

Members

Rep. William Friend, Chairperson
Rep. Jack Lutz
Rep. Robert Morris
Rep. Steve Stemler
Rep. David Cheatham
Rep. David Niezgodski
Sen. James Banks, Vice-Chairperson
Sen. Edward Charbonneau
Sen. Susan Glick
Sen. James Arnold
Sen. Lindel Hume
Sen. Richard Young



WATER RESOURCES STUDY COMMITTEE

Legislative Services Agency
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Authority: IC 2-5-25

MEETING MINUTES¹

Meeting Date: October 2, 2012
Meeting Time: 10:00 A.M.
Meeting Place: State House, 200 W. Washington St., 404
Meeting City: Indianapolis, Indiana
Meeting Number: 2

Members Present: Rep. William Friend, Chairperson; Rep. Jack Lutz; Sen. James Banks, Vice-Chairperson; Sen. Edward Charbonneau; Sen. James Arnold; Sen. Lindel Hume.

Members Absent: Rep. Robert Morris; Rep. Steve Stemler; Rep. David Cheatham; Rep. David Niezgodski; Sen. Susan Glick; Sen. Richard Young.

The Water Resources Study Committee (WRSC) Chairperson, Representative William Friend, presided over the morning's agenda, and called the meeting to order at 10:10 a.m. Members introduced themselves at the request of Chairperson Friend. The Chairperson noted that the majority of appointed members (7) is required to formally approve a final report.

Great Lakes Compact

Mark Basch, Section Head, Department of Natural Resources (DNR), Water Rights

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.

Section, provided a status report on the Great Lakes Compact. **Ex. 1, Great Lakes_St. Lawrence River Basin Water Resources Compact Update.** Mr. Basch reported that Indiana is one of the first states to implement the Compact. He also stated that withdrawal of water in Indiana is primarily for energy production. In response to questions, Mr. Basch stated that:

- 1) Indiana meets its obligations under the Compact due to certain programs and reports in place before the adoption of the Compact.
- 2) Survey data provides a planning framework for facilities and is used foreducation programs but other ways to use survey results are being developed.
- 3) Permitting requirements are specifically for the Great Lakes Basin; however, registration is a statewide requirement. Conservation is a statewide voluntary program.

Drainage tiles, sales tax exemption

Representative Gutwein provided background related to the legislative effort to exempt drainage tiles from state sales tax. **Ex. 2, House Bill No. 1295, introduced version.** He stated that the bill has been approved by the House Agriculture Committee but fails to pass the Ways and Means Committee proceedings. Representative Gutwein remarked that Indiana drainage tile manufacturers are at a competitive disadvantage with businesses of surrounding states, which are not required to collect this tax. He concluded that Indiana loses benefits from commercial activity that goes to neighboring states.

Various persons from the public attending the meeting offered testimony in support of the drainage tiles sales tax exemption:

- 1) Bob Clark, President, Clark Farm Drainage, Inc.

Mr. Clark stated that his company removes excess water from the ground, which improves yield. According to Mr. Clark, it is important to create incentives for programs and policies that encourage productivity; therefore, a tax exemption for drainage tiles will increase yield. He also described the effects of surrounding states' tax exemptions on Indiana businesses.

- 2) Kevin Musselman, Owner, Musselman Land Improvement, Inc.

Mr. Musselman pointed out that farm drainage is essential, and a direct input cost of agricultural activities. He reminded the Committee that similar products are not subject to sales tax in Indiana. Responding to questions by the Committee, Mr. Musselman stated as follows:

- a. There could be 2-3 competitors per county.
- b. Soil holds a maximum amount of water, and his process drains only excess water.
- c. Anything directly related to agricultural production is tax exempt in Indiana.

- 3) Ron Schlatter, Owner, Schlatter's Inc.; Indiana Land Improvement Contractor's Association; West Central Water Management.

Mr. Schlatter indicated that water management has been essential in Indiana but remains a "gray area" related to sales tax. He encouraged legislators to remove obstacles preventing the installation of drainage

systems. Mr. Schlatter advocated for exempting drainage tiles from sales tax, emphasizing that these systems improve water quality as well.

4) Todd Redlin, Sales Vice-President, Fratco, Inc.; Farm Manager, Richel Enterprises, Inc.

According to Mr. Redlin, the sales tax issue is a competitive matter for Indiana manufacturers because surrounding states exempt these products from sales tax.

Final Report

Chairperson Friend informed the Committee that this would be their last meeting. He brought to the members' attention the draft final report (**Ex. 3**), and observed that there was no quorum to approve a final report. The Chairperson adjourned the meeting at 11:20 a.m.

Exhibit 1
Water Resources Study Committee
October 2, 2012

Great Lakes St. Lawrence River Basin Water Resources Compact Update



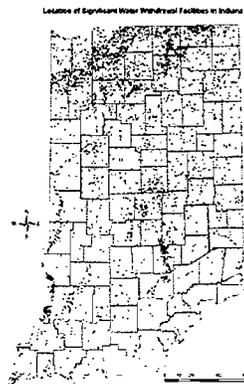
Great Lakes Compact
A look back

- 1909 Boundary Waters Treaty IJC
- 1985 Great Lakes Charter
- 1986 WRDA
- 2001 Annex
- Agreement among the Parties 12/13/2005
- Indiana Approach to passage
 - Summer/fall 2007 - development of implementing legislation with stakeholder outreach and input
 - Commitment to enact implementing legislation in conjunction with Compact
 - Legislative Study Committee Meetings
 - Legislation drafted Late Fall
 - 2008 session - introduce and pass a bill
- Compact became effective 12/8/2008

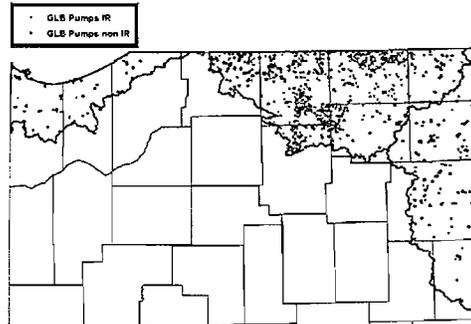
IC 14-25-7:

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



Locations of Registered Wells & Intakes within the Great Lakes Basin



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	88	18	235	48	114
IN	381	89	697	170	284	41
MI	142	55	248	106	49	11
PS	718	137	2178	371	69	12
RU	83	9	188	24	14	3
TOTAL	1722	378	3558	627	477	78

INDIANA/GREAT LAKES BASIN DATA

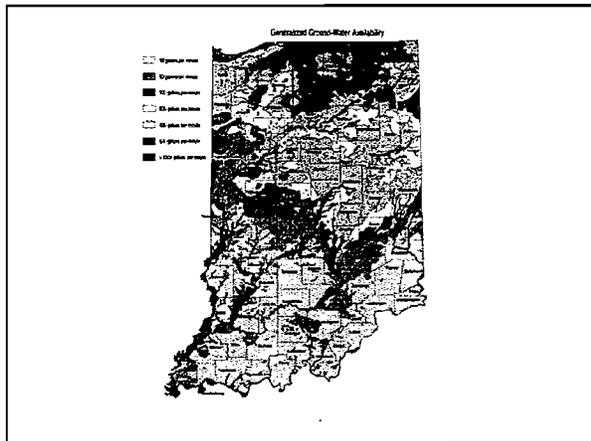
	GL Basin Withdrawals in 2011 (BG)		GL Basin Current Capacity (MGD)		Current Number	
	Total (BG)	As MGD	Total	%	Indiana	GL Basin
Surface Intakes	853.79	2,339.15	6,687	35	1379	293
Wells	39.33	107.75	1,068	10	6558	1327
TOTAL	893.12	2,446.90	7,755	32	7937	1620
Facilities					3732	1768

- Compact Purposes**
Effective consistent water resource management
- Remove causes of present and future controversies;
 - Provide for cooperative planning and action;
 - Facilitate consistent water management approach;
 - Facilitate data exchange and scientific information base for decision making;
 - Prevent significant adverse impacts of water withdrawals and losses;
 - Promote interstate and state-provincial comity; and
 - Promote adaptive management approach to conservation and management of basin waters.

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.



Water Resource Compact Diversions - Exceptions

▪ Intra-Basin Transfers

- State discretion < 100,000 gpd
- Between 100,000 gpd & 5 MGD
 - Exception Standard
 - Notice to other parties
 - No feasible alternative in the receiving Great Lake Basin
- Requires Regional Review if > 5 MGD

Diversion Inquiries

- Chester, Inc.- Valparaiso, Porter Co.**
 - Straddling County
 - Four 12 unit multi-family buildings
 - Sufficient gw resource available in area
- Grand Oaks LLC.- Valparaiso, Porter Co.**
 - Straddling County
 - 400 unit housing development
 - Sufficient gw resource available in area
- Twin Lakes Utilities, Lake Co.**
 - Straddling Community
 - Proposed wells to supply Lake of the Four Seasons
 - Diversion volume established by existing baseline
- Mineral Springs Bottling Facility, Porter Co.**
 - Straddling County
 - Water shipped to Asia
 - Diversion must be for short-term "humanitarian purpose"

IC 14-25-15-5

Responsibilities and powers of the natural resources commission
Sec. 5. The natural resources commission:

.....
(3) shall adopt rules under IC 4-22-2 that implement voluntary water conservation and efficiency programs; and

(4) shall adopt rules under IC 4-22-2, which may provide for general permits, for the implementation, administration, and enforcement of article 4 of the compact.

As added by P.L.4-2008, SEC.5.

Water Conservation and Efficiency Checklist (cont.)

<input type="checkbox"/>	Program according to your own needs by setting objectives and an achievable schedule (minimum 18 month program).
<input type="checkbox"/>	Check for leaks in toilets, showers, faucets, and other fixtures.
<input type="checkbox"/>	Monitor demand and water usage conditions regularly.
<input type="checkbox"/>	Water has pressure in low velocity systems (backflow with more efficient application products).
<input type="checkbox"/>	Use water saving devices on all fixtures (low flow toilets, showerheads, faucets, etc.).
<input type="checkbox"/>	Participate in water conservation community group or organization to share information.
<input type="checkbox"/>	Other (please specify):

Development and Distribution of Voluntary Conservation and Efficiency Plans

Water conservation and efficiency plans (conservation and efficiency plans) are developed by the user. The user is responsible for the plan's success. The user should monitor the plan's progress and make adjustments as needed. The user should also monitor the plan's progress and make adjustments as needed. The user should also monitor the plan's progress and make adjustments as needed.

Water Conservation and Efficiency Checklist

This checklist is intended to help you identify areas for water conservation and efficiency. It is not a guarantee of success. The user is responsible for the plan's success. The user should monitor the plan's progress and make adjustments as needed. The user should also monitor the plan's progress and make adjustments as needed. The user should also monitor the plan's progress and make adjustments as needed.

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Voluntary Conservation & Efficiency Checklist Survey Results

Great Lakes Basins	Great Lakes Basins	Great Lakes Basins
<ul style="list-style-type: none"> • 3652 Facilities • 1868 Replies • 51% rate of return 	<ul style="list-style-type: none"> • 858 Facilities • 464 Replies • 54% rate of return 	<ul style="list-style-type: none"> • 2794 Facilities • 1404 Replies • 50% rate of return

Voluntary Conservation & Efficiency ~Checklist Survey Results~ Great Lakes Basins

Great Lakes Basins	Great Lakes Basins	Great Lakes Basins
<ul style="list-style-type: none"> • Industrial/Energy Production 30% • Irrigation 75% • Public 56% • Rural/Misc 27% • All Uses 49% 	<ul style="list-style-type: none"> • Industrial/Energy Production 52% • Irrigation 52% • Public 28% • Rural/Misc 0% • All Uses 43% 	<ul style="list-style-type: none"> • Industrial/Energy Production 51% • Irrigation 59% • Public 49% • Rural/Misc 42% • All Uses 56%

Survey Says

- **Industrial & Energy Production**
 - *Statement 4*— Install cooling towers or retrofit once-through applications with closed loop recirculation systems to reduce cooling water use.
 - *Statement 10*— Turn off all flows during shutdowns and use solenoid valves to stop the flow of water when production stops.
- **Irrigation**
 - *Statement 5*— Operation of pumps to meet, but not exceed, application rates to reduce excessive pumping.
 - *Statement 1*— Develop a system wide (pivot, pump, water supply) maintenance program to reduce in season shut downs, improve water distribution, and enhance overall conservation objectives.
- **Public Water Supply**
 - *Statement 5*— Implementation of universal metering combined with a meter testing, calibration, and replacement program.
 - *Statement 6*— Develop a system wide large water meter (1 1/2" and larger) testing, repair and/or replacement program to increase revenues and to mitigate water losses to enhance conservation objectives.
- **Rural Use / Miscellaneous**
 - *Statement 4*— Development of an accurate water measurement system; including mechanical metering, or by figuring water use by flow meters, by acre inches applied, or by pump capacity.
 - *Statement 6*— Operate pumps to meet, but not exceed, necessary rates to reduce excessive pumping.



Assistance for Water Management Planning for Indiana's Significant Water Withdrawal Facilities~

The Water Management Planning Framework: Customizable for Water Use Each Category

2011 Follow-Up Survey to Significant Water Withdrawal Facilities

We asked what a Reasonable Voluntary Reduction Goal Amount might be:

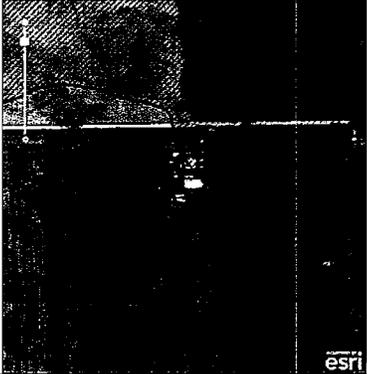
- Responses reported range from 2-30%
- Majority of Respondents reported 5-10% Overall, regardless of Use Category
- Higher Goal Percentages were Reported by Public Water Supply Utilities

2011 Follow-Up Survey to Significant Water Withdrawal Facilities

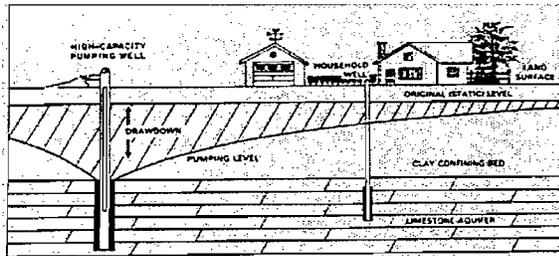
- Responses highly dependent upon on water use category
- Irrigators want to understand soils and soil capacity, how to better conserve with older systems, best practice & application technologies.
- Public Water Suppliers want to better understand customer usage and technologies to find and fix leaks.
- Industrial users would like to know more about water reuse & have industry specific seminars in-house.

First Survey indicated that the most desired Conservation and Efficiency Strategy for the future was Education based.

Practical Challenges: Groundwater Boundaries



Practical Challenges: Evaluating Local Impacts



IDNR, Division of Water
Great Lakes Compact Webpage at:
<http://www.in.gov/dnr/water/5216.htm>

**Protecting
the Great Lakes**
Great Lakes-St. Lawrence River Basin
Water Resources Compact

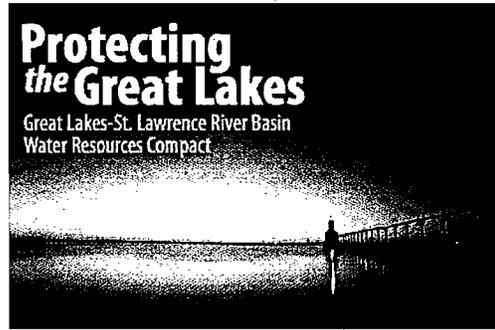


Exhibit 2
Water Resources Study Committee
October 2, 2012

Introduced

Second Regular Session 117th General Assembly (2012)

PRINTING CODE. Amendments: Whenever an existing statute (or a section of the Indiana Constitution) is being amended, the text of the existing provision will appear in this style type, additions will appear in **this style type**, and deletions will appear in ~~this style type~~.

Additions: Whenever a new statutory provision is being enacted (or a new constitutional provision adopted), the text of the new provision will appear in **this style type**. Also, the word **NEW** will appear in that style type in the introductory clause of each SECTION that adds a new provision to the Indiana Code or the Indiana Constitution.

Conflict reconciliation: Text in a statute in *this style type* or ~~this style type~~ reconciles conflicts between statutes enacted by the 2011 Regular Session of the General Assembly.

HOUSE BILL No. 1295

A BILL FOR AN ACT to amend the Indiana Code concerning taxation.

Be it enacted by the General Assembly of the State of Indiana:

- 1 SECTION 1. IC 6-2.5-5-45 IS ADDED TO THE INDIANA CODE
- 2 AS A NEW SECTION TO READ AS FOLLOWS [EFFECTIVE JULY
- 3 1, 2012]: Sec. 45. (a) As used in this section, "farm drainage
- 4 system" means a system of drainage tubing, drainage tiles, and
- 5 related control systems designed to facilitate the drainage of
- 6 agricultural land.
- 7 (b) Transactions involving a component of a farm drainage
- 8 system are exempt from the state gross retail tax if the person
- 9 acquiring the component is engaged in the business of agriculture.
- 10 (c) Transactions involving equipment used to install, repair, or
- 11 maintain farm drainage systems are exempt from the state gross
- 12 retail tax if the person acquiring the equipment is engaged in the
- 13 business of agriculture.

C
O
P
Y



HOUSE BILL No. 1295

DIGEST OF INTRODUCED BILL

Citations Affected: IC 6-2.5-5-45.

Synopsis: Exemption of farm drainage components from sales tax. Provides that a component of a farm drainage system is exempt from sales tax if a farmer acquires the component. Provides that equipment used to install, repair, or maintain a farm drainage system is exempt from sales tax if the equipment is acquired by a farmer.

Effective: July 1, 2012.

Heaton, Cherry, Gutwein

January 11, 2012, read first time and referred to Committee on Ways and Means.

C

O

P

Y



Water Resources Study Committee

I. STATUTORY DIRECTIVE

The Water Resources Study Committee (WRSC) is established by IC 2-5-25-1. Under IC 2-5-25-5, the WRSC shall study and may make recommendations concerning all matters relating to the surface and ground water resources of Indiana, including the following:

- (1) The usage, quality, and quantity of water resources.
- (2) Issues concerning diffused surface water, the common enemy doctrine of law, and runoff.

The WRSC conducted all activities to discharge its responsibilities.

II. SUMMARY OF WORK PROGRAM

The Legislative Council did not assign a specific topic for interim 2012. The Committee also reviewed the suitability of a sales tax exemption for the purchase of drainage tiles. The WRSC held 2 meetings as follows:

- (1) August 28, 2012 (Lafayette, IN)
Information presented pertained to: (1) invasive species; (2) Department of Natural Resources (DNR) reports; (3) water resources management; and, (4) the effects of the 2012 drought. This was a joint meeting with the Natural Resources Study Committee.
- (2) October 2, 2012 (State House, Indianapolis, Indiana)
Issues discussed included: (1) the suitability of a sales tax exemption for the purchase of drainage tiles; and (2) the Great Lakes Compact.

Minutes and exhibits provide detailed information of each meeting, and are accessed from the General Assembly's website at <http://www.in.gov/legislative/>

III. SUMMARY OF TESTIMONY

August 28, 2012

Invasive Species

Steve Yaninek, Professor, Department Head, Department of Entomology, Purdue University (Purdue), and Council Secretariat, Indiana Invasive Species Council (IISC), and **Phil Marshal**, Division of Entomology and Plant Pathology Department of Natural Resources' (DNR) and IISC member reported on IISC's objectives, organizational

structure, and strategic plan. Mr. Yaninek stated that the IISC's goal is to work with relevant parties to slow or eliminate the threat of invasive species to homes, environment, and economy. Their report identified the following invasive species management efforts: 1) gypsy moth, 2) tulip tree scale insect, 3) thousand cankers disease, 4) emerald ash borer, and 5) brown marmorated stink bug. Mr. Yaninek discussed the importance of having each position at the council filled, and reported that an industry representative has not been appointed. Mr. Marshall explained that the IISC has no regulatory powers and work with existing state agencies.

Water Resources Management

Ron Turco, Professor, Director of the Indiana Water Resources Research Center, and the Director of Purdue Water Community, provided information and data on the role and use of water in agriculture, watershed systems, and water quality and quantity. He discussed: (1) the ability of different types of soils to hold and deliver water, and stated that these are all represented in Indiana's geology; (2) the three types of water (i.e., green, blue and gray water) and its uses; and, (3) the quantity and quality of the Wabash Watershed, and Purdue's monitoring program.

Prof. Turco also reported on Purdue's water resources programs and discussed data on pharmaceuticals in freshwater. He explained how human and agricultural pharmaceuticals enter water systems and prevention strategies to avoid the contamination.

Tomas Hóók, Professor, Department of Forestry and Natural Resources, Purdue University, and Purdue Water Community member, discussed the Illinois-Indiana Sea Grant Program (IISG) and the importance of the Great Lakes as the world's largest surface fresh water supply. Professor Hóók informed the members that: (1) the IISG spent about \$2 million funding 40 research programs; (2) the IISG is 1 of 32 programs in the USA; and (3) the IISG is funded by the National Oceanic and Atmospheric Administration (NOAA). He described the efforts of IISG to: (1) reduce the spread of invasive species; (2) reduce the volume of pharmaceuticals entering into waterways; (3) help producers build aquaculture markets; and (4) help teachers meet science education standards. Professor Hóók also explained the history and impact of various species affecting the Great Lakes.

DNR Reports

Mark Basch, Section Head, Department of Natural Resources (DNR), Water Rights Section, reported on DNR's water resources availability, management, and distribution programs. Mr. Basch discussed matters related to significant water withdrawal, emergency regulations, water supply contracts, and Indiana's water shortage plan.

John Davis, Deputy Director, DNR, provided an update on the effect of the 2012 drought on state owned properties. Among the effects noted are: (1) loss of certain business; (2) increased fish kills; and (3) problems with the use of fire hydrants.

Effects of the 2012 Drought

Chris Hurt, Professor, Agricultural Economist, Purdue Extension Service, provided information on the 2012 drought and its effect on Indiana's agricultural economy. Prof. Hurt also reported as follows:

- 1) The 2012 drought will be one of the most expensive natural disasters since 1980. Yield losses in Indiana are estimated to be much higher than the national average. For example, estimated corn crop losses in Indiana are 40% but nationally losses are 25%; soy bean losses are 24% in the state, however, nationally the crop is down 18%.
- 2) Forward pricing crops will hurt farmers this drought year. Livestock farmers will also be greatly impacted due to the higher cost of feed.
- 3) While this year the net loss is high, over the long term the federal crop insurance program is actuarially sound because for many years, crop insurance brought in more premium income than what was paid out.
- 4) Indiana produces 8% of the ethanol in the nation. Because this year will not yield enough crop, the U.S. Environmental Protection Agency is considering a renewable fuel standard waiver that would reduce the amount of ethanol that it requires to be produced next year.

Dr. Jack Wittman, Director, Layne Hydro, a Division of Layne Christensen, presented information pertaining to the effects of users' competition for water on natural resources, municipalities' growth, and agricultural uses.

October 2, 2012 [Additional information to be added after meeting.]

Great Lakes Compact

Ron McAhron, DNR, provided an update about the Great Lakes Compact.

Sales Tax Exemption of Drainage Tiles

The committee discussed testimony about the sales tax exemption of drainage tiles.

IV. COMMITTEE FINDINGS AND RECOMMENDATIONS

Recommendations, if any, to be added after October 2nd meeting.

WITNESS LIST

Mark Basch

Section Head, Water Rights Section, DNR

John Davis

Deputy Director, DNR

Tomas Hóók

Professor, Department of Forestry and Natural Resources, Purdue University

Chris Hurt

Professor, Agricultural Economist, Purdue Extension Service, Purdue University

Phil Marshal

Division of Entomology and Plant Pathology, DNR

Ron McAhron

Deputy Director, DNR

Ron Turco

Professor, Director, Indiana Water Resources Research Center
Director, Purdue Water Community, Purdue University

Jack Wittman,

Director, Layne Hydro, a Division of Layne Christensen

Steve Yaninek

Professor, Department Head, Department of Entomology, Purdue University
Council Secretariat, Indiana Invasive Species Council