State of Indiana
Five-Year Water Management and Conservation and Efficiency Program Review
December 20, 2019

1. **Lead Agency and Contact Persons**
   Indiana Department of Natural Resources; Chris Smith, Deputy Director, IDNR.

2. **Implementing Laws, Rules, Regulations and Policies**
   The following statutory provisions, Rules and Policies are applicable to the Water Management and Conservation and Efficiency Programs in the State of Indiana:

- Great Lakes-St. Lawrence River Basin Water Resources Compact under 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.

- 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.

- Water Resource Management Act under 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.

- Sale of Water (IC 14-25-2 and 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.

- Emergency Regulation of Ground Water Rights (IC 14-25-4 and 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.

- Emergency Regulation of Surface Water Rights (IC 14-25-5 and 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.

- Water Well Drillers and Pump Installers Licensing (IC 25-39 and 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.

- 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.

Water Management Program Report

1) 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.

- 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.

- 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.

    a. 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.

- 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.

- In accordance with Section 7 of Indiana's implementation of the Great Lakes-St. Lawrence River Basin Water Resources Compact (IC 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 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.

2) Water Withdrawal Management

- 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.

3) Application of the Decision Making and Exception Standards for Withdrawals, Consumptive Uses and Diversions

- 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; 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 http://www.in.gov/dnr/water/4841.htm.

4) 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 IC 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 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 http://www.in.gov/dnr/water/4841.htm.

5) Water Withdrawal Application Form

- 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.

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 available on the Division of Water**'s** webpage.

- 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.

- 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.

- Indiana's Voluntary Monitoring Network authorized under HEA 319 in 2015 currently includes 58 ground water monitoring wells throughout the state, and 11 wells located within the Great Lakes Basin in Indiana. The monitoring well

network is maintained and operated by the IDNR, Division of Water with water level data posted by the USGS. Siting of VMN observation wells based upon past water rights issues or the potential for ground water discharge to exceed recharge capability of source aquifer.

Water Conservation and Efficiency Program Report

1) Status of Water Conservation and Efficiency Goals and Objectives

The State of Indiana's Great Lakes Basin water conservation and efficiency goals are consistent with the goals and objectives of the Compact, and are provided by Section 4.2.1 of Indiana's implementation of the Compact under IC 14-25-15 [www.in.gov/dnr/water/5216.htm] that includes the following basin-wide goals:

a. Ensure the improvement of the waters and water dependent natural resources of the Basin;
b. Protect and restore the hydrologic and ecosystem integrity of the Basin;
c. Retain the quantity of surface water and groundwater in the Basin;
d. Ensure sustainable use of waters of the Basin; and
e. Promote the efficiency of use and reduce losses and waste of water in the Basin.

The State of Indiana's water conservation and efficiency objectives are consistent with Indiana's Water Management Guidelines that *"recognizes that Indiana's abundant resources are a public good for all citizens of the State, and promotes the efficient use of this water by encouraging environmentally sound and economically feasible conservation measures to ensure availability for future generations"*.

2) Water Conservation and Efficiency Program Overview;
Also Available at: www.in.gov/dnr/water/6364.htm

The following statutory provisions applicable to the Water Conservation and Efficiency program in the State of Indiana are as follows:

- Great Lakes-St. Lawrence River Basin Water Resources Compact (IC 14-25-15 and Rule 312 IAC 6.2) - Interstate agreement on the use of water resources in the Great Lakes-St Lawrence River Basin.

- Indiana legislation for Voluntary Conservation and Efficiency (14-25-15-5) - Enacts and implements the Compact, and calls for the Indiana Natural Resources Commission to adopt rules that implement a voluntary water conservation and efficiency program and water conservation and efficiency planning required as part of a permit application for a new or increase in withdrawal or consumptive use in the Great Lakes Basin. Rule 312 IAC 6.2 that assists with the implementation of the Compact for water conservation and efficiency programs became effective September 3, 2014 and may be found here: www.in.gov/dnr/water/5216.htm]

- Significant Water Withdrawal Facility Registration (IC 14-25-7-15) - Requires that an inventory of significant uses of water withdrawn from the surface or ground be taken and maintained. Section 15 of the act 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 Non-Rule Policy Document Information Bulletin #40. Water withdrawals from temporary construction dewatering operations must also be reported in accordance with IC 14-25-7. [www.in.gov/dnr/water/4847.htm]

- Sale of Water (IC 14-25-2 and Rule 312 IAC 6.3) - Conservation planning is required in the application for the sale of water from any reservoir financed fully or in part by the State.
[http://iga.in.gov/legislative/laws/2017/ic/titles/001]

- Emergency Regulation of Ground Water Rights (IC 14-25-4 and Rule 312 IAC 12) - Owners of small capacity water wells are protected against the impacts of high capacity ground-water pumping 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. [www.in.gov/dnr/water/4849.htm]

- Emergency Regulation of Surface Water Rights (IC 14-25-5 and 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. [www.in.gov/dnr/water/4840.htm]

- Water Shortage Plan (Authorized by IC 14-25-14, enacted in 2006) - Ten-member Water Shortage Task Force was charged with updating and implementing Indiana's Water Shortage Plan that 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 the environment. Indiana's Water Shortage Plan update was completed in 2009. [www.in.gov/dnr/water/files/watshplan.pdf]

3) Promotion of Environmentally Sound and Economically Feasible Water Conservation Measures, Consistent with Regional Objectives.

- **Measures that guide programs toward long-term sustainable use.**

  - Statewide registration and water use reporting program under IC 14-25-7-15 of over 4,100 facilities under the water use categories of Energy Production, Industrial, Irrigation, Public Water Supply, Rural and Miscellaneous. [www.in.gov/dnr/water/4847.htm]

  - Detailed river basin studies for the Indiana portion of the Great Lakes Basin (Lake Michigan Region, St. Joseph River Basin, Maumee River Basin) by the Indiana Department of Natural Resources, Division of Water. These studies provide detailed information regarding the availability, development, protection and projected use of ground water and surface water resources of each river basin.
    [www.in.gov/dnr/water/2454.htm]

  - Best Management Practices (BMPs) for each water use category have been developed and distributed to all registered SWWFs within the Great Lakes Basin and statewide. The identification of applicable BMPs was completed with the use of industry standards and input from SWWF representatives, area water user groups, environmental groups, private sector water management firms, academia, and area planning commissions. [www.in.gov/dnr/water/6364.htm]

  - The Water Management Planning Framework is a live, fill in the blank style document that was drafted for use by each of the water use categories in the SWWF registration program. The document is available online to assist water users with their conservation planning efforts, especially those registered as SWWFs. The framework is directed to those facilities that may not currently have conservation strategies as part of daily operating procedures as a guidance document to help develop those strategies. It encourages facilities to more readily develop & implement conservation and efficiency programs on a voluntary basis by walking them through the water audit process to identify areas where potential water savings exist. The document is also intended to aid in development fundamental conservation and efficiency strategies, and the selection of applicable BMPs.
    [www.in.gov/dnr/water/6364.htm]

  - Provision of a summary of the BMP checklist survey results to all SWWFs located in the Great Lakes Basin, as well as statewide. The survey's purpose was to: 1) to gather data on conservation and efficiency efforts of all Indiana SWWFs; and 2) share information on BMPs, water management practices, new technology, and other pertinent topics relevant to conservation and efficiency efforts.
    [www.in.gov/dnr/water/6364.htm]

- A 2011 survey sought to acquire more specific information about 'planned' conservation and efficiency within a facility. Since education was the most commonly indicated future or 'planned' strategy by SWWFs who responded to the 2010 survey, it was relevant to find out how these educational strategies would be implemented. The survey also asked facility representatives to indicate what was felt to be a reasonable voluntary reduction goal, and to identify any previously achieved reduction in water use resulting from implementation of conservation and efficiency strategies or BMPs. Email addresses were also requested as part of the responses to improve communication efficiency with registered facilities. The mailer also included information on the implementation of LSA Document # 13-532(E) (the original rule package) regarding the permitting of water withdrawals within the Great Lakes Basin that exceed the established thresholds set forth in IC 14-25-15-7.

- 2012 water use mailing provided summary of results of previous year's survey to registered SWWFs, both in the Indiana portion of the Great Lakes Basin as well as Statewide, on the progress toward permanent rule adoption of LSA Document #13-335(F) regarding the permitting of water withdrawals and on voluntary water conservation and efficiency programming within the Great Lakes Basin that exceed the established thresholds set forth in IC 14-25-15-7. [www.in.gov/dnr/water/6364.htm]

- The 2013 water use mailing helped to gather data on current conservation and efficiency practices by SWWFs. An electronic version of the checklist survey was made available online to gather a comparison dataset to the results from the original surveys, and to gather data on status of the previously 'planned' conservation and efficiency BMPs utilized by SWWFs. The data analysis provided a means to identify trends existing among the voluntary participants. [www.in.gov/dnr/water/6364.htm]

- In 2016 the annual SWWF water use mailing was utilized to provide a newsletter specific to water use type that included a list of Best Management Practices to continue to draw attention to potential new strategies available to facilities.

- **Promote the efficient use and conservation of water.**

  - Implementation of educational mailings to registered SWWFs to communicate the importance of water use efficiency and conservation practices. The educational mailings are ongoing, utilizing the long established correspondence for SWWF annual water use reporting as a vehicle for providing information on conservation and efficiency.

- Encouraging use of universal water metering programs, including water audits, to identify leaks, waste, and opportunities for water savings in all educational items.

- *Indiana's Water Management Guidelines* recognize that Indiana's abundant water resources are a public good for all citizens of the State, and promote the efficient use of this water by encouraging environmentally sound and economically feasible conservation measures to ensure availability for future generations. [www.in.gov/dnr/water/6364.htm]

- *Development of a Statewide Water Management Plan* that promotes improvements in water management practices, such as watering lawns, gardens, and farm fields efficiently, using water efficient fixtures in homes and businesses, using drought resistant landscape practices, and using reclaimed or lower quality water for irrigation, industrial, and other appropriate non-potable uses. [www.in.gov/dnr/water/6364.htm]

- *Suggested Model Ordinance*—The Model Conservation Ordinance describes a suite of measures including good water management practices at all times, potential price increases for water during times of shortage, and enforced rationing during periods of extreme water shortage. While some of the measures in the ordinance may not apply in all situations or locations, the purpose of the measures is to encourage wise use of the resource and to minimize the impacts of seasonal or short-term water shortages. [http://www.in.gov/dnr/water/files/Model_ordinance_Final_Draft_7-2-07.doc]

- Conservation and efficiency programming is required as part of a permit application for any new or increase in withdrawals or diversions under the Compact by Rule 312 IAC 6.2.

- Promotion of water conservation and efficiency utilizing the EPA *Water Sense* and *We're for Water* programming at area water related conferences, seminars, and for the three weeks of the Indiana State Fair where a substantial number of fairgoers picked up conservation materials at the Division of Water display. Reported attendance for the Indiana State Fair was approximately 730,000 in 2016, and 907,000 in 2017. [www.epa.gov/watersense/]

- Promotion of water conservation and efficiency under the GLC in partnership with area agricultural extension offices and county Soil and Water Conservation Districts. Meetings take place particularly in the Northern & Northwestern regions of the State where predominant use of water is for agricultural purposes. Meetings are typically attended by area

irrigators, potential irrigators, members of the public and county officials. [http://msue.anr.msu.edu/program/info/irrigation]

- **Develop water conservation education programs and information sharing.**

    - 'Water Conservation and Efficiency Clearinghouse' available online [www.in.gov/dnr/water/6364.htm] which outlines the historical process of implementation of the Great Lakes and St. Lawrence River Basin Water Resources Compact, corresponding permit rule and conservation and efficiency rule development, and subsequent posting of permanent rules once adopted.

    - Educational and printable material available and made conveniently accessible to public, water users, SWWFs, and various stakeholders on Indiana's water conservation and efficiency clearinghouse website.

    - Significant Water Withdrawal Facility (SWWF) data is accessible from and linked to conservation and efficiency clearinghouse. [www.in.gov/dnr/water/4841.htm]

    - Website clearinghouse includes links to other conservation programs, including the EPA's *Water Sense* program. [www.in.gov/dnr/water/6364.htm]

    - Indiana registered SWWFs surveyed on current water conservation and efficiency efforts and water management practices and those that are planned for implementation in the future. Included with the 2011 annual water use report form, the survey received a 54% response rate from facilities within the Great Lakes Basin. (Acquired data accessible from website clearinghouse.)

    - The program continues to build on the success of surveys and communications associated with annual water use reporting. Use of the ongoing process of surveying facilities and building the database to track the implementation of new or revised conservation strategies by SWWFs. The survey program will show the movement of conservation and efficiency strategies and BMPs formerly indicated as 'planned' and moving to the 'current' category in a facility. Additional water conservation communication anticipated with 2019 SWWF water use reporting process.

    - Utilizing social media to promote conservation and efficiency. A series of "Talk with an Expert" events on the Indiana DNR Facebook page to discuss water use issues in Indiana, focusing on providing information about agricultural irrigation, including historical use and generalized location data, general conservation and efficiency practices suggested for

managing water used for irrigation purposes, & Indiana's water use laws and protections provided for owners of domestic (home) wells when they are impacted by high capacity pumping. General conservation and efficiency practices were presented in 2013 and 2014 using social media. In 2016, total reach for "Talk with an Expert" was 107,451 Facebook users, 3,657 engaged users (those that directly interacted with the material or asked questions), and 191,933 total impressions. "Talk with an Expert" was conducted in 2017 during NGWA's Ground Water Awareness Week with a total reach of 73,721 Facebook users, 2,067 engaged users and 99,612 total impressions. Conservation and efficiency practices were also presented and discussed in 2017 during a Facebook "Theme Week" with a total reach of 78,067 users, 1,993 engaged users, and 107,647 total impressions. A 2018 Facebook "Theme Week" that presented water well construction requirements, SWWF registration and water use data, water rights provisions and ground water availability information had a total reach of 77,563 users, 6,318 engaged users, and 101,235 total impressions. A Groundwater Awareness Facebook Week presented information regarding water rights programs, water use data, water well construction criteria and water conservation information and had a total reach of 80,640 users, 108,223 total impressions and 4,025 engaged users.

- A GIS-based map has been added to the Division of Water's website that shows the locations of Significant Water Withdrawal Facilities (SWWFs) and their associated withdrawal sources (groundwater wells and/or surface water intakes). Users can zoom to a specific county and see the locations of registered SWWFs. The interactive map allows users to click on a facility point to quickly view information regarding the facility, including the owner name, total capacity (MGD), and a count of withdrawal sources. As the user scrolls in further, the withdrawal sources associated with each facility become visible, allowing users to easily see the specific locations of the sources. The wells and intakes are also color-coded based on the Major Water Use category the facility falls under (Energy Production, Industry, Irrigation, Public Supply, Rural Use, or Miscellaneous). As with the facility points, when a user clicks on an individual source point, they can quickly view the features of each source, including depth, diameter, and capacity (GPM) for wells and water body source and capacity (GPM) for intakes. The SWWF registration information (along with the last three years of reported water use data) is also available for download either by county or for the entire state in Excel spreadsheet format on the Division of Water's website.
  [www.in.gov/dnr/water/4841.htm]

- **Improve monitoring and standardize data reporting:**

  - SWWF water use data was first made available online in 2005 that provides annual summaries and withdrawal data for the previous five

years. The data is updated on an annual basis. [www.in.gov/dnr/water/4841.htm]

- Best Management Practices developed specifically for each SWWF water use category will allow standardized comparisons of implemented and planned conservation and efficiency efforts, with input from SWWF representatives, area water user groups, environmental groups, private sector water management firms, academia, and area planning commissions. [www.in.gov/dnr/water/6364.htm]

- The online submittal portal for Indiana SWWF annual water use data has been successfully deployed. The electronic water use reporting system is currently being used by facilities in the effort to facilitate and standardize data reporting. The online reporting system was tested initially for 2012 water use reporting, with very few issues encountered. The deadline to submit 2018 water use data for all categories is March 31, 2019. Annual reporting compliance is generally at 98%. [https://secure.in.gov/apps/dnr/dowos/Main.aspx]

- In 2017, Indiana DNR staff participated on the expert panel for the Council of Great Lakes Industries (CGLI) Water Stewardship project to develop tools that may be utilized by Great Lakes industries to optimize internal water use and management, demonstrate good water stewardship, and support efforts to utilize a transparent process to disclose water use to complement other tools used for regulatory water use reporting and implementation of the Great Lakes Compact.

- Senate Bill 347 enacted by the 2016 Indiana Legislature instructed the IDNR to collaborate with the Indiana Geological and Water Survey (IGWS) to "*perform a quality review of the water resources data compiled from the reports submitted by owners of significant water withdrawal facilities for all calendar years since 1985*". The IGWS completed their review of existing SWWFs in 2018 and provided the IDNR, Division of Water with detailed well and intake locations as well as identifying approximately 3,500 potential unregistered facilities within Indiana. IDNR staff will rectify existing SWWF locations and is currently conducting field investigations of potential unregistered facilities in the Great Lakes Basin. About 500 unregistered SWWFs have been visited by DNR staff and 50 new SWWFs have been registered within the basin.

- Standardized forms for the "Application for Individual Permit for a New Water Withdrawal" and the "Notification of Sale or Transfer of Baseline Volume of Significant Water Withdrawal Facility" within the Great Lakes Basin were completed and approved in 2019 and available for use

on the IDNR, Division of Water webpage at https://www.in.gov/dnr/water/2450.htm

4) The State of Indiana's timeline for implementation of voluntary Water Conservation and Efficiency Program.

- Indiana has met its obligations under Section 4.2 of the Compact, including development of water conservation and efficiency goals and objectives consistent with the basin wide goals and objectives by December 8, 2010 (two years from the effective date of the Compact). The goals and objectives outlined in the Compact have been incorporated by reference within Rule 312 IAC 6.2.

- Public outreach and input regarding development of Indiana's voluntary Water Conservation and Efficiency Program has been utilized, and feedback from SWWF's will continue to shape the program through the coming year(s).

- Meetings continue with the Michiana Irrigation Association, the Indiana Ground Water Association, Northwest Indiana Regional Plan Commission, Indiana Steel Producers Environmental Working Group, Indiana Mineral Aggregate Association and the Indiana Rural Water Association for available outreach opportunities and input as the conservation and efficiency program continues to develop and evolve.

- The Department of Natural Resources completed work with the Natural Resources Commission for the final adoption of amendments to Rule 312 IAC 6.2 as LSA Document #13-335(F) which implements permitting and voluntary water conservation and efficiency programs for facilities applying for new or increased withdrawals, diversions, and consumptive uses. Permanent Rule 312 IAC 6.2 became effective September 3, 2014.

- The Department of Natural Resources completed work with the Natural Resources Commission for the final adoption of amendments to Rule 312 IAC 6.2 under Administrative Cause #15-076W in response to a "Petition to Change Great Lakes Compact Implementation Permanent Rule (LSA #12-1335)" submitted by the membership of Save the Dunes, Natural Resources Defense Council, National Wildlife Federation and the Alliance of the Great Lakes. Amendments include voluntary conservation and efficiency objectives currently set forth in Rule 312 IAC 6.2 to be listed in full rather than by reference. The rule package received final adoption by the Natural Resources Commission on March 20, 2018, and amendments became effective on June 8, 2018.