State of Indiana Water Management Program Review December 8, 2014

The State of Indiana submits the following Five Year Water Management Program Review to the Region Body and Compact Council pursuant to the requirements in the Agreement Article 300 and Section 3.4 of the Great Lakes-St. Lawrence River Basin Water Resources Compact. The State of Indiana believes its measures for the management and regulation of new or increased withdrawals and consumptive uses within the Great Lakes Basin are consistent with the Decision Making Standard set forth in Section 4.11 of Indiana's implementation of the Great Lakes Compact under IC 14-25-15.

1. Lead Agency and Contact Persons

Indiana Department of Natural Resources; Chris Smith, Deputy Director, IDNR.

2. Water Management Program Implementing Laws, Rules, Regulations and Policies

The following statutory provisions, Rules and Policies will be applicable to the Water Management Program in the State of Indiana:

- Great Lakes-St. Lawrence River Basin Water Resources Compact (IC 14-25-15) The State of Indiana's implementation of the Interstate agreement on the use of water resources in the Great Lakes-St Lawrence River Basin.
 [www.in.gov/dnr/water/5216.htm]
- Rule 312 IAC 6.2: Assists with the implementation of the Great Lakes-St. Lawrence River Basin Water Resources Compact (IC 14-25-15) for the registration and permitting of water withdrawal facilities; a voluntary conservation and efficiency program for water withdrawal facilities; and mandatory conservation and efficiency programs for new and increased withdrawals, diversions and consumptive uses. Rule 312 IAC 6.2 is applicable to the Water Management and Regulation provisions set forth in Article 4 of the Compact. [www.in.gov/legislative/iac/title312.html]
- Water Resource Management Act (IC 14-25-7): Section 13 requires that an inventory of the water resource in Indiana be conducted and include an assessment of the following: 1) The capabilities of streams to support instream and withdrawal uses and of aquifers to support withdrawal uses; 2) Low stream flow characteristics; 3) Existing uses and projections of beneficial use requirements; 4) The potential in watersheds for managing flood water for beneficial uses; 5) Potential sources and amounts of surplus water for transfers; 6) Other assessment and information considered necessary to properly define water resource availability. Section 14 Allows for the determination and establishment of minimum flows of streams and minimum level of ground water in aquifers. Section 15 requires that every person who owns a significant water withdrawal

facility (SWWF) shall register it within three (3) months after the facility is completed. A "significant water withdrawal facility" is defined in the act to mean "the water withdrawal facilities of a person that, in the aggregate from all sources and by all methods, has the capability of withdrawing more than one hundred thousand (100,000) gallons of ground water, surface water, or ground and surface water combined in one (1) day". Owners of a SWWF must also report annual water use within three (3) months after the end of each calendar year. Approved methods of measuring the amount of water withdrawn by a SWWF are specified in the Nonrule Policy Document Information Bulletin #40. Water withdrawals from temporary construction dewatering operations must also be reported in accordance with IC 14-25-7. IC 14-25-7 is applicable to the Water Management and Regulation provisions set forth in Sections 4.1 and 4.2 of the Compact. [www.in.gov/dnr/water/2453.htm]

- Sale of Water (IC 14-25-2, Rule 312 IAC 6.3): Conservation planning required in application for the sale of water from reservoir financed fully or in part by the State. IC 14-25-2 and 312 IAC 6.3 are applicable to the Water Management and Regulation provisions set forth in Section 4.2 of the Compact.
 [www.in.gov/dnr/water/2453.htm]
- Emergency Regulation of Ground Water Rights (IC 14-25-4; Rule 312 IAC 12): Owners of small capacity water wells are protected against the impacts of high capacity ground-water pumpage if it substantially lowers water levels, resulting in the failure of a small capacity well. Restrictions of high capacity pumping can occur when it is believed that discharge exceeds the recharge capability of the source aquifer. IC 14-25-4 and 312 IAC 12 are applicable to the Water Management and Regulation provisions set forth in Section 4.1 of the Compact. [www.in.gov/dnr/water/4849.htm]
- Emergency Regulation of Surface Water Rights (IC 14-25-5; Rule 312 IAC 11.5): Freshwater lake owners are protected against the impacts of high capacity pumping if it substantially lowers the level of the freshwater lake, resulting in significant environmental harm to the lake or adjacent property. Restriction of high capacity pumping can be required in order to restore lake level. IC 14-25-5 and 312 IAC 11.5 are applicable to the Water Management and Regulation provisions set forth in Section 4.1 of the Compact. [www.in.gov/dnr/water/4840.htm]
- Water Well Drillers and Pump Installer Licensing (IC 25-39; Rule 312 IAC 13): Requires licensing of water well drillers and water well pump installers and the submittal of water well records providing information regarding geology and ground water availability. Water well records are made available to the public on the IDNR, Division of Water webpage. IC 25-39 and 312 IAC 13 are applicable to the Water Management and Regulation provisions set forth in Section 4.1 of the Compact. [www.in.gov/dnr/water/6110.htm]

• Indiana's Water Management Policy: Developed by Indiana's Water Shortage Task Force under IC 14-25-14 (since repealed) declaring that "Indiana's water resources are public goods that generate benefits for all citizens of the State. The wise use of water through environmentally sound and economically feasible water management practices is essential to maximize the benefits obtained from water resources and sustain them for future generations. To achieve these goals, Indiana promotes the following:

1) Public Education and outreach that identifies appropriate water management practices and water conservation methods;

2) Appropriate water pricing and incentives;

3) Identification and dissemination of water management practices, such as demand and supply analyses, that will increase water use efficiency;

4) The application and sharing of available science and research regarding water management, water conservation, and water use efficiency; and

5) Funding of a water management and water use efficiency program by user fees established by legislative directive.

The State of Indiana's Water Management Policy is applicable to the Water Management and Regulation provisions set forth in Section 4.2 of the Compact. [www.in.gov/dnr/water/3124.htm]

3) Summary Description of the State of Indiana's Water Management Program Scope and Thresholds

- Reports on the Water Resource Availability in the Great Lakes Basin within the • State of Indiana (St. Joseph River Basin-1987; Lake Michigan River Basin-1994; Maumee River Basin-1996) have been completed by the IDNR, Division of Water. The reports were completed in accordance with the Water Resource Management Act (IC 14-25-7) requiring that an inventory of the water resource (ground water and surface water) in Indiana be conducted and include an assessment of the following: 1) The capabilities of streams to support instream and withdrawal uses and of aquifers to support withdrawal uses; 2) Low stream flow characteristics; 3) Existing uses and projections of beneficial use requirements; 4) The potential in watersheds for managing flood water for beneficial uses; 5) Potential sources and amounts of surplus water for transfers; 6) Other assessment and information considered necessary to properly define water resource availability. Section 14 Allows for the determination and establishment of minimum flows of streams and minimum level of ground water in aquifers. [www.in.gov/dnr/water/2454.htm#basin%20studies]
- Maps of Unconsolidated and Consolidated Aquifer Systems of all counties located within the Great Lakes Basin in Indiana have been completed by the Department of Natural Resource, Division of Water, and are available on the IDNR webpage. [www.in.gov/dnr/water/4302.htm]
- Maps of the Potentiometric Surface of Bedrock and Unconsolidated Aquifers of all counties located in the Great Lakes Basin in Indiana have been completed by

the Department of Natural Resources, Division of Water, and are available on the IDNR webpage. [<u>www.in.gov/dnr/water/7256.htm</u>]

- Indiana's Water Shortage Plan (updated in 2009 by Water Shortage Task Force) provides an effective and systematic plan to assess and manage the State's water resources during a water shortage or potential water shortage to respond, to the maximum extent practicable, to the needs of its water users while protecting its environment. [www.in.gov/dnr/water/3124.htm]
- Significant Water Withdrawal Facilities (SWWF) shall be registered within three (3) months after the facility is completed in accordance with IC 14-25-7. Owners of a SWWF must also report annual water use within three (3) months after the end of each calendar year. Approved methods of measuring the amount of water withdrawn by a SWWF are specified in the Nonrule Policy Document Information Bulletin #40. Water withdrawals from temporary construction dewatering operations must also be reported. Water use data, identified as ground water or surface water, is reported in the following categories:
 - Agricultural and Irrigation (IR)—Crop and golf course irrigation, farm field drainage, agricultural services, etc;
 - Industry (IN)—Process water, cooling water, mineral extraction (except coal), quarry dewatering, waste assimilation;
 - Public Supply (PS)—Public water supply, drinking water and sanitary facilities;
 - Energy Production (EP)—Power generation, cooling water, coal mining, geothermal, oil recovery;
 - Rural Use (RU)—Watering of livestock, barn facilities, fisheries, etc.; and
 - Miscellaneous (MI)—Fire protection, amusement parks, construction dewatering, dust control, pollution abatement, hydrostatic testing, recreational field drainage, etc.

[www.in.gov/dnr/water/4847.htm]

- In accordance with Section 7 of Indiana's implementation of the Great Lakes-St. Lawrence River Basin Water Resources Compact (14-25-15), a person must obtain a permit from the IDNR for a daily withdrawal in excess of any of the following, calculated on average over any 90 day period: 1) five million (5,000,000) gallons from Lake Michigan surface water; 2) one hundred thousand (100,000) gallons from a salmonid stream; or 3) one million (1,000,000) gallons from any other surface water or groundwater source. Section 8 of the statute provides an exemption from the permit requirements if a withdrawal does not exceed the amount of baseline status determination.
- Rule 312 IAC 6.2 assists with the implementation of the Great Lakes-St. Lawrence River Basin Water Resources Compact (IC 14-25-15) for the registration and permitting of water withdrawal facilities; a voluntary conservation and efficiency program for water withdrawal facilities; and

conservation and efficiency programs required as part of permit application for new and increased withdrawals an exception to the prohibition on diversions for a straddling community, a community within a straddling county, and an intrabasin transfer; and the regulation of consumptive uses.

- 4) Application of the Decision Making and Exception Standards for Withdrawals, Consumptive Uses and Diversions
- Rule 312 IAC 6 assists with the implementation of the Great Lakes-St. Lawrence River Basin Water Resources Compact (IC 14-25-15) for the registration and permitting of water withdrawal facilities; a voluntary conservation and efficiency program for water withdrawal facilities; and mandatory conservation and efficiency programs for new and increased withdrawals; an exception to the prohibition on diversions for a straddling community, a community within a straddling county, and an intra-basin transfer; and the regulation of consumptive uses. Provisions of 312 IAC 6.2 provide for compliance to the Decision Making and Exception Standards specified for new or increased withdrawals and consumptive uses under the Compact.
- Section 15 of IC 14-25-7 requires that every person who owns a significant water withdrawal facility (SWWF) shall register it within three (3) months after the facility is completed. A "significant water withdrawal facility" is defined in the act to mean "the water withdrawal facilities of a person that, in the aggregate from all sources and by all methods, has the capability of withdrawing more than one hundred thousand (100,000) gallons of ground water, surface water, or ground and surface water combined in one (1) day". Owners of a SWWF must also report annual water use within three (3) months after the end of each calendar year. Previous three years of reported SWWF annual water use available for review at www.in.gov/dnr/water/4841.htm.

5) Overview of the State of Indiana's Reporting and Database of Withdrawals, Consumptive Uses and Diversions

Annual reports of withdrawals are required from each SWWF in accordance with Indiana Code 14-25-7-15. The IDNR provides hard copy report forms to each facility previously reporting by hard copy, and provides email notification to facilities previously submitting data electronically. Annual water use data must be submitted by March 31st of the following year. Approved methods of measuring withdrawals are specified in the attached NRC Bulletin #40. Upon receipt by hard copy or electronic submittal, annual water use reports are reviewed for accuracy and subsequently entered into a database. Digital data is reviewed by edit reports and corrections are made when necessary. Previous three years of reported SWWF annual water use available for review at www.in.gov/dnr/water/4841.htm.

- 6) State of Indiana's Initiatives to Support an Improved Scientific Understanding of the Waters of the Great Lakes Basin
- Maps of Unconsolidated and Consolidated Aquifer Systems of all counties located within the Great Lakes Basin in Indiana have been completed by the IDNR, Division of Water, and are available on the Division of Water's webpage at www.in.gov/dnr/water/4302.htm.
- Maps of the Potentiometric Surface of Bedrock and Unconsolidated Aquifers of all counties located in the Great Lakes Basin in Indiana have been completed by the Department of Natural Resources, Division of Water, and are available on the IDNR webpage at www.in.gov/dnr/water/7256.htm.
- Reports on the Water Resource Availability in the Great Lakes Basin within the ٠ State of Indiana (St. Joseph River Basin-1987; Lake Michigan River Basin-1994; Maumee River Basin-1996) have been completed by the IDNR, Division of Water. The reports were completed in accordance with the Water Resource Management Act (IC 14-25-7) requiring that an inventory of the water resource (ground water and surface water) in Indiana be conducted and include an assessment of the following: 1) The capabilities of streams to support instream and withdrawal uses and of aquifers to support withdrawal uses; 2) Low stream flow characteristics; 3) Existing uses and projections of beneficial use requirements; 4) The potential in watersheds for managing flood water for beneficial uses; 5) Potential sources and amounts of surplus water for transfers; 6) Other assessment and information considered necessary to properly define water resource availability. Section 14 allows for the determination and establishment of minimum flows of streams and minimum level of ground water in aquifers. [www.in.gov/dnr/water/2454.htm#basin%20studies]