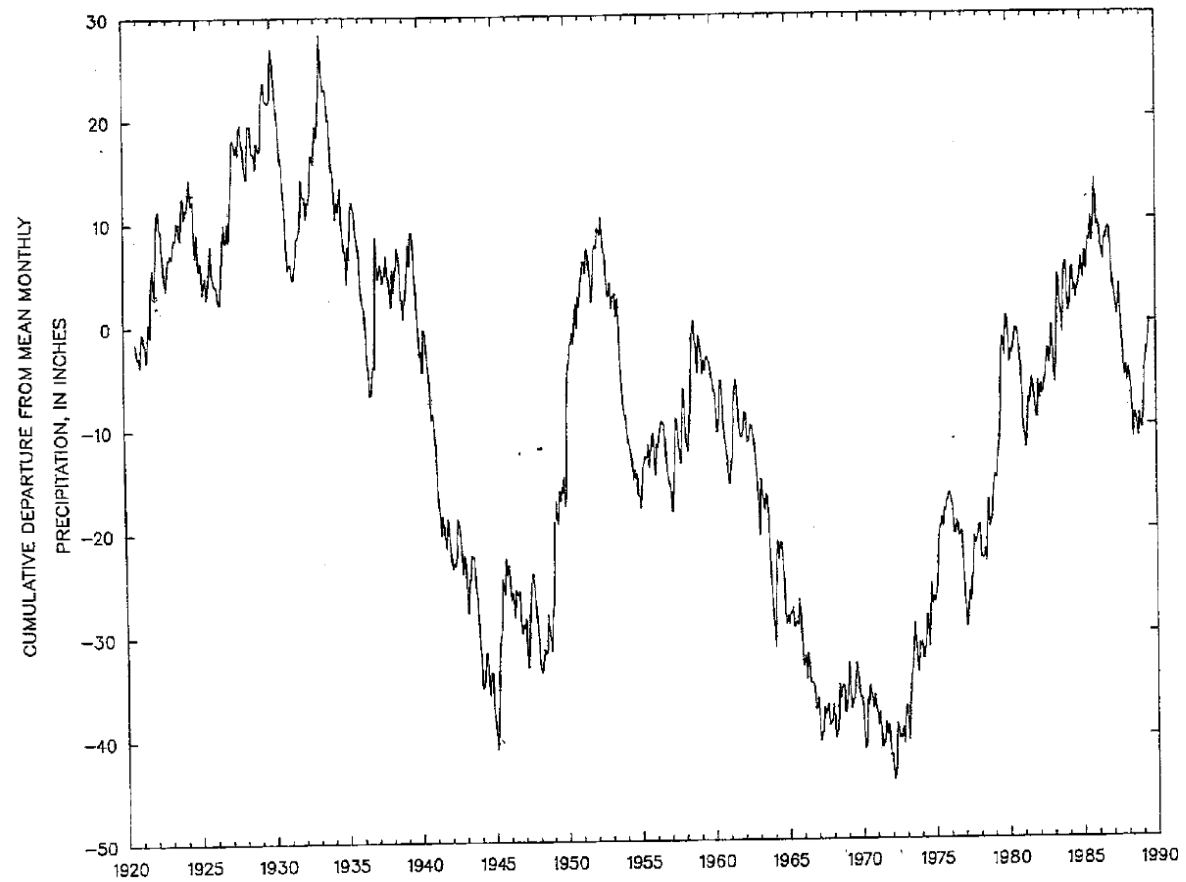


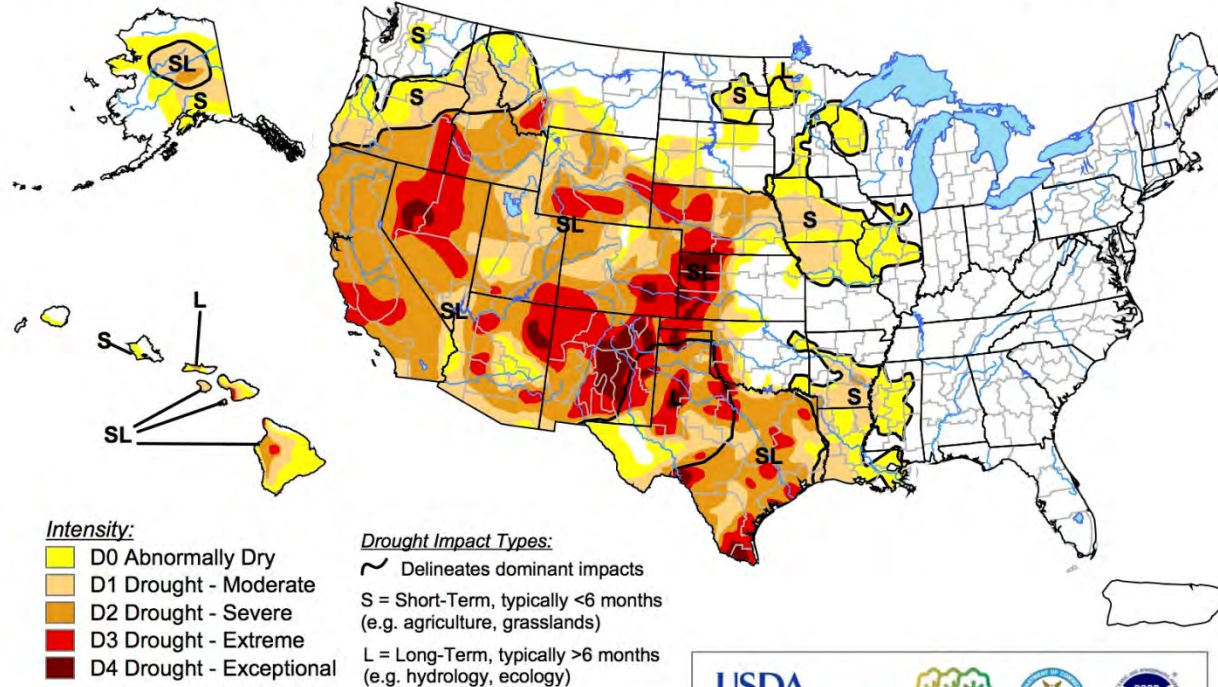
Figure 3.—Cumulative departure from mean monthly precipitation for climatic division 8, water years 1921–89 (data from National Oceanic and Atmospheric Administration, Climatic Data Center).

Persistent Drought

U.S. Drought Monitor

August 13, 2013

Valid 7 a.m. EDT

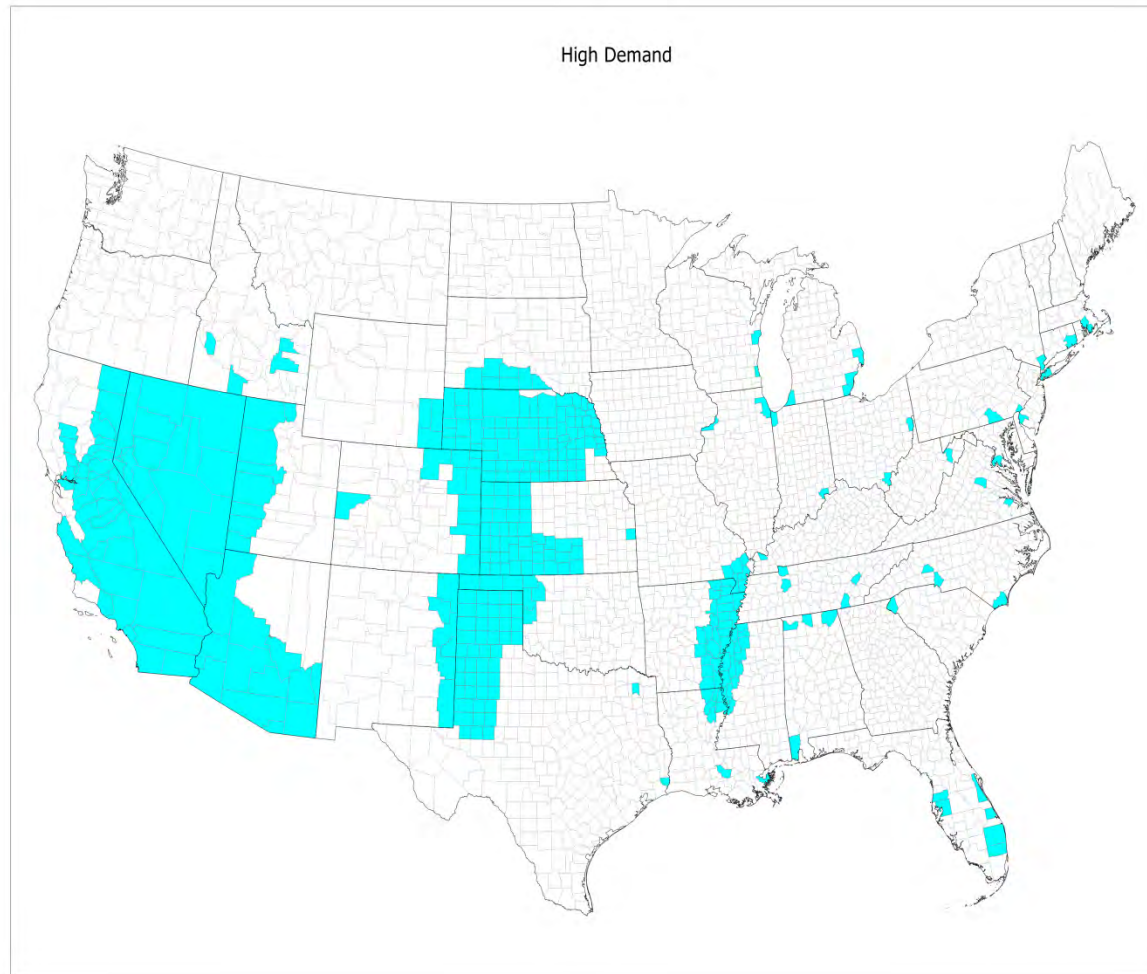


The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



Released Thursday, August 15, 2013

Competition for Water



***Great Lakes_St. Lawrence River Basin Water Resources
Compact Update
Summer Study Committees; November 2 & 3, 2012***



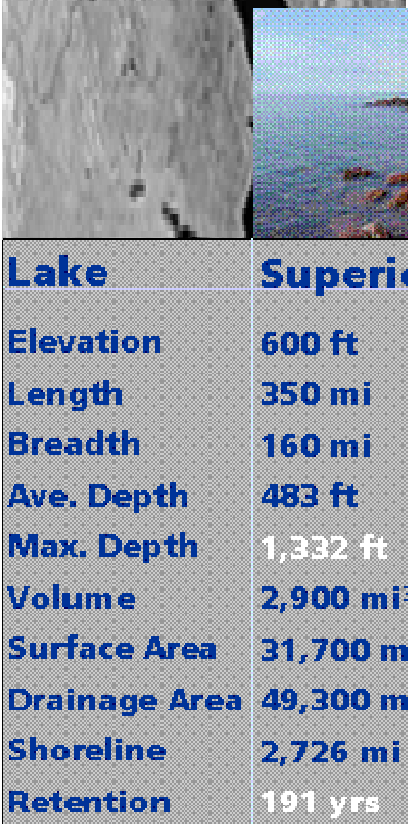
Real Purpose of Great Lakes Compact

Section 4.8. *All new or increased diversions are prohibited except as provided for in the compact.*

Section 4.9. *Exceptions to the prohibition for straddling communities, straddling counties and intra-basin transfers.*



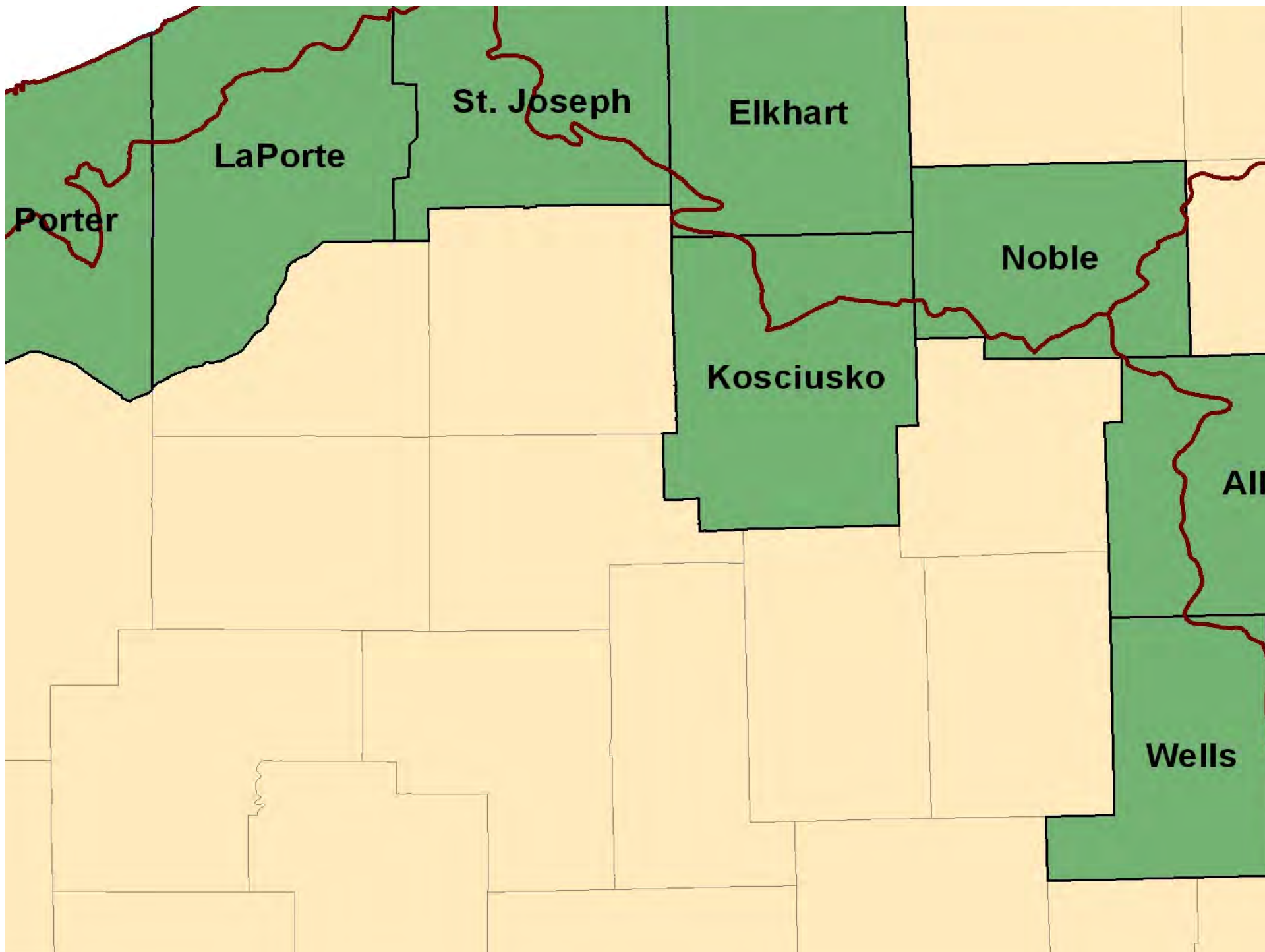
Hydrology



Lake	Superior	Michigan	Huron	Erie	Ontario
Elevation	600 ft	577	577	569	243
Length	350 mi	307	206	241	193
Breadth	160 mi	118	183	57	53
Ave. Depth	483 ft	279	195	62	283
Max. Depth	1,332 ft	925	750	210	802
Volume	2,900 mi ³	1,180	850	116	393
Surface Area	31,700 mi ²	22,300	23,000	9,910	7,340
Drainage Area	49,300 mi ²	45,600	51,700	30,140	24,720
Shoreline	2,726 mi	1,638	3,827	871	712
Retention	191 yrs	99	22	2.6	6

1 mi³ = 1.1 trillion gallons, GL Total = 5439 mi³ = 5.9 quadrillion gallons.



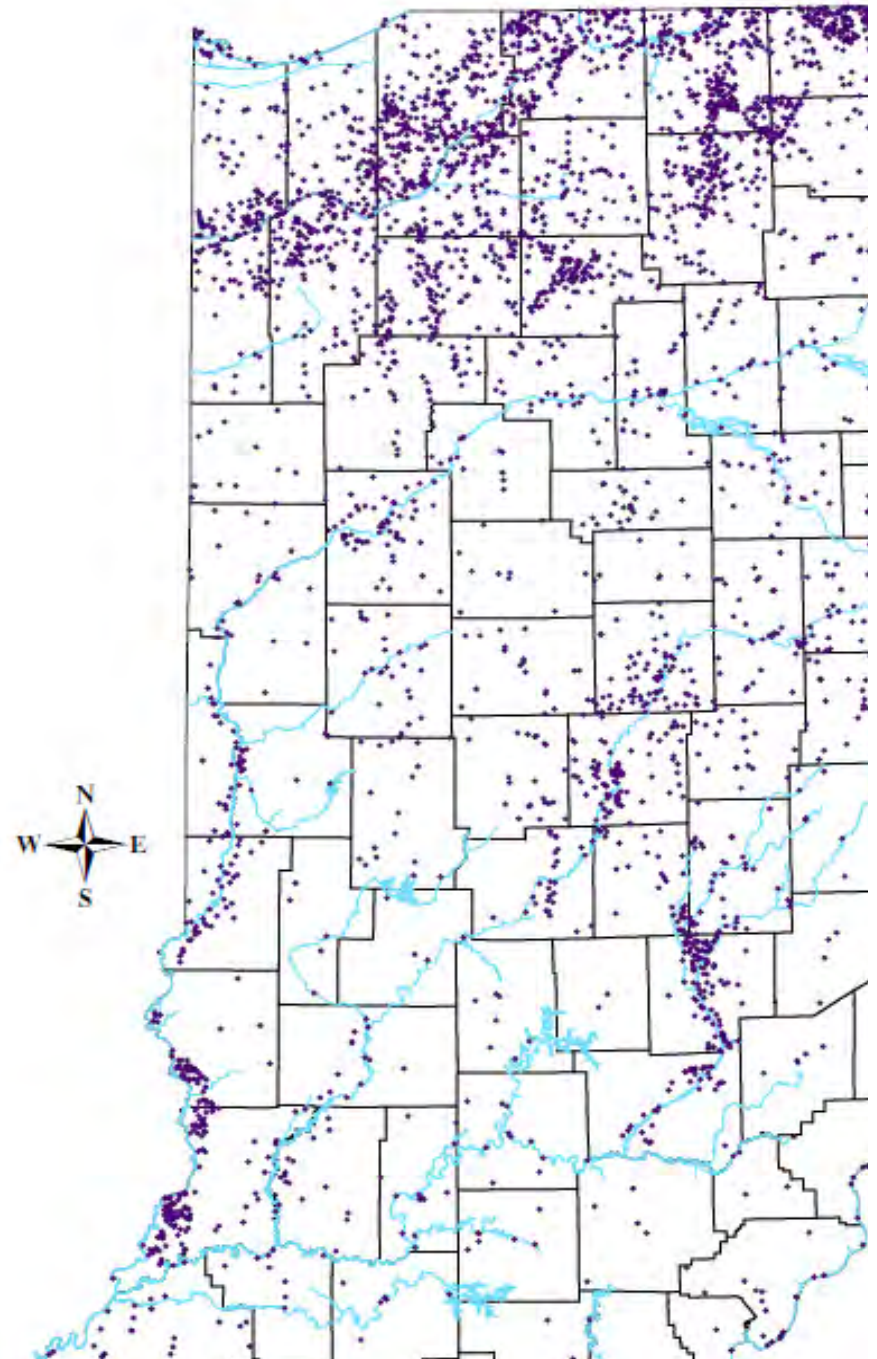


IC 14-25-7:

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**

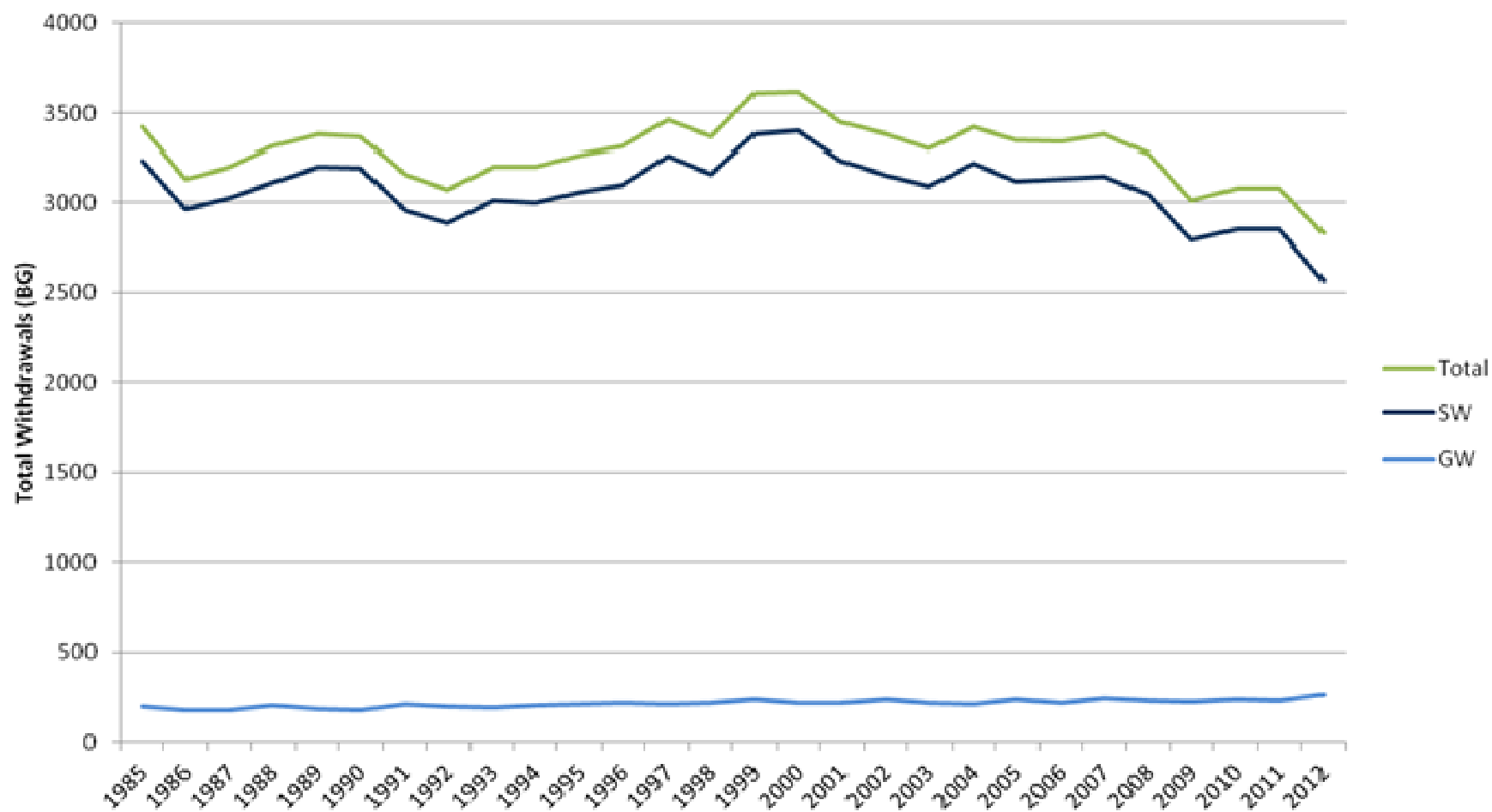
Location of Significant Water Withdrawal Facilities



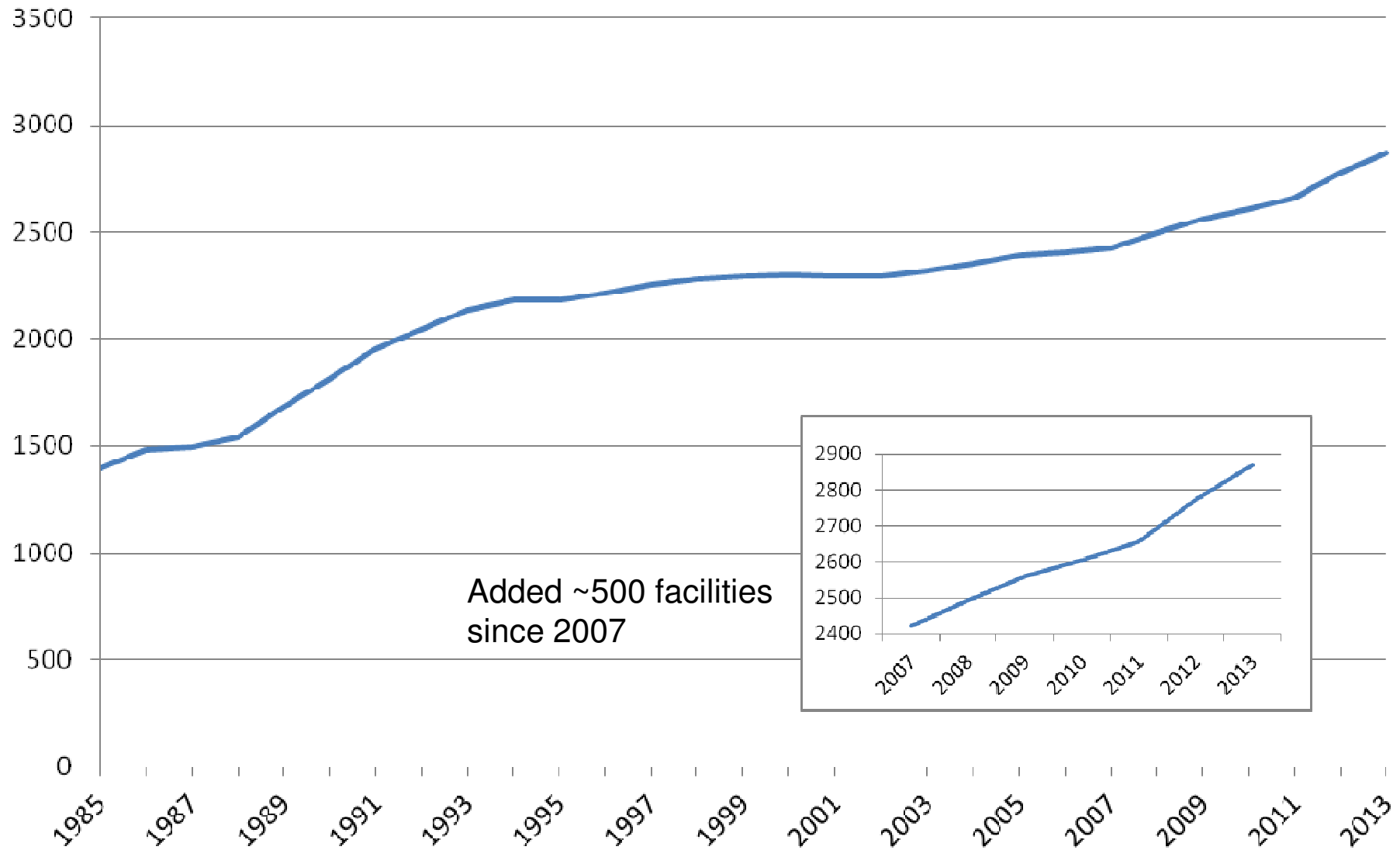
Significant Water Withdraw Facility (SWWF)

- Every person who has an **SWWF** shall register it with the Natural Resources Commission
- SWWF is $\geq 100,000$ gpd (or 70 gpm)
- All SWWF must be registered within 3 months after installation
- The owner of the SWWF shall report water use within three months after the end of each calendar year

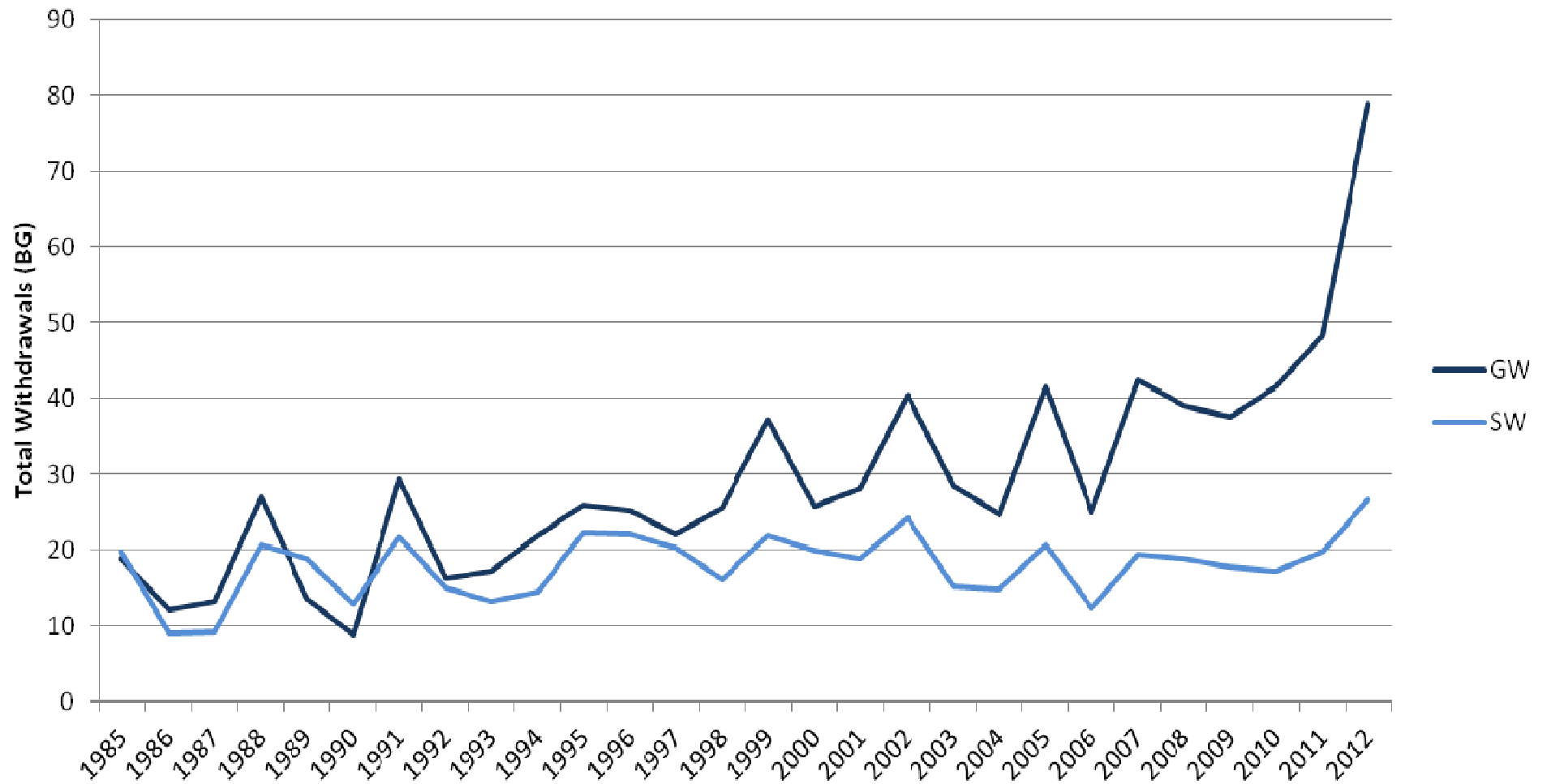
Total Annual Withdrawals 1985-2012



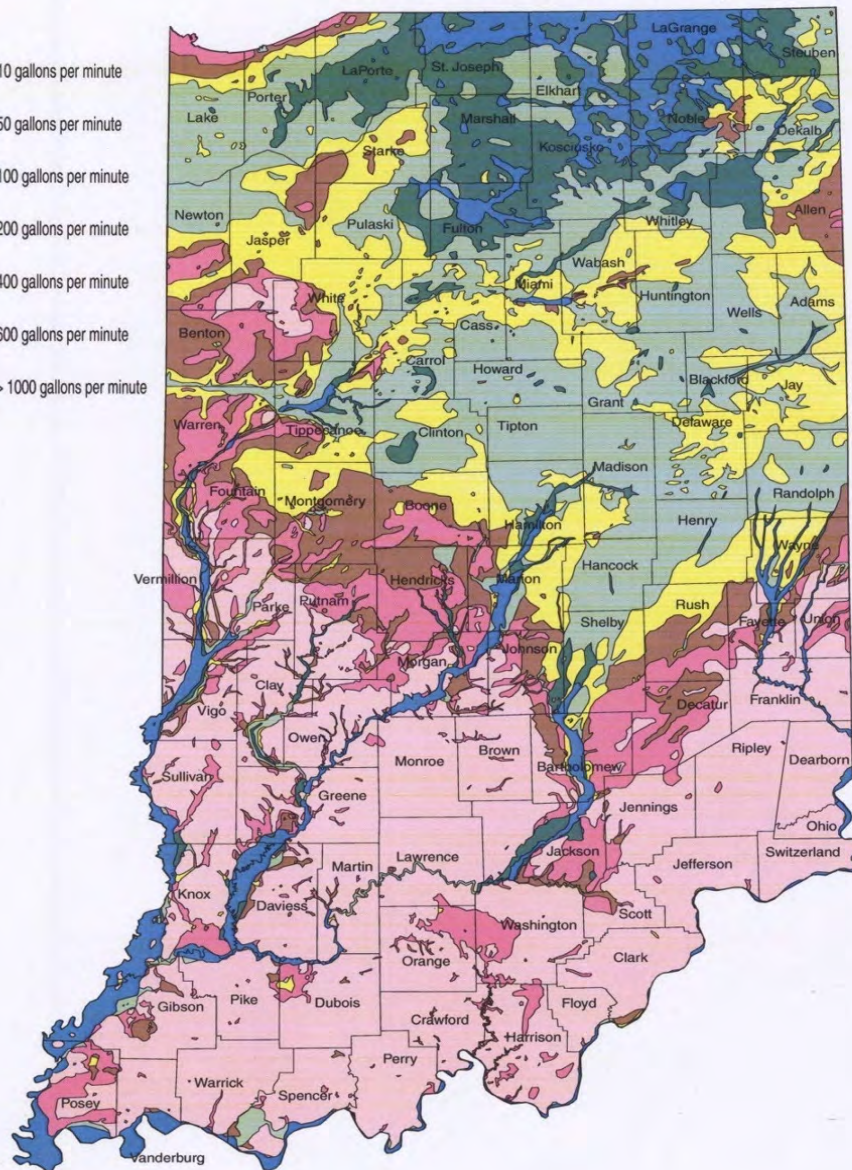
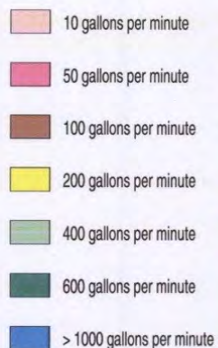
Registered Irrigation Facilities 1985-2013



Irrigation Ground and Surface Water Withdrawals 1985-2012

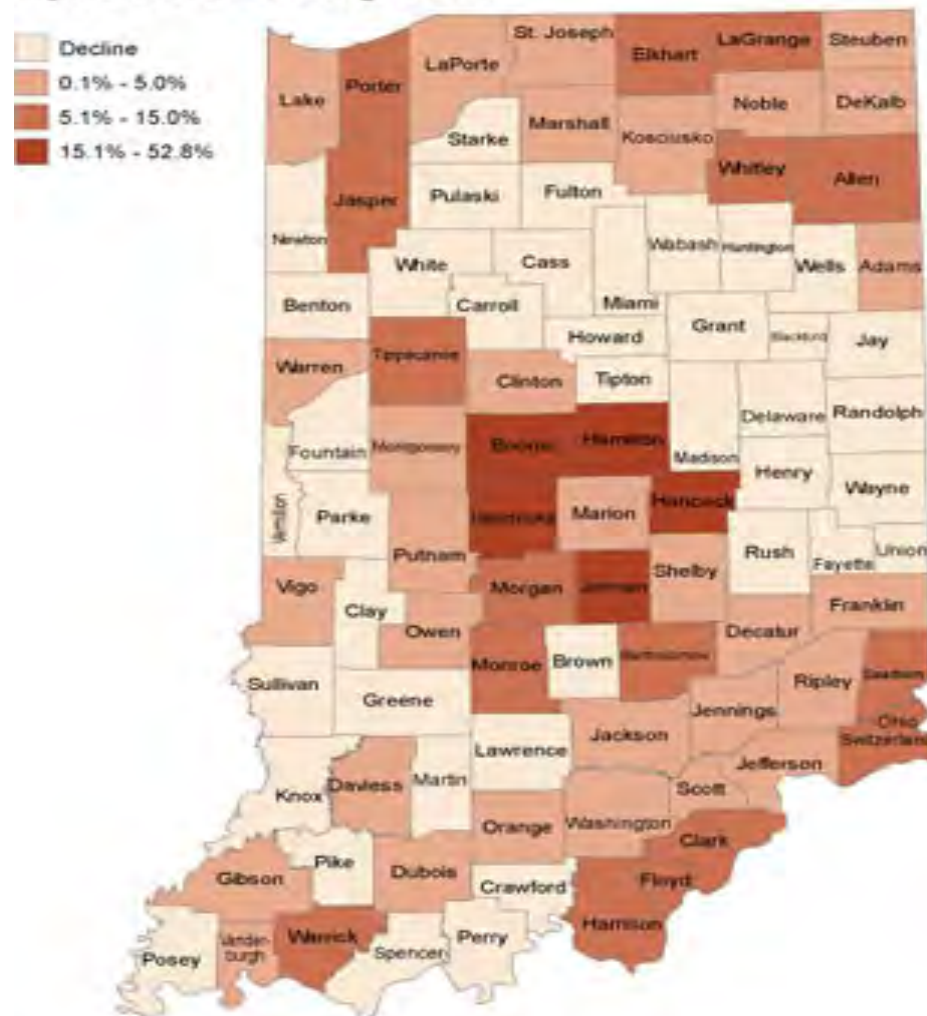


Generalized Ground-Water Availability



Growth by County (need)

**Percent Change in Population
April 2000 to July 2009**



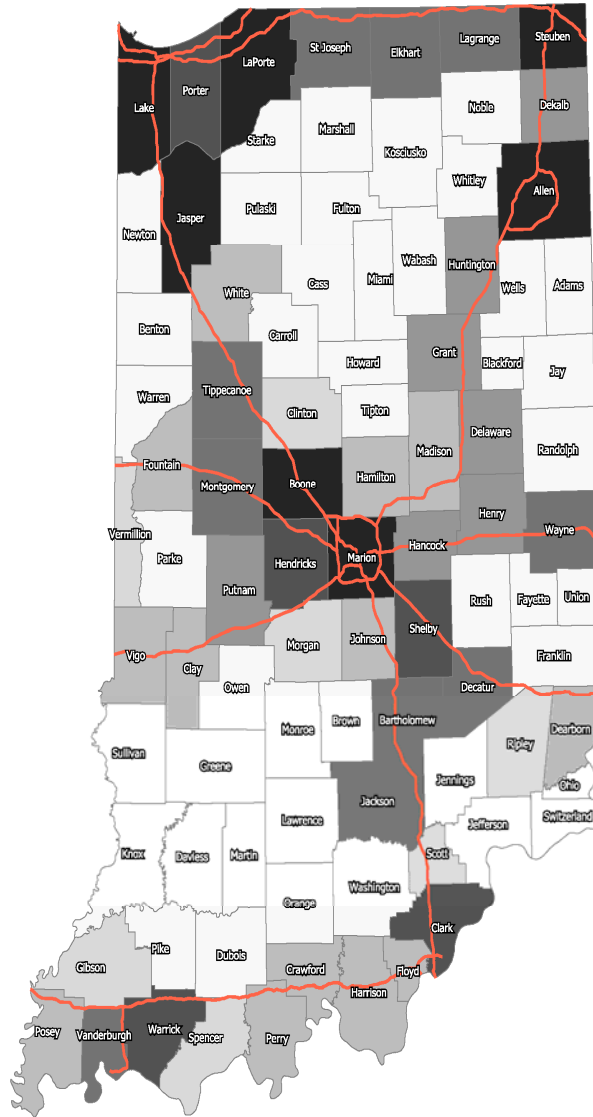
Source: U.S. Census Bureau
Indiana Business Research Center, March 2010



**Large demand,
marginal supplies**

**Growing demand,
vulnerable
supplies**

Transportation Infrastructure



**Water is essential for our
state's economic
development.**

- **Keep business,**
- **Grow business and**
- **Attract business**

FOUR-PRONG EFFORT

- **Legislative**
- **Regulatory/IURC**
- **Governor Pence**
- **Indiana Chamber's Vision 2025**

Indiana Water Plan Evolution

- Directive from the Legislature's 2011 "Water Resources Study Committee"
 - ***"While Indiana has been doing research and mapping of water resources, the institutional infrastructure that regulates and manages water resources may not be prepared to manage the serious economic effects of regional shortage."***

P.L. 87-2012 IURC Requirements

- The efficient use of financial resources by water utilities;
- Necessary infrastructure investments by water utilities; and
- Actions designed to minimize impacts on the rates and charges imposed on water and wastewater customers.

Indiana Chamber Vision 2025

“Water Plan” Statement

Traditional thinking should be challenged as it is essential to **preserve and protect** this valuable resource and recognize that national and global competition requires broader cooperation across the state. Communities must **work together** to utilize Indiana’s advantage and realize potential economic growth. **The result of narrow, local planning is that resource sharing and economies of scale are missed. Indiana must rethink the way it plans, regulates and utilizes its water resources.**

Vision 2025 Recommendations

Recommended actions include:

- **Survey** available water resources.
- Identify the areas of the state that have or will have significant **water needs**.
- Identify those **local, regional or statewide approaches** to water resources and requirements that would best maximize the value and minimize the cost of water use.
- Develop **infrastructure investment priorities**.

Cont. Chamber Vision 2025

- Identify constitutional, statutory, administrative or other policy changes necessary to create an effective system that will **maximize** water resources.
- Develop and implement a **comprehensive, long-range plan** considering both water and waste water needs that will realize a secure and advantageous position for the state's citizens, businesses and industries while promoting aggressive economic development.

Governor Pence “Roadmap”

“Dense population centers, like Central Indiana, will challenge water supplies in the future... We need to better manage our water resources to ensure that Hoosiers have a sufficient quantity of water for business, industry, recreation, and life.”

CHALLENGES

- Barely adequate local supplies in Central Indiana
- Limited groundwater in some areas
- Infrastructure investment in the South
- Regional planning is needed

Indiana Chamber “Water Study”

(Commissioned, October 2013)

Create a report that will serve as a roadmap using the **IURC recommendations** toward the goal of modernizing Indiana’s approach to **managing and protecting** the essential water supplies that fuel our economy.

Water Advisory Council

- Agriculture**
- Environment/Natural Resources**
- Electric power generation**
- Steel Industry**
- Water suppliers**
- Engineers**
- Aggregate/Minerals**
- Environmentalists**

**Indiana Chamber
Water Study
Completion Date
June, 2014**

GOOD NEWS!

- We can invent our energy and water future.
- We do have the energy and water resources.
- But – we must take charge NOW and make smart decisions.
- We must all work together!

***OUR ENVIRONMENT
OUR RESPONSIBILITY***

