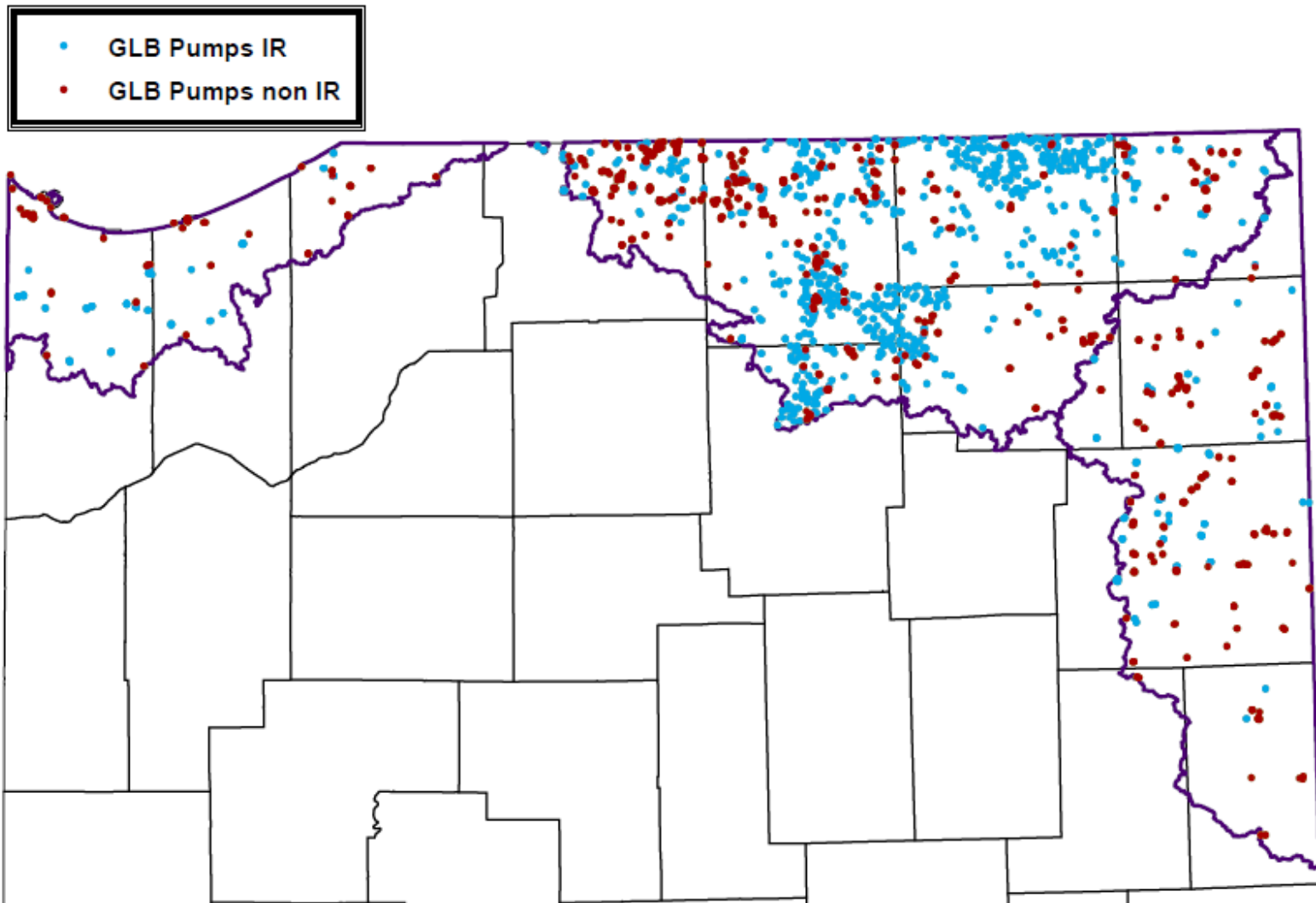


Brief Overview of Proposed Amendments to Rule 312 IAC 6.2: *Indiana's Implementation of Water Withdrawal Permitting and Conservation and Efficiency in the Great Lakes Basin*



Locations of Registered Wells & Intakes Within the Great Lakes Basin in Indiana

1333 wells (624 IR); 295 intakes (218 IR)



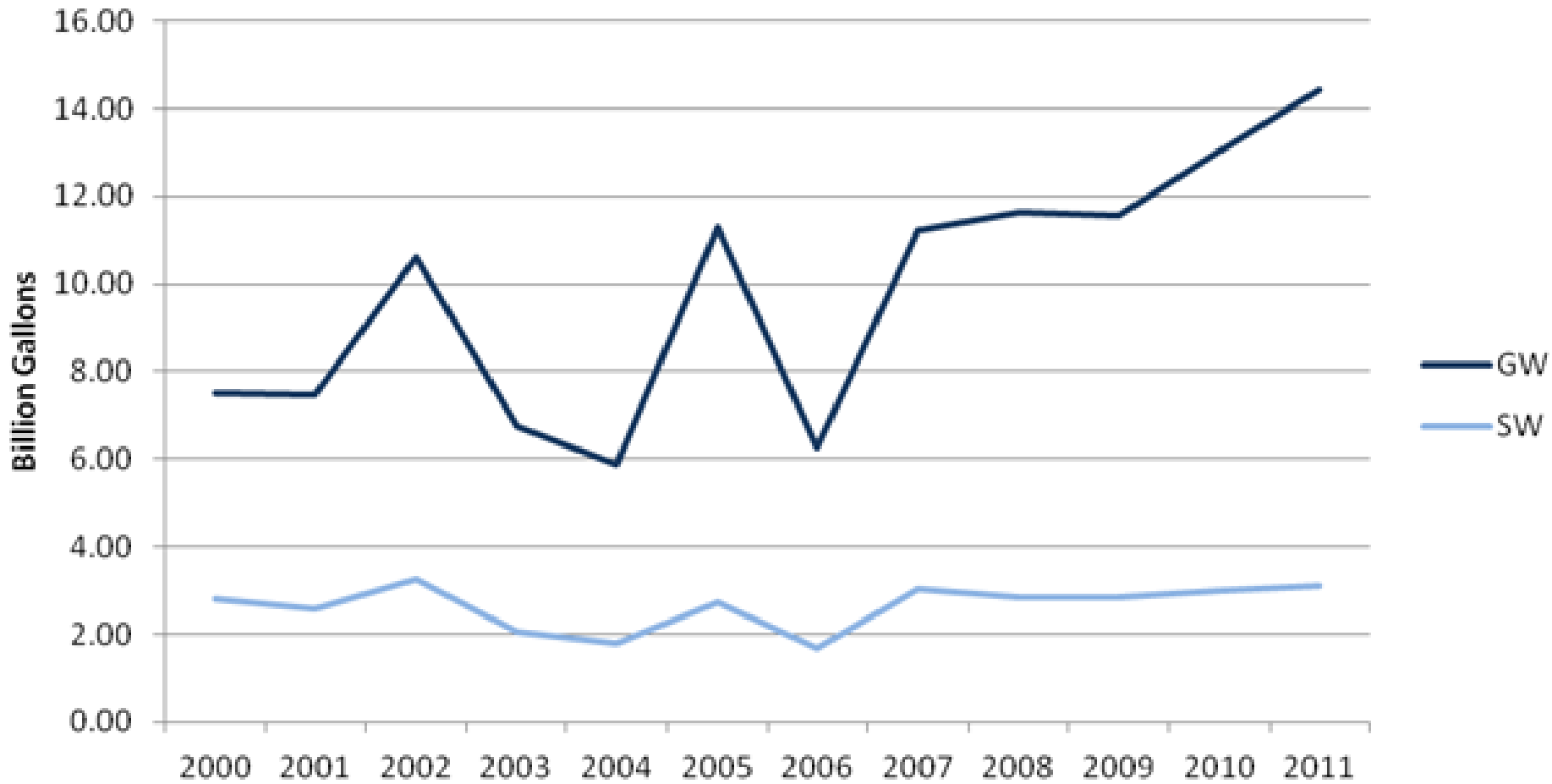
INDIANA/GREAT LAKES BASIN DATA

Water Use Code	Number of Facilities		Number of Wells		Number of Intakes	
	Indiana	GL Basin	Indiana	GL Basin	Indiana	GL Basin
EP	99	18	236	38	111	9
IN	381	89	697	170	284	41
IR	2342	570	3049	624	853	218
MI	143	56	248	106	50	12
PS	716	137	2178	371	69	12
RU	63	9	168	24	14	3
TOTAL	3744	879	6576	1333	1381	295

INDIANA/GREAT LAKES BASIN DATA

	<i>GL Basin Withdrawals in 2011 (BG)</i>		<i>GL Basin Current Capacity (MGD)</i>		<i>Current Number</i>	
	<i>Total (BG)</i>	<i>As MGD</i>	<i>Total</i>	<i>%</i>	<i>Indiana</i>	<i>GL Basin</i>
Surface Intakes	853.79	2,339.15	7,258	32	1381	295
Wells	39.33	107.75	1,075	10	6576	1333
TOTAL	893.12	2,446.90	8,333	29	7957	1628
Facilities					3744	879

Irrigation Withdrawals in Great Lakes Basin



Water Resources Compact

Indiana's Implementation under

IC 14-25-15

Permit Required for:

1. Withdrawals greater than 5 MGD (90 day ave.) from Lake Michigan
2. Withdrawals greater than 1 MGD (90 day ave.) from other GW and SW source
3. Withdrawals greater than 100,000 gpd from salmonid stream

Proposed Rule #12-089(W)

- *Amends 312 IAC 6.2 to assist with implementation of IC 14-25-15*
- *Addresses: 1) registration and permitting of water withdrawals ; 2) voluntary conservation and efficiency program; and 3) mandatory conservation and efficiency programs for new and increased withdrawals, diversions and consumptive uses in Great Lakes Basin*
- *Proposed Effective date of November 1, 2013; can be viewed at www.in.gov/nrc/2377.htm*
- *Temporary Rule #12-586(E) currently in place*

Section 1-2: Definitions

- *“Baseline Volume” refers to total registered capability, consumptive use and diversion*
- *“Water Withdrawal Facility” refers to 100,000 gpd capability or a diversion*

Section 2-2: Permit exemption

- *A facility that does not exceed its baseline volume is exempt from permitting requirements but must satisfy monitoring and reporting requirements*

Section 2-3: Sale or transfer of a facility

- *Notification of sale or transfer by March 31 of following year*
- *Approved baseline volume transferred to new owner*
- *New Diversion or Consumptive Use subject to Compact*

Section 2-4: Registration of withdrawal, consumptive use or diversion

- *Notification within 90 days of completion of new facility if less than threshold*
- *Notification by March 31 of following year if increased withdrawal by existing facility does not exceed withdrawal or consumptive use threshold*
- *Prior approval for existing facility with increased withdrawals exceeding threshold*
- *Registration and reporting requirements*

Section 2-5: Individual permit for withdrawal, consumptive use or diversion

- *Permit required for new withdrawal, for any 90-day period, which exceeds thresholds*
- *Advance approval for increased withdrawal by existing facility in excess of average thresholds*
- *Application information (request type, water source, location of withdrawal/discharge, etc.)*
- *Exemptions (pump tests, humanitarian, ballast, etc.)*

Section 2-6: General permit for withdrawal, consumptive use or diversion

- *Individual permit not required if applicable.*
- *Registration of facility required*
- *Limit new or increased average consumptive use below threshold (5 MGD/90 days)*
- *No withdrawals of at least 100,000 GPD within ½ mile of salmonid stream (unless approved)*
- *Comply with DNR orders to restrict withdrawals*

Proposed Rule for Conservation & Efficiency

- Proposed Effective date of November 1, 2013; can be viewed and commented upon at www.in.gov/nrc/2377.htm
- Amends 312 IAC 6.2 to assist implementation of IC 14-25-15-1; Article 4 for provision of Voluntary Conservation & Efficiency Program for SWWF's
- Supplements 312 IAC 6.3 which governs the entrance of contracts for water from State owned Reservoirs
- Conservation & Efficiency planning must be included as part of permit application for new or increased withdrawal, diversion, or consumptive use

Division of Water

Voluntary Water Conservation & Efficiency Programs

- Outreach & Education
 - Water Use Management outreach fliers specific to water use categories— to all 3,600+ facilities; Provides Great Lakes Compact Information & Suggests Best Management Practices for Conservation & Efficiency for each Water Use category
 - Water Management Planning Framework for each Category
- Establishing Baseline Conservation Data—What are registered facilities doing already? What do they have planned for the future?
 - Checklist Survey Statewide –specific to water use category
 - Data Compilation & Analysis Complete and available online
- 2011 Survey shows a reasonable reduction rate of 2-30% dependent upon water use category.
- Conservation & Efficiency Website:
www.in.gov/dnr/water/6364.htm

Water Conservation and Efficiency Outreach Efforts



Indiana Department of Natural Resources

DIVISION OF WATER

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Indianapolis, IN 46204-2641

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Fax: 317-233-4579
Toll Free: 877-928-3755
E-mail:
water_inquiry@dnr.in.gov

Irrigation Management Practices For Conserving Water, Nutrients & Energy

Knowledge of irrigation management practices allows you to take a more scientific approach to the irrigation process, achieve greater control, and begin to conserve water without compromising crop yield. Basic to this knowledge is understanding your system's capacity to deliver water. All irrigators need to know the net water application rate of their system, the irrigation guidelines for the specific crop being grown, and how to measure soil moisture levels. Good irrigation management requires one to know how much water the irrigation system delivers to a crop's roots over a given period of time, allowing adjustments to be made to the duration and frequency of application in order to maintain a balance between water and nutrients added to the soil, and the amount plants actually use.

Management Practices for Conservation:

- Whole System Maintenance—Identification of leaks in delivery and distribution, preservation of optimal operation pressure, maintaining gauges in good working order, testing regularly for application uniformity, system calibration, identification and repair of pressure and nozzle problems;
- Consistent Scheduling—Effective timing of applications for reducing evaporation rates;
- Utilize low pressure or low volume irrigation techniques with more efficient application practices;
- Utilize low elevation spray and larger drops settings to prevent drift and evaporation;
- Soil Management—Moisture measurement and monitoring to reduce run-off and increase crop water & nutrient utilization;
- Track seasonal crop water use;
- Repair or replace inefficient pumping plants;
- Provide sufficient soil storage capacity in the event rainfall follows irrigation;
- Know your crop's water needs at different stages of development and irrigate accordingly.

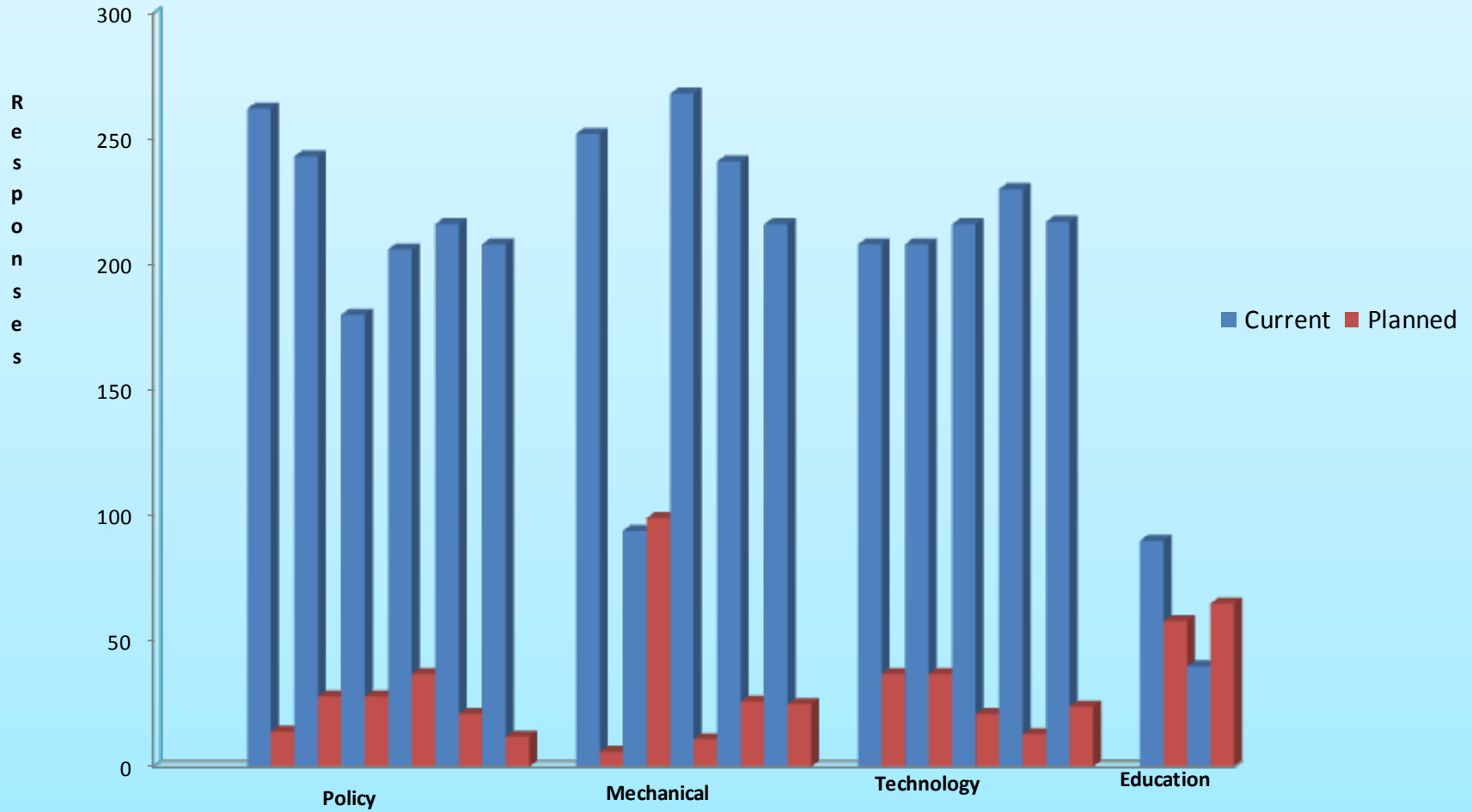
For more information regarding water conservation & energy savings visit the Division of Water website at:

www.in.gov/dnr/water/7113.htm



Irrigators

Current and Planned Water Conservation & Efficiency Efforts: Three Basin Summary



DOW Great Lakes Compact Webpage

- Interactive Map of GL Basin Boundaries
- Frequently Asked Questions
- History of GL Compact (Charter, Annex, Water Management Agreement)
- Summary of Indiana's Implementation of the GL Compact Under IC 14-25-15
- Links to Lake Michigan, St. Joseph and Maumee River Basin Studies / SWWF Data
- Water Use Efficiency and Conservation Report with Links to: 1) Water Shortage Plan; 2) Conservation Plan; 3) Suggested Model Ordinance; 4) SWWF Educational Efforts; 5) Conservation and Efficiency Checklists; and 6) Water Management Planning Framework

DNR DIVISION OF WATER

Water Rights & Use Section

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