Members

Sen. Edward Charbonneau, Chairperson
Sen. Michael Crider
Sen. Susan Glick
Sen. James Arnold
Sen. Lindel Hume
Sen. Richard Young
Rep. William Friend, Vice-Chairperson
Rep. Robert Morris
Rep. Jack Lutz
Rep. Steven Stemler
Rep. David Niezgodski
Rep. Patrick Bauer

WATER RESOURCES STUDY COMMITTEE

Legislative Services Agency
200 West Washington Street, Suite 301
Indianapolis, Indiana 46204-2789
Tel: (317) 233-0696 Fax: (317) 232-2554

LSA Staff:

Jessica Harmon, Fiscal Analyst for the Committee
Craig Mortell, Attorney for the Committee

Authority: ***IC 2-5-25***

MEETING MINUTES[1]

Meeting Date:	**October 23, 2013**
Meeting Time:	**10:00 A.M.**
Meeting Place:	**State House, 200 W. Washington St., Room 233**
Meeting City:	**Indianapolis, Indiana**
Meeting Number:	**2**

Members Present: **Sen. Edward Charbonneau, Chairperson; Sen. Susan Glick; Sen. Lindel Hume; Sen. Richard Young; Rep. Robert Morris; Rep. Jack Lutz; Rep. David Niezgodski; Rep. Patrick Bauer.**

Members Absent: **Sen. Michael Crider; Sen. James Arnold; Rep. William Friend, Vice-Chairperson; Rep. Steven Stemler.**

Call to order. Senator Charbonneau, Chair of the Water Resources Study Committee, called the meeting to order at 10:08 am.

Water's current and potential impact on Indiana's economy. Mr. Eric Doden, President, Indiana Economic Development Corporation, was recognized to speak (Exhibit 1). Mr. Doden:

- Explained how water is an important part of economic development in the state, and although there is no comprehensive water strategy for the state yet, the development of a plan could be a significant advantage for Indiana.
- Explained that companies make location decisions based on a variety of factors including tax structure, incentive packages, available workforce, and water resources.
- Discussed the challenges that central and southern Indiana face with population growth and more limited water availability compared to northern Indiana.
- Demonstrated that many of the largest users of water, including the steel industry, food processing, and drug companies, are concentrated in the northern part of the state due to water availability by referring to a map of the top 50 industrial water withdrawal facilities for

[1] These minutes, exhibits, and other materials referenced in the minutes can be viewed electronically at http://www.in.gov/legislative Hard copies can be obtained in the Legislative Information Center in Room 230 of the State House in Indianapolis, Indiana. Requests for hard copies may be mailed to the Legislative Information Center, Legislative Services Agency, West Washington Street, Indianapolis, IN 46204-2789. A fee of $0.15 per page and mailing costs will be charged for hard copies.

Indiana in 2012.
- Explained that even though the southern and southwestern regions of the country experienced growth over the last 10 years, they struggle with water availability.
- Stated that Indiana's water resources will serve as a long-term advantage as the population grows if the resources are managed appropriately.
- Expressed the need to pursue a comprehensive state plan to identify resources and needs, and to identify and implement a system to assist in economic development efforts and ensure that water resources are adequate and available throughout the state.

In response to questions, Mr. Doden emphasized the importance of a state plan for water resources due to the complex nature of the issue and the many state and local entities (including the 824 water utilities) involved in the issue.

Review of Indiana statutes related to water resources. Mr. Craig Mortell, Staff Attorney, Legislative Services Agency, provided a review of Indiana statutes related to water resources (Exhibit 2). Mr. Mortell:

- Informed the committee that there are more than 200 chapters and individual sections that are related to water resources.
- Explained that the subjects addressed in the sections include storm water management, wetlands, water pollution control, water rights, flood control, and others.
- Provided the state and local entities with water resources functions under the Indiana Code.
- Provided the Indiana Administrative Code titles where water resource-related administrative rules may be found.
- Provided the entities that have been devoted to water resources studies including the Water Resources Study Committee and the Lake Management Work Group.
- Discussed the history of the Water Shortage Plan, the Water Shortage Task Force, and the Water Resources Task Force.
- Provided the web site address for the documents compiled by the Legislative Services Agency that contain the sections of the Indiana Code pertaining to water resources, and the web site address for the 2009 Water Shortage Plan on the Department of Natural Resources' web site.

Water and the agricultural industry. Mr. Justin Schneider, Senior Policy Advisor and Counsel, Indiana Farm Bureau, was recognized to speak to the committee (Exhibit 3). Mr. Schneider:

- Explained the importance of water resources to livestock and crops, and the importance of agriculture to rural communities.
- Explained that the agricultural industry primarily relies on rain and supplements with pumped water for livestock and irrigation.
- Shared that the number of registered irrigation facilities has almost doubled since 1985.
- Demonstrated the increase in irrigation ground and surface water withdrawals in 2012 due to drought.
- Shared the surface and ground water withdrawals for 2012 by water use (i.e., energy production, industry, public supply, rural use, irrigation, and miscellaneous).
- Demonstrated that the largest use for total water withdrawals during 2012 was for energy production, while irrigation was the fourth largest use of the six categories of water use.

Water rights and regulation in other states. Mr. Schneider also provided results from a review of other states' laws and regulations performed by a law student for the Indiana Farm Bureau. Mr. Schneider:

- Explained the four main common law approaches.
- Explained the regulated riparian systems used by other states.

- Explained the “entire state” regulated riparian approach which typically requires a state-issued permit for withdrawals over a specified amount.
- Explained the “critical areas” approach which typically is characterized by requiring state-issued permits in “critical” areas only.
- Explained the “management district” approach, which is characterized by locally governed districts that are given broad authority to regulate ground water withdrawals.
- Explained historical use, or “grandfather” clauses, used by states regulating water resources.

Indiana Chamber of Commerce’s Vision 2025 and water study. Mr. Vince Griffin, Vice President, Environmental and Energy Policy, Indiana Chamber of Commerce, was recognized to speak (Exhibit 4). Mr. Griffin:

- Emphasized the importance of water and electricity to the economy.
- Discussed the importance of the Great Lakes to Indiana--the third largest user of water in the Great Lakes.
- Briefly discussed the history of water resource-related legislation, including the Water Resources Management Act and P.L. 87-2012 (SEA 132).
- Outlined the Indiana Chamber Vision 2025 and its recommendations concerning water resources.
- Shared that the water study should be completed before the next interim study committee period.

Dr. Jack Wittman, Principal Hydrogeologist, INTERA Incorporated, was recognized to speak (Exhibit 5). Dr. Wittman:

- Provided a timeline concerning Indiana water issues including droughts (1941, 1988, and 2012), the Water Shortage Plan (1994), Water Shortage Task Force (2006), and the Supreme Court decision in Avon (2011).
- Discussed the Indiana Utility Regulatory Commission’s Water Utility Resource Report and its recommendations.
- Discussed the water needs of power plants, industrial users, and the agricultural industry.
- Informed the committee that other states, including Connecticut and Minnesota, are planning and studying how to deal with their water resources issues.
- Explained that the Indiana Chamber’s water study will look at projecting future demand, provide funding alternatives, and provide recommendations.

In response to questions, Dr. Wittman:

- Explained that there needs to be better education and communication with the water utilities that did not participate in the IURC’s data collection efforts for the Water Utility Resource Report.
- Discussed how Texas deals with their water challenges through the 16 regions within the state that develop regional supply plans.
- Shared that he plans to involve the Indiana Water Monitoring Council in looking at water supply available in aquifers during the water study.
- Shared that the outcome of the water study will not be a comprehensive plan for the state, but will be a description of how to proceed and will answer the main questions needed to be able to form a plan.
- Explained that decisions made regarding the location of heavy water users is made at the corporate level and not by the state.

Recommendations for the Final Report. After committee discussion, the following recommendations for inclusion in the final report were approved unanimously by a roll call vote by the members present.

1. Require the IURC, beginning with its 2014 Water Resource Report, to include in their report a full list of all utilities who did not fully comply with the data collection request.

2. Ask the IURC to make reasonable efforts to work with non-complying utilities, including coordination with industry stakeholders, to provide adequate communication and education especially targeting small systems. The IURC should develop a plan for non-complying utilities in advance of their data collection for the 2014 report.

3. Require the IURC to include in future reports:

(A) A summary of their efforts to work with all utilities, especially small systems with limited resources, regarding SEA 132 compliance;
(B) Recommendations regarding what assistance or training small systems need in order to make compliance easier; and
(C) Recommendations that describe what resources, if any, the legislature could provide to assist the IURC or responding utilities to ensure IC 8-1-30.5 compliance.

4. Formally request the Executive Branch to initiate efforts that would result in improved agency coordination and collaborate on water resource issues. At minimum, this should involve the IURC, IDEM, DNR, and IEDC.

5. During the summer of 2014, we recommend that the Legislative Council convene a joint task force on water resources made up of members from the Water Resources Study Committee and the Regulatory Flexibility Committee. This task force should have the following assignments:
(A) Hear from the IURC regarding their findings in the 2014 SEA 132 report to the legislature;
(B) Receive testimony on how the availability of water resources impacts state and regional economic development decisions;
(C) Receive testimony discussing ways state government agencies can better coordinate activities that relate to managing water resources;
(D) Receive testimony related to how state and local governments can better coordinate water resource management activities;
(E) Receive testimony regarding the unique water challenges facing rural Indiana generally and the agricultural community specifically. Issues worthy of discussion should include aquifer withdrawals, surface water concerns, and inter-basin transfers;
(F) Receive testimony that evaluates the recommendations set forth by the IURC in their 2013 SEA 132 report as well as any additional recommendations; and
(G) Receive testimony on the key elements that a state water plan should contain.

6. The committee recommends that after the water resource task force, described in #5 above, completes their work during the summer of 2014, a recommendation shall be submitted to the Legislative Council for evaluation regarding the need for a statewide water plan and what, if any, legislation is required. If legislation is recommended, a comprehensive proposal should be submitted to the 2015 General Assembly.

Consideration of the Final Report. The Water Resources Study Committee unanimously approved the preparation of a Final Report for 2013 that contains a summary of the committee's 2013 work program and a list of recommendations made by the committee.

Closing remarks and adjournment. Sen. Charbonneau shared with the committee his preference for a systematic slow approach to the water resources challenges as opposed to making dramatic state legislation that could result in negative impacts.

Sen. Charbonneau adjourned the meeting at 11:46 am.

Exhibit 1
Water Resources
Study Committee,
Meeting #2
October 23, 2013

Comments for the Water Resources Study Committee
Eric Doden, IEDC President
October 23, 2013

Background

- A white paper drafted in 2010 for former Gov. Mitch Daniels offers a concise but substantive overview of where Indiana stands from a water resources perspective and outlines some questions that should be addressed:
    - What and where are the water resources and challenges located throughout the State?
    - What kinds of companies and industries fit best with our resource use and should be pursued for growth in Indiana?
    - What local, regional or state-wide approach to water resources and requirements would best maximize the value and minimize the cost of our water use?
    - What constitutional, statutory, administrative, or other changes are necessary to maximize the value of the water resources of Indiana?
- Answers to the last two questions remain largely outstanding.

Water and Economic Development

- The IEDC is about advancing our state's economy over both the short-term through job and investment growth as well as the long-term through population growth.
- Short-term
    - Site selection process – companies make location decisions based on a variety of factors (i.e. tax climate, site and workforce availability, incentive package).
    - Industry goes where the water is (DNR's top 50 industrial water users map).
    - Some of Indiana's most successful industries are our largest water users, including steel, agriculture, food processing, and drug companies to name a few.
    - These industries are concentrated in the northern tier of the state where there are substantial resources.
- Long-term
    - Talent attraction – Indiana needs to pursue population growth by being a place where people want to live and work.

Comments for the Water Resources Study Committee
Eric Doden, IEDC President
October 23, 2013

- We all know that, without access to water, we cannot have a sustainable economy nor can we attract further development.
    - Southern and western states have experienced substantial population growth over the last decade. Ironically, the western states have the most severe water challenges in the nation.

- The good news for Indiana: We have a lot of water, which puts us in position to compete for population over the long run.
    - Northern Indiana – superior resources due to Great Lakes basin.
    - Central Indiana – currently adequate resources but foreseeable problems on the horizon (drought, growing population).
    - Southern Indiana – inadequate resources and infrastructure to support economic growth, except along the Ohio River.

- The bad news: We have not yet adopted a plan to leverage the best use of this asset.
    - Our state's water resources are unevenly distributed and some resources are going unused (Charlestown wells, Newport wells, & Evansville area where the Ohio, Wabash, White and Patoka all converge).
    - These wells have incredible capacity and should be included in our state's water management strategy.
    - The last figures I've seen indicate that Indiana has over 824 water utilities. That is nearly 9 per county!

- We have an opportunity here to lead our fellow states and do what no other state has done, which is to develop a comprehensive state plan for water.

- Everyone here wants to see every corner of our state thrive and growth.

- Forty years from now, what will the people of Indiana be thankful that we accomplished? Example, highways.

- Given what we know (inadequate infrastructure and resources in some areas, untapped resources in others, and substantial costs for installing infrastructure – to the tune of $1 - $3 million per mile), there is no reason not to pursue and a plan to:
    - Identify the resources;
    - Identify the needs;
    - Identify and implement a system to both achieve economies of scale and to ensure that water resources are accessible throughout the state.

Top 50 Industrial Water Withdrawal Facilities for Indiana in 2012

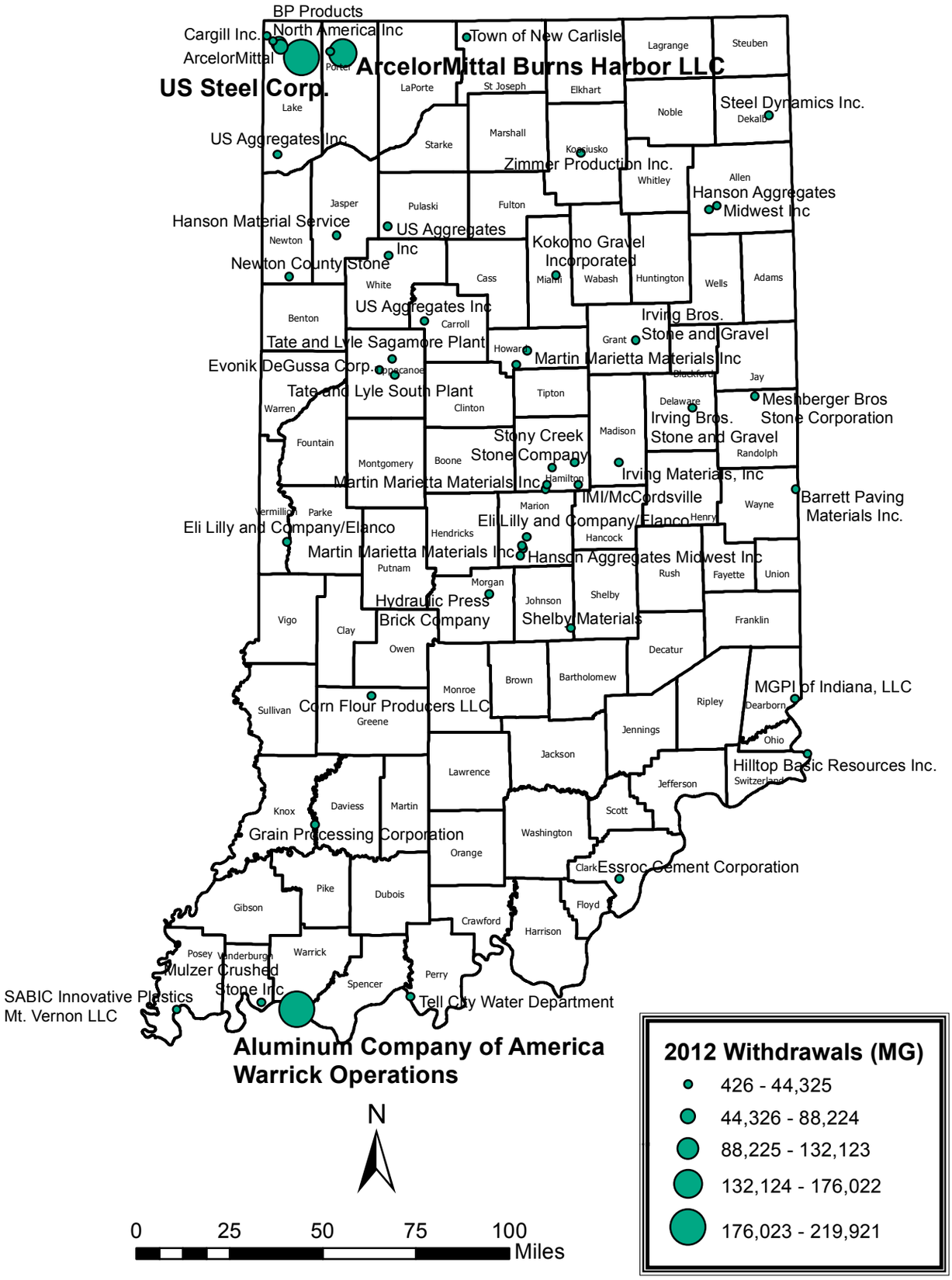


Exhibit 2
Water Resources Study Committee, Meeting #2
October 23, 2013

REVIEW OF INDIANA STATUTES RELATED TO WATER RESOURCES

PRESENTED BY THE LEGISLATIVE SERVICES AGENCY TO THE

WATER RESOURCES STUDY COMMITTEE

OCTOBER 23, 2013

WATER RESOURCE-RELATED STATUTES

- PROVISIONS THROUGHOUT TITLE 2 – TITLE 36
- MORE THAN 200 CHAPTERS AND INDIVIDUAL SECTIONS

- SUBJECTS INCLUDE:
  - WATER UTILITIES AND WASTEWATER UTILITIES
  - STORM WATER MANAGEMENT
  - WATER POLLUTION CONTROL
  - WETLANDS
  - WATER RIGHTS
  - LAKES AND RIVERS
  - FLOOD CONTROL
  - GROUND WATER RESOURCES
  - REGULATED DRAINS

STATE ENTITIES WITH WATER RESOURCES FUNCTIONS UNDER THE INDIANA CODE

- WATER RESOURCES STUDY COMMITTEE (IC 2-5-25)
- INDIANA FINANCE AUTHORITY (IC 4-4-11)
- INDIANA ECONOMIC DEVELOPMENT CORPORATION (IC 5-28-25-4)
- INDIANA UTILITY REGULATORY COMMISSION (VARIOUS SECTIONS THROUGHOUT IC 8-1)
- PORTS OF INDIANA (IC 8-10)
- INDIANA DEPARTMENT OF HOMELAND SECURITY (IC 10-14-3; IC 10-14-4)

STATE ENTITIES WITH WATER RESOURCES FUNCTIONS UNDER THE INDIANA CODE (CONTINUED)

- INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (VARIOUS SECTIONS THROUGHOUT IC 13)
- ENVIRONMENTAL RULES BOARD (VARIOUS SECTIONS THROUGHOUT IC 13)
- INDIANA DEPARTMENT OF NATURAL RESOURCES (VARIOUS SECTIONS THROUGHOUT IC 14 AND IC 25-39)
- SOIL CONSERVATION BOARD IN THE INDIANA STATE DEPARTMENT OF AGRICULTURE (IC 14-32-2)
- INDIANA STATE DEPARTMENT OF HEALTH (IC 16-19-3-4; IC 16-19-3-8; IC 16-19-3-16; IC 16-41)
- INDIANA PLUMBING COMMISSION (IC 25-28.5)

ENTITIES OF LOCAL GOVERNMENT WITH WATER RESOURCES FUNCTIONS UNDER THE INDIANA CODE

- MUNICIPAL UTILITIES (IC 8-1.5)
- DEPARTMENTS OF WATERWORKS (IC 8-1.5-4)
- DEPARTMENTS OF STORM WATER MANAGEMENT (IC 8-1.5-5)
- WATERWAY MANAGEMENT DISTRICTS (IC 8-10-9)
- REGIONAL WATER, SEWAGE, AND SOLID WASTE DISTRICTS (IC 13-26)
- DRAINAGE DISTRICTS (IC 14-27-8)
- FLOOD PLAIN COMMISSIONS (IC 14-28-4)
- RIVER BASIN COMMISSIONS (IC 14-30)

ENTITIES OF LOCAL GOVERNMENT WITH WATER RESOURCES FUNCTIONS UNDER THE INDIANA CODE (CONTINUED)

- SOIL AND WATER CONSERVATION DISTRICTS (IC 14-32-5)
- CONSERVANCY DISTRICTS (IC 14-33)
- CITY WORKS BOARDS (IC 36-9-6)
- SANITARY BOARDS (IC 36-9-23-4)
- MUNICIPAL WORKS BOARDS (IC 36-9-23-5)
- SANITATION DEPARTMENTS (IC 36-9-25)
- FLOOD CONTROL DISTRICTS (IC 36-9-29; IC 36-9-29.1)
- CITY WATER DEPARTMENTS (IC 36-9-35)

WATER RESOURCE-RELATED ADMINISTRATIVE RULES

- TITLE 135 INDIANA FINANCE AUTHORITY
- TITLE 327 WATER POLLUTION CONTROL DIVISION
- TITLE 170 IURC
- TITLE 329 SOLID WASTE MANAGEMENT DIVISION
- TITLE 290 INDIANA DEPARTMENT OF HOMELAND SECURITY
- TITLE 410 INDIANA STATE DEPARTMENT OF HEALTH
- TITLE 312 NATURAL RESOURCES COMMISSION
- TITLE 326 AIR POLLUTION CONTROL DIVISION
- TITLE 675 FIRE PREVENTION AND BUILDING SAFETY COMMISSION
- TITLE 860 INDIANA PLUMBING COMMISSION

PAST WATER RESOURCES STUDY ENTITIES

- WATER RESOURCES STUDY COMMITTEE (CREATED IN 1970; MADE PERMANENT IN 1997)
- GOVERNOR'S WATER RIGHTS AND MANAGEMENT COMMISSION (1982-83)
- WATER AND MINERAL RESOURCES ADVISORY COMMISSION (1984-87)
- WATER AND MINERAL RESOURCES ADVISORY COUNCIL (1988)
- LAKE PROBLEMS WORK GROUP (1997)
- LAKE MANAGEMENT WORK GROUP (1998)
- NATURAL RESOURCES STUDY (ADVISORY) COMMITTEE (1981-PRESENT)

HISTORY OF WATER SHORTAGE PLAN AND TASK FORCES

- 1991: DNR MANDATED BY IC 13-2-6.1-10 TO DEVELOP A WATER SHORTAGE PLAN
- 1994: WATER SHORTAGE PLAN COMPLETED BY DNR
- 2006: IC 14-25-24 ENACTED TO ESTABLISH A WATER SHORTAGE TASK FORCE
- 2009: REVISED "INDIANA WATER SHORTAGE PLAN" COMPLETED BY THE TASK FORCE
- 2009: IC 14-25-16 ENACTED TO ESTABLISH A WATER RESOURCES TASK FORCE
- 2012: WATER SHORTAGE TASK FORCE AND WATER RESOURCES TASK FORCE REPEALED BY HEA 1002 OF 2012.

THE WATER SHORTAGE PLAN

- "… TO PROVIDE THE STATE OF INDIANA WITH AN EFFECTIVE AND SYSTEMATIC PLAN TO ASSESS AND MANAGE THE STATE'S WATER RESOURCES DURING A WATER SHORTAGE OR POTENTIAL WATER SHORTAGE (SO AS TO ENABLE THE STATE) TO RESPOND, TO THE MAXIMUM EXTENT PRACTICABLE, TO THE NEEDS OF ITS WATER USERS WHILE PROTECTING ITS ENVIRONMENT."
- DECLARATION OF A WATER SHORTAGE "WATCH", "WARNING", OR "EMERGENCY"
- IDENTIFIES CERTAIN ACTIONS AND CONSERVATION MEASURES TO BE TAKEN AS NEEDED
- RECOMMENDS THAT CERTAIN WATER ALLOCATION PRIORITIES BE IMPLEMENTED DURING WATER SHORTAGES

FOR FURTHER INFORMATION . . .

DOCUMENTS CONTAINING SECTIONS OF THE INDIANA CODE PERTAINING TO WATER RESOURCES ARE AVAILABLE ON THE WATER RESOURCE STUDY COMMITTEE'S WEB PAGE AT:

HTTP://WWW.IN.GOV/LEGISLATIVE/INTERIM/COMMITTEE/WRSC.HTML

THE 2009 WATER SHORTAGE PLAN CAN BE FOUND ON THE DNR WEB SITE AT:

HTTP://WWW.IN.GOV/DNR/3124.HTM

Indiana Farm Bureau®

Water Rights and Regulation

Presentation to the
Water Resources Study Committee

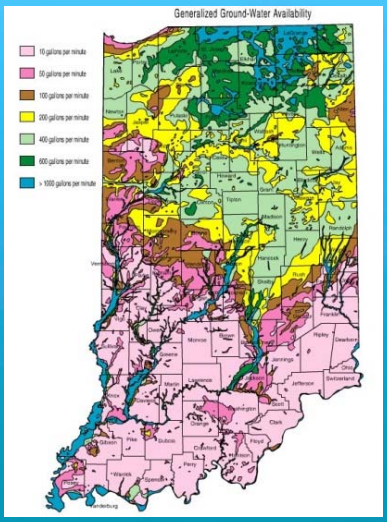
Justin Schneider
Sr. Policy Advisor and Counsel

August 2013

Indiana Farm Bureau®

WHY DOES AG CARE?

- Importance of Water Resource
  - Livestock and Crops Need Water to Survive
  - Ag as Economic Engine
  - Negative Effects of Depletion
- Broad Policy Discussion



Source: http://www.in.gov/dnr/water/3650.htm

Indiana Farm Bureau®

AG USES OF WATER

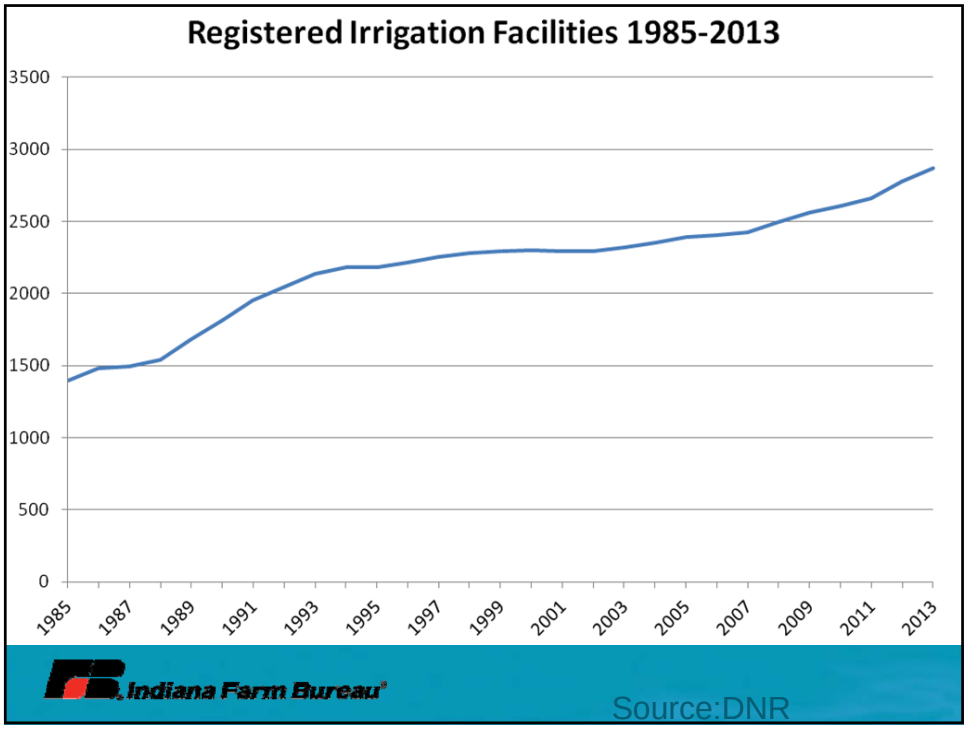
- Primarily rely upon rain
- Supplement with pumped water as needed
  - Livestock
  - Irrigation
- Supplemental sources
  - Ground water
  - Surface water
  - Ponds/cisterns
  - Rural water utility for domestic uses

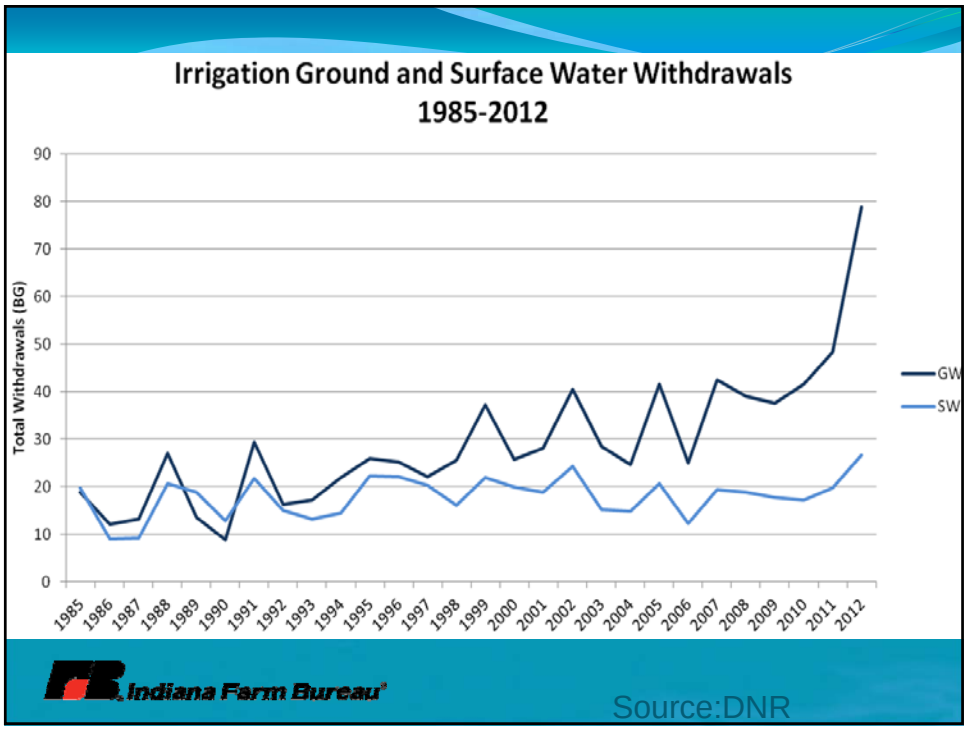
Indiana Farm Bureau

AG RELATED USES OF WATER

- Fuel Production
  - 130+million GPY
- Food Processing
  - Meat
    - 30+ million GPY
  - Dairy
    - 39+ million GPY
  - Vegetable
    - 113+ million GPY

Indiana Farm Bureau

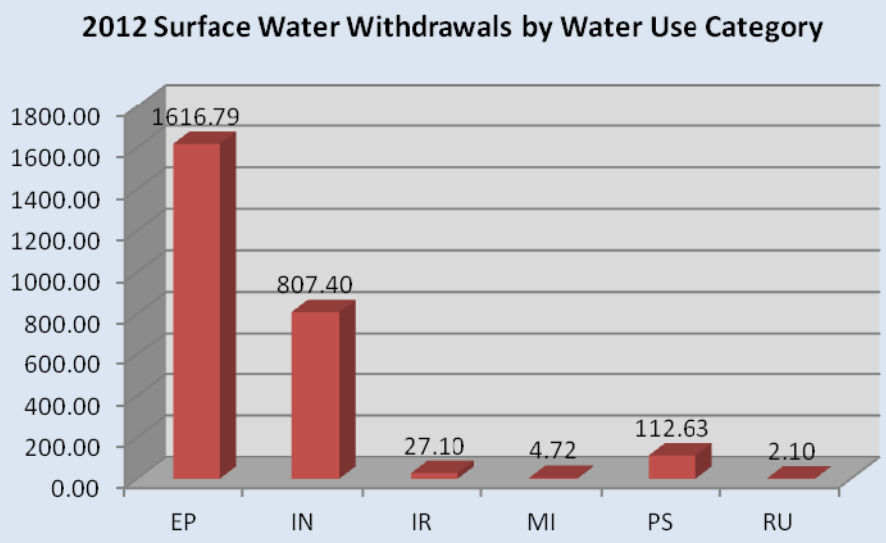

Registered Irrigation Facilities 1985-2013
3500
3000
2500
2000
1500
1000
500
0
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013
Indiana Farm Bureau
Source:DNR


Irrigation Ground and Surface Water Withdrawals
1985-2012
Total Withdrawals (BG)
90
80
70
60
50
40
30
20
10
0
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
GW
SW
Indiana Farm Bureau
Source:DNR

WATER USE CATEGORIES AND CODES

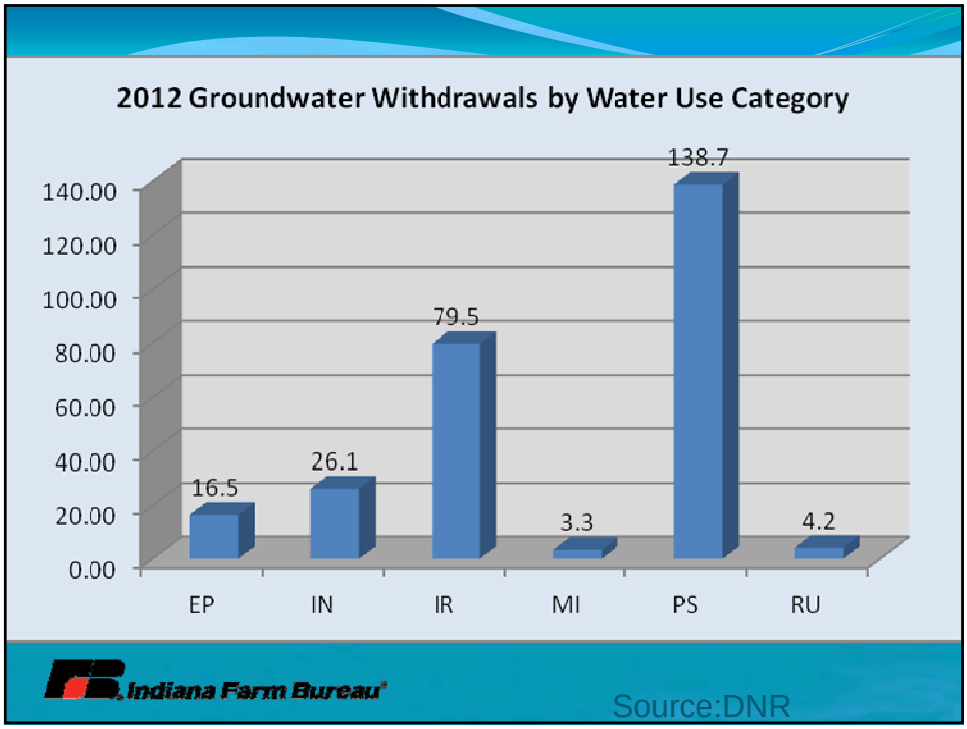
- IR—AGRICULTURE/IRRIGATION (Crop & golf course irrigation, farm field drainage, agricultural services)
- IN—INDUSTRY (Process water, cooling water, mineral extraction (except coal), quarry dewatering, waste assimilation)
- PS—PUBLIC SUPPLY (Public water supply, drinking water/sanitary facilities)
- EP—ENERGY PRODUCTION (Power generation, cooling water, coal mining, geothermal, oil recovery)
- RU—RURAL USE (Livestock, fisheries)
- MI—MISCELLANEOUS (Fire protection, amusement parks, construction dewatering, dust control, pollution abatement, hydrostatic testing, recreational field drainage)

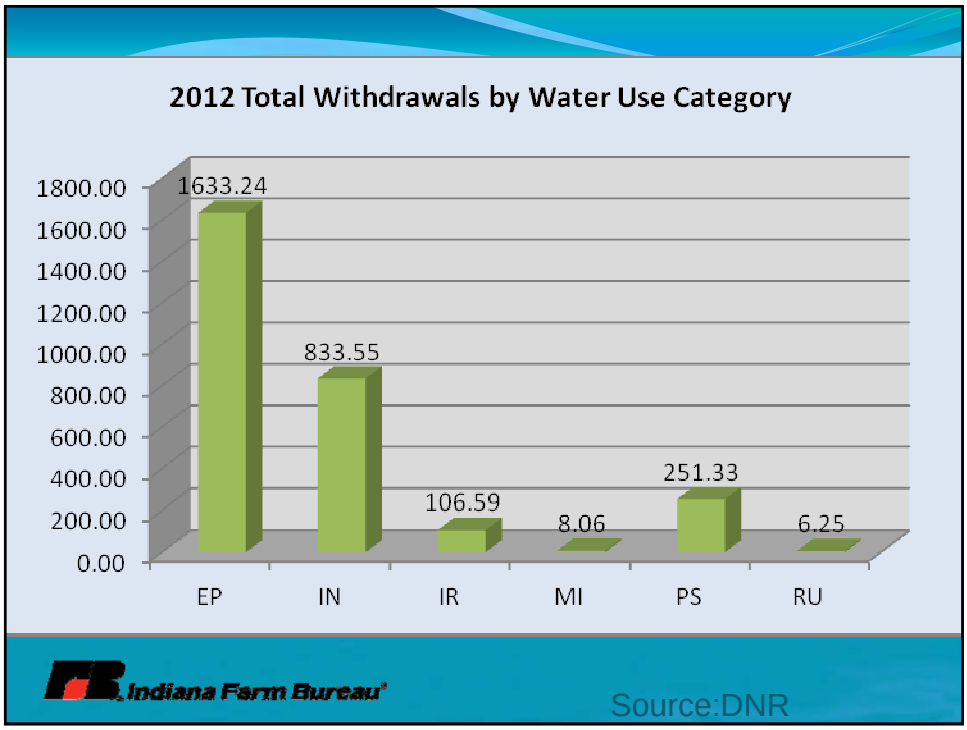
Indiana Farm Bureau



Indiana Farm Bureau

Source:DNR


2012 Groundwater Withdrawals by Water Use Category
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
16.5
26.1
79.5
3.3
138.7
4.2
EP
IN
IR
MI
PS
RU
Indiana Farm Bureau
Source:DNR


2012 Total Withdrawals by Water Use Category
1800.00
1600.00
1400.00
1200.00
1000.00
800.00
600.00
400.00
200.00
0.00
1633.24
833.55
106.59
8.06
251.33
6.25
EP
IN
IR
MI
PS
RU
Indiana Farm Bureau
Source:DNR

2013 Indiana Registered SWWFs

Water Use Code	Number of Facilities	Number of Wells	Number of Intakes
EP	97	246	111
IN	380	697	287
IR	2428	3232	843
MI	148	251	54
PS	719	2192	69
RU	63	168	14
TOTAL	3835	6786	1378

Indiana Farm Bureau

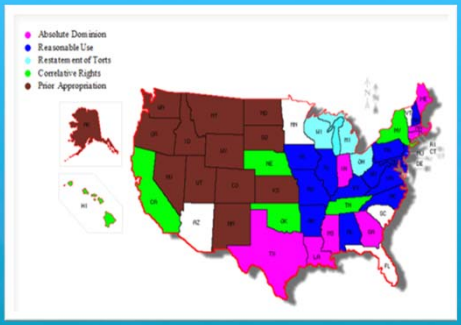
Source:DNR

So What Do We Do?

Indiana Farm Bureau

LEGAL THEORIES

- Approaches
  - Four/Five? Common Law
    1. Absolute Dominion
    2. Reasonable Use /Restatement of Torts
    3. Correlative Rights
    4. Prior Appropriation
  - One Statutory
    1. Regulated Riparian



Indiana Farm Bureau

REGULATED RIPARIAN

- Regulated Riparian Systems
  - Three Types:
    1. Entire State
    2. Critical Areas
    3. Management Districts

Indiana Farm Bureau

States Reviewed

- Arizona
- Arkansas
- Colorado
- Georgia
- Illinois
- Iowa
- Kentucky
- Michigan
- Minnesota
- Nebraska
- North Carolina
- Oklahoma
- Ohio
- Texas
- Virginia
- Wisconsin

Indiana Farm Bureau

ENTIRE STATE

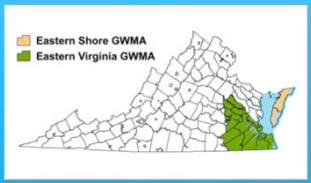
- Withdrawals over a specified amount require a state-issued permit
- Examples:
  - 100,000 gpd
  - 25,000 gpd
  - 10,000 gpd

Indiana Farm Bureau

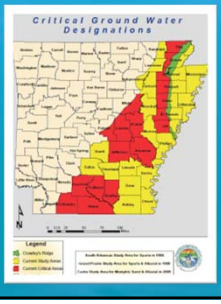
CRITICAL AREAS

- Withdrawals over a specified amount require a state-issued permit in designated "critical" or "management" areas only
- Area boundaries are typically determined by aquifer boundaries in parts of the state with limited groundwater supply

Virginia



Arkansas



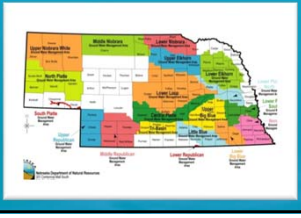
Indiana Farm Bureau

MANAGEMENT DISTRICTS

- Locally governed districts delegated broad authority to regulate groundwater withdrawals
- Regulated amount, permit durations, and permit fees vary by district
- Board members may be appointed or elected

Texas

Nebraska



Indiana Farm Bureau

PERMIT DURATION & FEES

- **Duration**
  - Range from 1 year to 100 years
  - Most common: 10 to 50 years
  - Typically renewable after reevaluated for "reasonableness" of use and amount
  - Temporary permits often offered for special, limited uses
- **Fees**
  - Common: permit application/filing fee
  - Less common: annual "administration" fee
  - Range from $0 to $3,000
  - Most common: $100

Indiana Farm Bureau

PERMITTING EXEMPTION EXAMPLES

- **Domestic Use**
  - Ordinary household purposes
  - Drinking water for poultry, livestock, and domestic animals
  - Watering of home gardens for consumption by the household
- **Agricultural Use**
  - May or may not include irrigation
- **Nonconsumptive Use**
  - Withdrawals that can be returned to the aquifer or groundwater system without substantial diminution in quantity or substantial impairment in quality
- **Utility Use**
  - Public and private water companies have rights to withdraw and transport groundwater for landowners and residents within a designated "Service Areas"

Indiana Farm Bureau

HISTORICAL USE CLAUSES

- Also known as "grandfather" clauses
- Guarantee permit approval for quantities used for beneficial purposes during X years prior to enactment of the statute
  - Most common: Automatic permit will be granted for average annual reported use during 3-5 year period prior to enactment
    - "Automatic" = upon application (no hearing required)
- Example: Existing wells are issued permits based on the average quantity of groundwater withdrawn for beneficial use during the three years prior to designation of a Critical Area

Indiana Farm Bureau®

Indiana Farm Bureau®

THANK YOU

Indiana Farm Bureau®

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

Great Lakes_St. Lawrence River Basin Water Resources Compact Update

Summer Study Committees; November 2 & 3, 2012

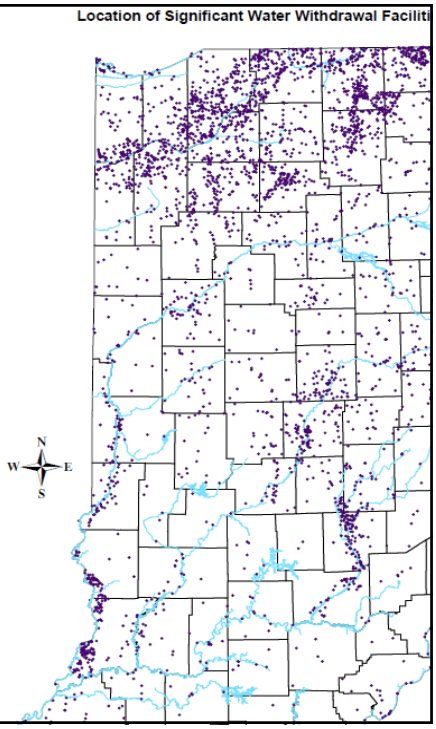
Real Purpose of Great Lakes Compact

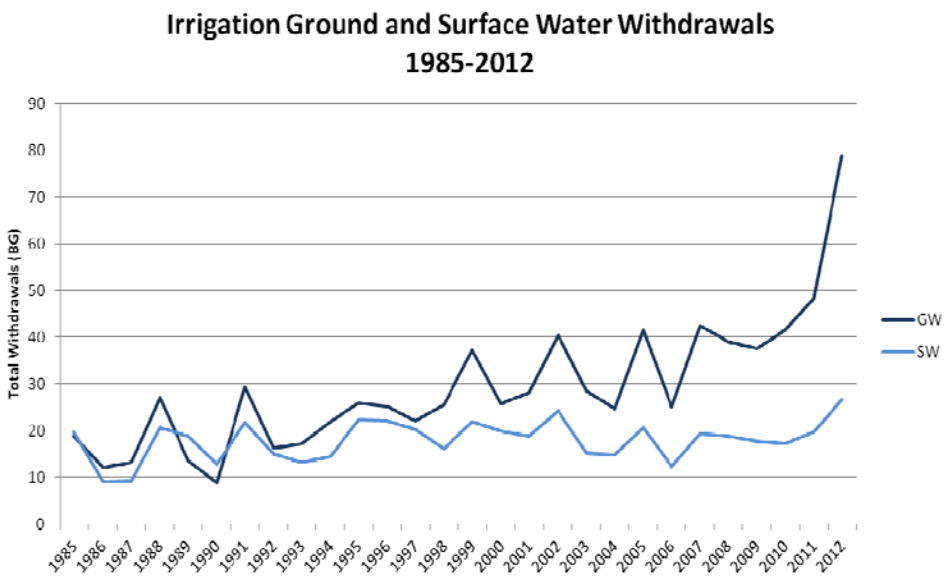
Section 4.8. *All new or increased diversions are prohibited except as provided for in the compact.*

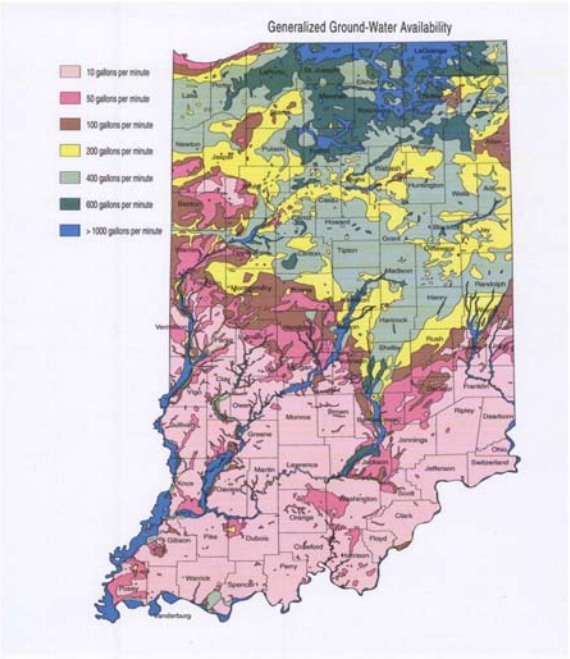
Section 4.9. *Exceptions to the prohibition for straddling communities, straddling counties and intra-basin transfers.*

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




Irrigation Ground and Surface Water Withdrawals
1985-2012
Total Withdrawals (BG)
90
80
70
60
50
40
30
20
10
0
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
GW
SW


Generalized Ground-Water Availability
10 gallons per minute
50 gallons per minute
100 gallons per minute
200 gallons per minute
400 gallons per minute
600 gallons per minute
> 1000 gallons per minute

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."***

Taking Action

- Senate Enrolled Act (SEA) 132 is a first and necessary step towards achieving the goals outlined by the Water Resources Committee
  - The purpose of SEA 132 is to gather necessary data in a single place to enable policy makers to make informed decisions
  - The data needs to be comprehensive and all inclusive
  - The best approach is to begin the analysis with an open mind, free of bias – let the data lead us to reasonable solutions that can benefit everyone

7

P.L.87-2012 "Water Resource Data Collection" and IURC

- P.L. 87 **explores water issues** in the state of Indiana and requires the IURC to **collect specific data** from water utilities, regardless of whether the water utility is currently regulated by the IURC.
- **Data collection/survey** includes water utilities including investor-owned, municipally-owned, not-for-profit, cooperatively-owned, conservancy districts, and regional water districts.
- The IURC is required to collect water resource data so that it can be analyzed **each year** and included in a report to the Regulatory Flexibility Committee of the Indiana General Assembly.

P.L. 87 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.

INDIANAVISION 2025

A PLAN FOR HOOSIER PROSPERITY

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, re-creation, and life."

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

Exhibit 5
Water Resources Study Committee, Meeting #2
October 23, 2013

Answering the Big Water Supply Planning Questions

Jack Wittman, Ph.D., CGWP, PH
Principal Hydrogeologist
INTERA, Inc.

Recent History of Indiana Water

- 1941 – **drought** of record
- 1980 – *Indiana's Water Resource* by the IDNR
- 1988 – major modern **drought**
- 1988 – IDNR begins recording high capacity **water use**
- 1993 – IDNR begins **digitizing** water well logs
- 1994 – IDNR produces the **Water Shortage Plan**
- 2006 – Water Shortage Task Force
- 2011 – Supreme Court decision in Avon (showing gaps in law)
- 2012 – severe **drought** causes voluntary water restrictions
- 2012 – **SB132** passed to require water utilities to report

Recent History of Indiana Water

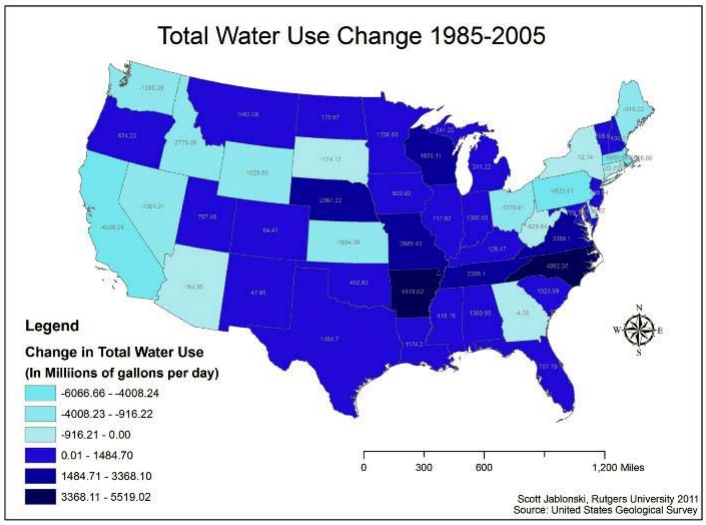
- 1941 – drought of record
- 1980 – *Indiana's Water Resource* by the IDNR
- 1988 – major modern drought
- 1988 – IDNR begins recording high capacity water use
- 1993 – IDNR begins digitizing water well logs
- 1994 – IDNR produces the Water Shortage Plan
- 2006 – Water Shortage Task Force
- 2011 – Supreme Court decision in Avon (showing gaps in law)
- 2012 – severe drought causes voluntary water restrictions
- 2012 – SB132 passed to require water utilities to report

NOW WHAT DO WE DO?

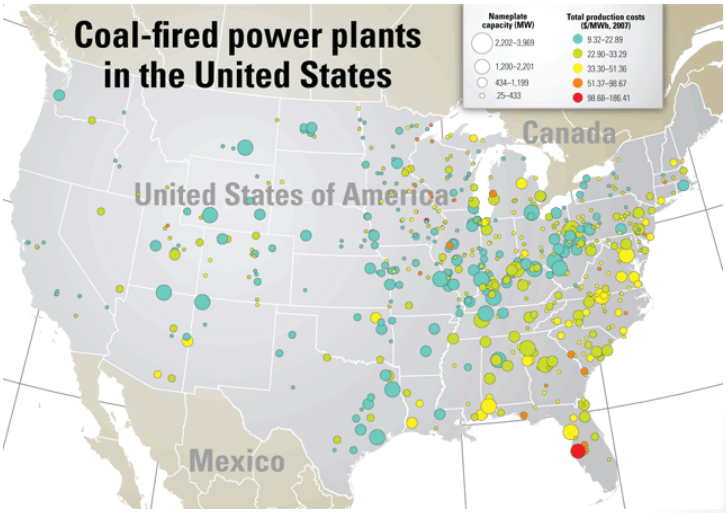
IURC – Water Utility Resource Report *(highlights)*

- Develop rules or laws for inter-basin transfer
- Begin integrated water resources management
- Promote efficiency by water utilities
- Require drought planning by utilities
- Evaluate the adequacy of existing monitoring
- Use existing underutilized water resources in southern Indiana

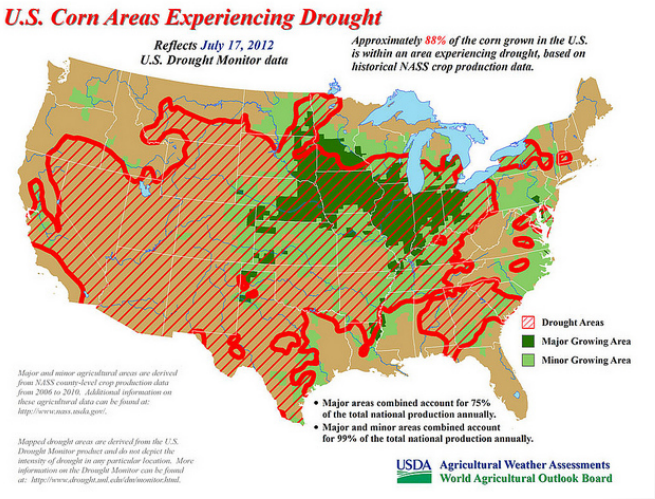
Who else uses water?



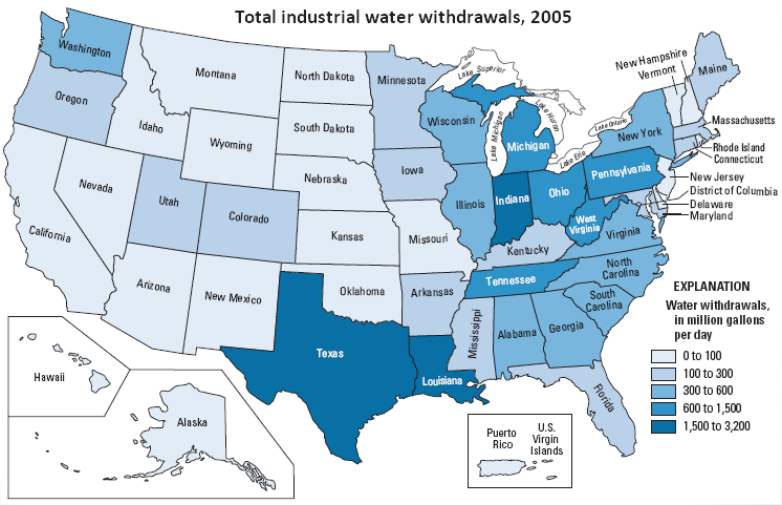
Power Plants



Agriculture - irrigation

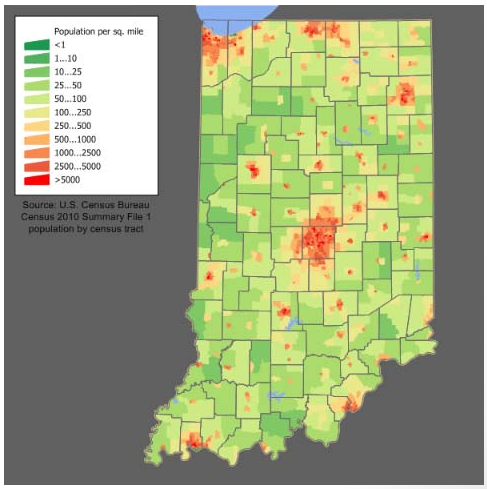


Industrial users



Answering Big Questions

- How much do we have and where?
- How much will we need, by when?
- How might we organize and develop a water plan?
- How can we pay for this ongoing effort?



Priorities	Sources
• Summarize what we know and need to know	• IDNR, IGS, USGS
• Model future demand	• IDNR high capacity water use records
• Identify alternative methods (institutions)	• Gap analysis
• Funding methods	• Consider how to pay for this work

Indiana is not alone

- Connecticut is hosting a water summit meeting **tomorrow**
- Georgia just offered $50M to water supplies that reduced drought vulnerability
- Minnesota is only now developing a plan for their state (initiated by the Chamber of Commerce)
- We need to begin to frame the problem in order to solve it.

Schedule

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8
Map Indiana supplies								
Predict future demand								
Regulatory Gap Analysis								
Funding and Admin. Alternatives								
Recommendations								
Draft report and present findings								
Develop final report								