

QUESTIONNAIRE FOR PRELIMINARY SUBMITTALS BY STATES AND PROVINCES

This Questionnaire is provided as a guide to assist the States and Provinces in gathering the information necessary to prepare their Five-Year Reports and to enable the Compact Council and Regional Body to undertake their required review, declaration of findings and recommendations under the Compact and the Agreement.

General Information

1. Lead agency/agencies and contact person(s) and contact information.
Ohio Department of Natural Resources-Division of Water Resources
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2. Identify all laws, statutes, rules, regulations, executive orders, administrative orders or other similarly enforceable documents (collectively, "Laws") that establish or implement programs meeting the requirements of the following provisions of the Compact or Agreement. Please note that the Secretariat has previously compiled (in 2012) a matrix of those Laws that are believed to be in effect for the States and Provinces. If you would like a copy, please contact Peter Johnson (pjohnson@cqlg.org; 312-407-0177). In particular, ensure that all such citations address the following sections and articles of the Compact and Agreement.
 - a. Compact Section 3.4/Agreement Article 300
Ohio Revised Code §1522.01, §1522.03

 - b. Compact Section 4.1/Agreement Article 301
Ohio Revised Code §1522.01, §1522.03, §1521.03(B), §§1521.15-16

 - c. Compact Sections 4.2(2), 4.2(4) and 4.2(5)/Agreement Article 304
Ohio Revised Code §1522.01, §1522.03, §1522.05

 - d. Compact Section 4.3/Agreement Article 200
Ohio Revised Code §1522.01, §1522.03, §1522.10-1522.21

 - e. Compact Section 4.8, 4.9 and 4.13/Agreement Articles 200, 201 and 208
Ohio Revised Code §1522.01, §1522.03, §1522.06, §1522.11

 - f. Compact Section 4.10/Agreement Article 206
Ohio Revised Code §1522.01, §1522.03, §§1522.12-15, §1522.17

 - g. Compact Section 4.11/Agreement Article 207
Ohio Revised Code §1522.01, §§1522.03-04, §1522.101, §§1522.13-131, §1522.17

 - h. Agreement Article 304
Ohio Revised Code §1522.01, §1522.03

Water Management Program Report

1. Summary description of the State's or Province's Water management program scope and thresholds, including the current status of program implementation and a description of which New or Increased Withdrawals, Consumptive Uses and Diversions are subject to the program. The summary should include information on registration (if applicable), management and regulation, and reporting elements of the program.

Status: The Compact's prohibition on diversions out of the Great Lakes Basin has been enforced since December 8, 2008. A permit program for new or increased diversions that meet the criteria required to qualify as exceptions to the Compact's prohibition on diversions has been in place since September 4, 2012. A permit program for diversions larger than 100,000 gallons per day both out of and into the Great Lakes Basin has been in place since 1986. A permit program for new or increased withdrawals and consumptive uses within the Great Lakes Basin pursuant to the Compact has been in place since March 3, 2013. A permit program for withdrawals resulting in new or increased consumptive uses larger than two million gallons per day has been in place since 1988.

Diversions subject to the program: All new or increased diversions are subject to the prohibition and the permit requirement for diversions that qualify as exceptions to the prohibition.

Withdrawals and Consumptive Uses subject to the program: New or increased withdrawals that are not otherwise exempt are subject to the permit requirement if they meet the following threshold quantities: [1] withdrawals from Lake Erie or a recognized Lake Erie navigation channel if the new or increased capacity for withdrawal or consumptive use is 2.5 million gallons per day or greater; [2] withdrawals from any high quality river or stream if the new or increased capacity for withdrawal or consumptive use is 100,000 gallons per day or greater; [3] withdrawals from other surface water and ground water if the new or increased capacity for withdrawal or consumptive use is 1.0 million gallons per day or greater. The following are exempt from the permit requirement: [1] a new facility whose proposed withdrawal and consumptive use capacity is below the applicable threshold quantity; [2] an existing facility whose proposed increase in withdrawal and consumptive use capacity is below the applicable threshold quantity; [3] a new facility whose actual maximum daily withdrawal will be less than the applicable threshold quantity when averaged over any 90-day period (45-day period if the withdrawal is from a high quality river or stream and the drainage area at the withdrawal point is between 50 and 100 square miles); [4] an existing facility whose increase in actual maximum daily withdrawal will be less than the applicable threshold quantity when averaged over any 90-day period (45-day period if the withdrawal is from a high quality river or stream and the drainage area at the withdrawal point is between 50 and 100 square miles); [5] an existing electric generating facility that increases its consumptive use due to a requirement imposed by federal regulation that is unrelated to an increase in electricity production; [6] a facility that is making a withdrawal for purposes other than industrial use or public water supply from an impoundment collected primarily from diffused surface water sources, including a farm pond, golf course pond, nursery pond, storm water retention pond, or other private pond; [7] a facility that is making a withdrawal for purposes other than industrial use or public water supply from a river or stream to augment the water supply of an impoundment used for firefighting purposes; [8] a facility that must temporarily establish a new or increased withdrawal and consumptive use capacity as a result of an emergency (for the duration of the emergency) that, without the new or increased capacity, would result in imminent harm to human health and property; [9] a facility that is establishing a new or increased withdrawal and consumptive use capacity in compliance with an experimental use permit; [10] a facility that must temporarily establish a new or increased withdrawal and consumptive use capacity in order to respond to a humanitarian crisis (for the duration of that crisis) if the new or increased capacity is necessary to assist in the management of that crisis; [11] a major utility facility that is subject to regulation under Chapter 4906 of the Ohio Revised Code or a facility that is increasing its withdrawal and consumptive use capacity directly related to supplying such a major utility

facility; [12] a public water system whose increase in withdrawal and consumptive use capacity is proposed and reviewed in accordance with the requirements of §1501.33(C) of the Ohio Revised Code; [13] a facility that is subject to regulation under Chapter 1514 of the Ohio Revised Code; [14] a facility that purchases all of its water from a public water system; and [15] a facility that is withdrawing or consumptively using water from an off-stream impoundment that has been substantially filled with an existing stream withdrawal or a new or increased stream withdrawal that is subject to a withdrawal and consumptive use permit.

Withdrawals and consumptive uses exempt from regulation pursuant to the Compact (i.e. ORC §§1522.10-21) are subject to the permit requirement contained in ORC §1501.33-34, which requires a permit from the Director of the Department of Natural Resources prior to withdrawing waters of the state that would result in a new or increased consumptive use of an average of more than two million gallons per day in any thirty-day period. The following are exempt from this permit requirement: [1] a major utility facility that is subject to regulation under ORC Chapter 4906; [2] a public water supply that was in operation on June 29, 1988 and for which no substantial changes are proposed; [3] a public water supply that encompasses only water distribution facilities; [4] a public water supply whose plans for a new or increased capacity, containing the information required in ORC §1501.33(A), are submitted and reviewed by the Director of the Environmental Protection Agency applying the criteria specified in ORC §1501.34(A), as determined by the Director of the Department of Natural Resources; [5] a facility that is required to obtain a withdrawal and consumptive use permit under ORC §§1522.10-21.

Diversions and Withdrawals subject to registration and annual reporting: All existing diversions out of the Great Lakes Basin are registered and are required to annually report the monthly quantity of water diverted. All permitted diversions under the Compact would also be required to annually report the monthly quantity of water diverted. All existing withdrawals with a capacity to withdraw greater than 100,000 gallons per day are registered and are required to annually report the monthly quantity of water withdrawn. All permitted withdrawals would also be required to annually report the monthly quantity of water withdrawn.

2. Describe specifically how Water Withdrawals in the State or Province are managed by:
 - a. Sector (public water supply, self-supply commercial and institutional, self-supply irrigation, self-supply livestock, self-supply industrial, self-supply thermoelectric power production (once-through cooling), self-supply thermoelectric power production (recirculated cooling), off-stream hydroelectric power production, in-stream hydroelectric power production (voluntary), and other self-supply;

New or increased withdrawals and consumptive uses in all use sectors are subject to permit requirements pursuant to ORC §§1522.10-21 or ORC §1501.33-34, except major utility facilities subject to regulation under ORC Chapter 4906 and certain public water systems subject to regulation under ORC Chapter 6109, which are subject to criteria identical to those in ORC §1501.33-34.

- b. Water source (groundwater, surface water (Great Lakes-St. Lawrence River), surface water other than Great Lakes-St. Lawrence River);

New or increased withdrawals and consumptive uses from all water source types are subject to permit requirements pursuant to the Compact (i.e., ORC §§1522.10-21) or ORC §1501.33-34. See the answer to question 1 above for threshold levels and specific exemptions that may be relevant to water source type.

- c. Quantity (regulatory thresholds, volumes, rates, and reporting requirements);

See the answer to question 1 for quantity thresholds and reporting requirements.

- d. Location (Statewide/Province-wide or Great Lakes-St. Lawrence River Basin); and

New or increased withdrawals and consumptive uses subject to regulation pursuant to the Compact (i.e., ORC §§1522.10-21) include only those withdrawals and consumptive uses within the Great Lakes Basin portion of the state. New or increased withdrawals and consumptive uses subject to regulation pursuant to ORC §§1501-33.34 include those withdrawals and consumptive uses from any waters of the state.

- e. Any specific exemptions as allowed in the Agreement and the Compact.

Exemptions as allowed in the Compact are also included as exemptions to permit requirements pursuant to the Compact (i.e., ORC §§1522.10-21) but are not exempt from permit requirements pursuant to ORC §§1501-33.34.

Note: Address all sectors and sources in your descriptions even if one or more sector or source is not currently managed by your State or Province.

- 3. Description of how the provisions of the Standard of Review and Decision are applied. The description should include information on how each criterion of the Decision Making Standard and Exception Standard is addressed.
 - a. Decision Making Standard for Withdrawals, Consumptive Uses.

ORC §1522.101 specifies that for the Ohio program “source watershed” (e.g., as used in Section 4.11 of the Compact) means the Lake Erie watershed considered as a whole.

ORC §1522.13 indicates that a withdrawal and consumptive use permit will be issued for a facility if the Chief (of the Division of Water Resources) determines that the facility meets all of the criteria established in Section 4.11 of the Compact. It specifies that in applying Section 4.11.2 of the Compact, the Chief will require that a withdrawal or consumptive use be implemented so as to ensure that it will result in no significant individual or cumulative adverse impacts on the quality or quantity of the waters and water dependent natural resources of the Great Lakes Basin considered as a whole or of the Lake Erie source watershed considered as a whole and that as part of the evaluation, the Chief will: (1) rely on the best generally accepted scientific methods appropriate for this state derived from professionally accepted resources and practices, (2) consider the long-term mean annual inflow and outflow of the Lake Erie source watershed, and (3) consider the withdrawal and the portion of the withdrawal that is not returned to the Lake Erie sources watershed. It also specifies that impacts of a withdrawal or consumptive use on the quantity or quality of waters and water dependent natural resources of more localized areas that affect less than the Great Lakes Basin considered as a whole or the Lake Erie source watershed considered as a whole shall be considered as a part of the evaluation of whether a proposed withdrawal or consumptive use is reasonable as provided in Section 4.11.5 of the Compact.

Legislation to provide additional instruction for applying the decision making standard is anticipated, and administrative rules are being developed that may also provide instruction in the application of the decision-making standard.

- b. Exception Standard for Diversions.

Nothing in Ohio's Compact implementation statute provides instruction regarding the application of the exception standard for diversions. Administrative rules are being developed that may provide instruction in its application.

4. Overview of State/Provincial reporting and database of Withdrawals, Consumptive Uses and Diversions including implementation status and database elements and capabilities, and reporting mechanisms (e.g., electronic submission, etc.). The overview should include methods of measurement (e.g., flow volume or rate meters, flow gauging, timing devices, etc.) approved by the State/Province for measuring Water volumes.

Ohio has required the registration and annual reporting of water withdrawals and permitted diversions since 1990, including the location and source of the withdrawal or diversion and the purpose for which it is used. Monthly withdrawal data for each well and/or surface water intake is reported annually. Monthly diversion data for registered diversions is also reported annually, beginning in 2013. Electronic submission is not available. Data is entered and stored in MS Access format, and can be queried as needed by division staff. Metering is not required, but is encouraged; reports based on flow gauging and timing devices are also accepted, and technical assistance in generating water withdrawal and diversion reports is available. Experience has demonstrated that consumptive use quantities cannot generally be accurately measured; instead consumptive use coefficients are employed.

5. Attach a copy of the State or Province's Withdrawal application form(s). Copies of related regulations, policies, and manuals with the application form may be included to provide a more complete program description.

The application for a water withdrawal permit pursuant to ORC §1522.12 has not been formally adopted and is not available.

6. Summary description of the State's or Province's initiatives to support an improved scientific understanding of the Waters of the Basin and an improved understanding of the groundwater of the Basin and the role of groundwater in Basin water resource management. A description of State or Provincial initiatives or mechanisms to support an improved understanding of individual or cumulative impacts of Withdrawals, Consumptive Uses and Diversions on the Basin ecosystem should also be provided.

Initiatives to support an improved understanding of the waters of the Basin (including ground water) and the cumulative impacts of withdrawals, consumptive uses, and diversions on the Basin ecosystem: Ohio has completed county aquifer yield and pollution potential maps for the entire state, and has completed river basin water quantity assessments for all the river basins within the Ohio portion of the Great Lakes Basin. The assessments quantify the impacts of water withdrawals (from ground water, Lake Erie, and other surface water sources), consumptive uses, and diversions on streams at various streamflow levels, and provide useful information in estimating individual and cumulative impacts of Basin withdrawals, consumptive uses, and diversions. Other initiatives, which may require additional legislative authority to implement, are currently being considered.

7. Additional information.

Nothing additional.

Water Conservation and Efficiency Program Report

1. Status of the State or Province's Water conservation and efficiency goals and objectives consistent with the Basin-wide goals and objectives. If developed, include State or Provincial goals and objectives or link to electronic version.

Ohio's Water Conservation & Efficiency Goals are those contained in Section 4.2.1 of the Compact:

1. Ensure the improvement of the Basin's waters & water dependent natural resources;
2. Protect and restore the hydrologic and ecosystem integrity of the Basin;
3. Retain the quantity of surface water and ground water in the Basin;
4. Ensure the sustainable use of the waters of the Basin;
5. Promote the efficiency of use and reduce loss and waste of water in the Basin.

Ohio's Water Conservation & Efficiency Objectives are as follows:

1. **Promote the efficient use and conservation of water.**
 - Develop a mechanism to communicate the importance of water use efficiency and conservation practices.
 - Identify and promote supply, demand, and mitigation best management practices for the various categories of water use.
 - Identify incentive programs to encourage water conservation and pursue their implementation.
 - Promote appropriate innovative technology for water reuse.
 - Promote the conservation of existing water supplies to delay or prevent the need for developing additional supply sources.
 - Promote investment in and maintenance of efficient water infrastructure.
 - Coordinate state agency and local government water use efficiency and conservation programs.
2. **Guide programs toward long-term sustainable water use.**
 - Develop and maintain water management plans for sustaining the quantity and quality of the waters of the Basin, including the inventorying and assessment of ground and surface water resources, the analysis of water use trends and formulation of long-term water use forecasts, and the development of strategies to incorporate water conservation practices.
 - Use adaptive programs that are goal-based, accountable, and measurable and that build upon existing efforts by considering practices and experiences from other jurisdictions.
 - Engage stakeholders and the public and coordinate with state and federal agencies and local government officials in the development and implementation of voluntary water management and conservation programs.
 - Develop administrative rules for regulating new and increased diversions allowable under the exceptions provisions of the Compact.
 - Develop programs or, if necessary, administrative rules to direct state agencies in the implementation of the voluntary Lake Erie Basin water conservation and efficiency program.
 - Develop a process for maintaining and improving the understanding, communicating, planning, and promoting of the waters of the Basin.
3. **Develop water conservation education programs and information sharing.**
 - Emphasize educating school children, businesses, citizens, and government officials on the economic, societal, and ecological values of water, including sustainability.
 - Encourage and increase training opportunities in collaboration with professional or other organizations in order to increase water conservation and efficiency practices and technological applications.
 - Promote the cost-saving aspect of water conservation and efficiency for economic sustainability.

- Disseminate information regarding identified best management practices for different categories of water use, including evaluation and results achieved.
 - Compile published information on specific water conservation efforts in Ohio and elsewhere and make it available to the public so that all are aware of how water can be used and conserved.
 - Ensure public access to water conservation and efficiency tools and information; ensure that voluntary conservation programs are transparent and that information is readily available.
 - Contribute to regional information sharing; share conservation and efficiency experiences, including successes and lessons learned across the Basin.
4. Develop science, technology, and research.
- Encourage the development of water-related industries and technologies to position Ohio as a global industry leader.
 - Identify research and monitoring needs related to the interaction of ground water and surface water, and strategies for managing and protecting water resources.
 - Use scientific data and modeling to improve conservation and efficiency.
 - Promote the development of systems and tools for an integrated approach to ground water and surface water management that would predict the effects of water withdrawal and conservation practices within the Basin and strengthen scientific understanding of the linkages between water conservation practices and ecological responses.
 - Leverage the resources of Ohio's research institutions to focus on problems affecting the human and natural communities of the Great Lakes, including analyzing barriers to sustainable water use.
 - Foster cooperation and sharing of resources and information among all federal, tribal, state, and local agencies as well as with international partners.
 - Encourage research, development, and implementation of state-of-the-art water conservation technologies, including the identification and sharing of innovative management practices.
5. Improve monitoring and standardize data reporting among state and provincial water conservation and efficiency programs.
- Collect, analyze, and report water use information for registered withdrawals in the various categories of water use.
 - Make information readily available to the public, including information about the waters of the state and water use, on a state website.
 - Monitor the implementation of best management practices for water conservation.
 - Improve the measurement and evaluation of water conservation practices; identify and encourage measures to monitor, account for, and minimize water loss.
 - Track and report program progress and effectiveness.

2. Water Conservation and Efficiency Program Overview.

- a. Citations to State/Provincial Water Conservation and Efficiency Program implementing laws, regulations and policies.

Ohio's implementing laws, regulations, and policies are contained in the Compact, codified in ORC §1522.01, and its state implementing provisions, codified in ORC §§1522.02-21.

- b. Summary description of the State's or Province's Water Conservation and Efficiency Program including what elements are voluntary and mandatory.

Ohio's program consists of education on the value of water conservation & efficiency and promotion of voluntary conservation activities. Such efforts are undertaken individually by state agencies pursuant to general education authorities

and programs, and without centralized coordination by the lead agency under the Compact. ORC §1522.05 requires the Chief of the ODNR-DSWR to adopt voluntary watershed-wide goals, objectives, and standards for water conservation and efficiency consistent with Section 4.2 of the Compact. ORC §1522.17 requires an applicant for a water withdrawal and consumptive use permit to submit a facility water conservation plan that, if it reasonably incorporates environmentally sound and economically feasible water conservation measures applicable to the facility, will be considered to be in compliance with Section 4.11.3 of the Compact. All other elements of Ohio's water conservation & efficiency program are voluntary, except those that are authorized by pre-existing statutes, regulations, or programs. The only such program that provides for mandatory use reductions is the Ohio Emergency Management Agency's Drought Contingency Plan, and then only when the governor declares a Level Four Drought Emergency.

3. For each of the regional objectives, identify how the State/Provincial program is consistent with the regional objective, and a description of how the State or Province promotes Environmentally Sound and Economically Feasible Water Conservation Measures. More details for each objective are available at http://www.glsregionalbody.org/Docs/Resolutions/GLSLRWRRB_Resolution_6-Conservation-Efficiency.pdf and can be provided in the table below.

OBJECTIVES	LEGISLATIVE OR PROGRAM CITATION
➤ Guide programs toward long-term sustainable water use.	A program is underway to coordinate existing state & local government water conservation programs under the leadership of the ODNR-DWR. Water management plans have been completed for the Lake Erie Basin watersheds, including water resource inventory & assessment, analysis of water use trends and formulation of water use forecasts, and identification of potential water shortage areas
➤ Adopt and implement supply and demand management to promote efficient use and conservation of water resources.	A program is underway to develop and disseminate a list of recognized water conservation & efficiency best management practices by water use category. Programs are being developed that encourage water conservation practices and provide incentives for water users who voluntarily implement strict conservation practices
➤ Improve monitoring and standardize data reporting among State and Provincial water conservation and efficiency programs.	Water use information for registered withdrawals is being collected, analyzed, and reported for the various categories of water use. A program is being developed to improve the measurement & evaluation of water conservation practices; identify & encourage programs to monitor, account for, and minimize water loss
➤ Develop science, technology and research.	Opportunities for research & development related to water conservation & efficiency are being investigated, and research & monitoring needs related to the interaction of ground water & surface water are being identified. Funding sources are being investigated to support research to develop state-of-the-art water conservation technologies and identify how recognized modeling programs can be used in water conservation planning
➤ Develop education programs and information sharing for all water users.	A water conservation & efficiency education program was developed to: (1) incorporate water conservation into the Ohio Project WET program by conducting advanced training workshops for classroom teachers and non-formal educators; 2) develop a website & printed material

	conveniently accessible to the public containing information on water conservation & efficiency
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4. Description of the State or Provincial Water conservation and efficiency program implementation timeline and status.

Ohio's initial Water Conservation & Efficiency Program, which does not include any mandatory conservation requirements on water users (except those who have obtained water withdrawal and consumptive use permits), is currently underway.