

Baseline Formulation

Date: May 12, 2009

Subject: Issues Related to Formulation of the Baseline List Based on Comments Received by April 10, 2009

Specific issues that need to be resolved include:

Are there other groups or organizations that should be notified in order to assure that existing withdrawers are registered and included on the baseline list? (See Issue 1)

Can small withdrawers be excluded from the baseline list so long as there is a provision in the withdrawal regulation statute whereby they can get credit for their existing capacity later if they enlarge? (See Issue 2)

Should registered facilities that are disaggregated because they serve multiple distribution systems be included in the baseline list if their disaggregated capacities are each less than 100,000 gpd? (See Issue 3)

Would a method for determining existing baseline capacities, recommended by the Advisory Board and adopted by the ODNR, be adequate? (See Issue 4)

Would a process for appealing inclusion on the baseline list and/or the baseline capacities, recommended by the Advisory Board and adopted by the ODNR, be adequate? (See Issue 5)

The general public is invited to email their comments to:
compactcoordinator@dnr.state.oh.us

ISSUES RELATED TO FORMULATION OF THE BASELINE LIST BASED ON COMMENTS RECEIVED BY APRIL 10, 2009

Compiled by staff with the ODNR, Division of Water
May 5, 2009

REVIEW OF OHIO'S COMPACT IMPLEMENTATION PROVISIONS

Ohio Revised Code (ORC) §1522.02 assigns the governor to be the state's administrator of the Great Lakes-St. Lawrence River Basin Water Resources Compact (the Compact) and directs the governor to appoint the director of the Ohio Department of Natural Resources (ODNR) as the governor's alternate. It authorizes the governor to receive copies of all agreements entered into pursuant to the Compact; to consult with, advise, and aid in the formulation of such agreements; to make recommendations to the General Assembly, legislatures of other states, governmental agencies, and political subdivisions to effectuate the purposes of the Compact; and to consult and cooperate with the Compact administrators of other states. ORC §1522.05(A) further authorizes the governor to take such actions as are necessary for the initial organization and operation of the Compact Council created in Section 2.1 of the Compact, and authorizes state agencies to cooperate with the Compact Council.

ORC §1522.03 directs the ODNR director to adopt rules for the implementation, administration, and enforcement of the Compact and to enforce the Compact and take appropriate actions to effectuate its purposes and intent. It further directs any appropriate state agency or governmental officer to enforce the Compact and take appropriate actions to effectuate its purpose and intent.

There are a few exceptions to these authorities. Under ORC §1522.05(B)(1), the governor, the ODNR, and other state agencies are prohibited from adopting rules or implementing any program regulating the use, withdrawal, consumptive use, or diversion of water pursuant to Sections 4.10 and 4.12.2 of the Compact and from adopting rules or implementing any mandatory program governing water conservation and efficiency pursuant to Section 4.2 of the Compact unless the General Assembly enacts legislation authorizing the implementation of the programs or adoption of rules. This provision allows for the effectuation of Sections 4.8 and 4.9 of the Compact, which prohibit new or increased diversions out of the Great Lakes Basin and prescribe exceptions to the prohibition on such diversions.

The governor (or the governor's alternate) is also required by ORC §1522.04 to obtain the authorization of the General Assembly prior to voting to modify the Compact's decision-making standard pursuant to Section 3.1 of the Compact. The Compact Council and the states are required to use this standard, described in Section 4.11 of the Compact, in exercising their authority. Proposals subject to management or regulation under the Compact shall be declared to meet the decision-making standard and may be approved as appropriate only when the following criteria are met: (1) all water withdrawn shall be returned to the source watershed less an allowance for consumptive use [in Ohio, the source watershed is the Lake Erie Basin]; (2) the withdrawal or consumptive use will be implemented so that it will result in no significant individual or cumulative adverse impacts to the quantity or quality of the waters and water dependent natural resources and the applicable source watershed; (3) the

withdrawal or consumptive use will be implemented so as to incorporate environmentally sound and economically feasible water conservation measures; (4) the withdrawal or consumptive use will be implemented so that it is in compliance with all applicable municipal, state and federal laws as well as regional, interstate, and international agreements; and (5) the proposed use is reasonable.

Since Section 3.1 of the Compact requires the unanimous vote of the Compact Council to modify the decision-making standard, ORC §1522.04 effectively makes any revision of the standard subject to the approval of General Assembly.

Section 3 of Am. HB 416 requires the creation of an Advisory Board, to be convened for the purpose of developing recommendations for legislation necessary to implement and effectuate the requirements and purposes of the Compact. The recommendations are to address (among other things) the establishment of requirements regarding the review of list of existing water users in the Lake Erie Basin of Ohio, the establishment of a process for use by persons that wish to appeal their inclusion on the list, and the method for determining the capacity of existing facilities as required in Section 4.12.2 of the Compact.

CLARIFICATION AS TO THE PURPOSE OF THE BASELINE LIST

Section 4.12.2 of the Compact requires that a baseline list be established for the purpose of determining new or increased diversions, consumptive uses, and withdrawals. Each state is required to develop a baseline list of existing withdrawal approvals and/or the capacity of existing withdrawal systems; the volumes of diversions, consumptive uses, or withdrawals of water set forth in this list will constitute the baseline volumes.

The Compact does not specify a threshold quantity for inclusion on the baseline list, but Section 4.1 requires registration and annual reporting for withdrawals greater than 100,000 gallons per day (gpd). Because these withdrawals need to be registered to fulfill the requirements of Section 4.1, this volume was considered to be an appropriate maximum threshold for the baseline list. States have the option of including withdrawers with smaller quantities on their baseline lists.

The volumes included on the baseline list will be “grandfathered” as existing withdrawals, consumptive uses, and diversions and will not be subject to regulation as new or increased withdrawals, consumptive uses, and diversions under the Compact. The importance attached to being included (or excluded) from the baseline list is different for diversions, withdrawals, and consumptive uses.

Section 4.8 of the Compact prohibits new or increased diversions out of the Great Lakes Basin, with certain limited exceptions. Diversions for straddling communities not on the baseline list or above the baseline volume will be subject to approval by the individual states consistent with criteria contained in Section 4.9.1 of the Compact. Diversions for communities in straddling counties not on the baseline list or above the baseline volume will be subject to approval by the Compact Council consistent with criteria contained in Section

4.9.3 of the Compact. Intra-basin transfers (which will not occur within Ohio) not on the baseline list or above the baseline volume will be subject to approval by either the individual states or the Compact Council (depending on their size) consistent with criteria contained in Section 4.9.2 of the Compact. Since new or increased diversions not meeting the criteria to qualify for these exceptions are prohibited and, therefore, cannot subsequently be approved, it is extremely important that all existing diversions be included on the baseline list.

Section 4.10 of the Compact requires the states to create programs for the management and regulation of new or increased withdrawals and consumptive uses by adopting and implementing measures consistent with the decision-making standard. Ohio does not statutorily regulate water withdrawals, except pursuant to ORC §§1501.33-1501.34 (under which no permits have been issued). And ORC §1522.05(B) explicitly prohibits the implementation of any program or adoption of any rules regulating the use, withdrawal, consumptive use, or diversion of water pursuant to Sections 4.10 and 4.12 of the Compact unless the General Assembly passes legislation authorizing the implementation of such a program or adoption of such rules.

Consequently, the importance of the baseline list for existing water withdrawers is going to depend largely on the nature of the legislation Ohio enacts pursuant to Section 4.10 of the Compact. The state has considerable latitude in determining the scope and threshold levels of its water withdrawal regulation program, including which withdrawals and consumptive uses will be subject to the program.

The Compact's intent is that all withdrawals and consumptive uses up to the baseline volumes will be grandfathered as "existing" and not subject to regulation as new or increased withdrawals. It is not clear, however, that all withdrawals included on the baseline list will be subject to regulation (it will depend on the threshold level set) or that withdrawals not on the baseline list cannot be otherwise grandfathered by the state's program (please see the Water Withdrawal Regulation issue paper for additional discussion on this topic).

Section 4.6 of the Compact requires water withdrawal proposals (and diversion proposals qualifying for an exception to the prohibition) resulting in new or increased consumptive uses greater than 5 million gallons per day (mgd) to undergo regional review. Regional review is essentially a prior notice and consultation requirement, wherein the other Great Lakes states and provinces review a proposal and provide commentary (and the Regional Body produces a "declaration of finding"). Regional review does not entail any regulatory approval of proposals by the Regional Body or Compact Council.

Triggering regional review under Section 4.6 of the Compact is the only clear purpose of the consumptive use volumes in the baseline list. Since 1985, the Great Lakes states and provinces have honored a similar prior notice and consultation provision contained in the Great Lakes Charter (which is also triggered by new or increased consumptive uses greater than 5 mgd). There have been no projects in the Lake Erie Basin of Ohio that have triggered this provision, and only two in the entire Great Lakes Basin.

ISSUES IDENTIFIED BASED ON COMMENTS RECEIVED

Issue 1: There may be existing withdrawers that should be included on the baseline list that are not registered under Ohio's Water Withdrawal Facility Registration Program (WWFRP).

Owners of facilities with the capacity to withdraw water greater than 100,000 gpd have been required to register with the Division of Water at the ODNR since 1988 pursuant to ORC §1521.16. The Division of Water has made reasonable efforts to ensure compliance with this requirement, but there may well be withdrawers that are not registered. To address this issue, Division of Water staff obtained lists of Ohio's public drinking water systems from the Ohio EPA, Ohio's golf courses from the Statewide Comprehensive Outdoor Recreation Plan, and industrial mineral permit holders from the ODNR Division of Mineral Resources Management. Facilities already registered and those withdrawers whose capacity is clearly less than 100,000 gpd were removed from these lists, and the remaining withdrawers were notified and given the opportunity to register their withdrawals and be included on the baseline list.

Issue 2: Exclusion of some existing withdrawers from the baseline list may affect their status under the withdrawal regulation program Ohio has committed to implement pursuant to Section 4.10 of the Compact.

Concern has been raised about excluding withdrawers from the baseline list whose existing capacities are less than 100,000 gpd. The states do have the option of including smaller withdrawers on the baseline list. The Division of Water accepts all withdrawal registrations it receives, and a few have been for facilities with capacities less than 100,000 gpd. Disaggregating registered facilities that provide water to more than one distribution system (see Issue 3) will also result in some withdrawers whose capacities are less than 100,000 gpd. These could be included on the baseline list as well as other small withdrawers who specifically request inclusion. However, this would not fully address the issue, since it will not be possible to identify and include every small withdrawer.

Exclusion of small withdrawers from the baseline list need not be problematic as long as this issue is addressed in the water withdrawal regulation statute that Ohio has committed to implement pursuant to Section 4.10 of the Compact. A provision in that statute could be included that would allow small withdrawers not on the baseline list to get "credit" for their existing capacity at a later time by providing appropriate documentation (e.g., a well log) of such capacity. It should also be noted that there will likely be new and increased withdrawals made after the effective date of the Compact but before the effective date of the state withdrawal regulation statute, which the state will not have the authority to regulate. Establishing statute to grandfather these existing withdrawals not included on the baseline list may be an option.

It should be recognized that under the Compact, the states retain jurisdiction over their withdrawal regulation programs and will have considerable flexibility in how they are implemented. Not all withdrawers on the baseline list will necessarily be regulated,

depending on the threshold level set, and existing withdrawers not on the baseline list can be given credit for their existing capacities or otherwise grandfathered. Inclusion on or exclusion from the baseline list is not necessarily definitive, depending on how the withdrawal regulation program is implemented.

Issue 3: A facility registered under Ohio's WWFRP is not necessarily the same thing as a withdrawer as defined by the Compact for inclusion on the baseline list.

ORC §1521.16 requires any person who owns a facility that has the capacity to withdraw waters of the state in an amount greater than 100,000 gpd from all sources to register the facility with the Division of Water at the ODNR. Section 4.12.6 of the Compact requires that, for the baseline list, the total volume of water that supplies a common distribution system shall determine the volume of a withdrawal, consumptive use, or diversion.

In accepting water withdrawal registrations, the Division of Water has allowed registrants latitude as to the delineation of their facilities. In some cases, a registered facility does not include all the withdrawals that are provided to a common distribution system (e.g., a large city may have multiple withdrawal intakes/treatment plants that are registered separately, but each does not have its own discrete service area, so there is only one common distribution system). In other cases, a single registered facility may include withdrawals that provide water to multiple distribution systems (e.g., agricultural withdrawers commonly have several fields or farms near each other for which they withdraw irrigation water, and have combined these into one facility for convenience of registering and annual reporting).

Each facility registered under ORC §1521.16 needs to be assessed to determine (1) if it must be aggregated with other registered facilities that are part of one common distribution system or (2) if it must be disaggregated to account for water withdrawn by a single facility as registered and provided to multiple distribution systems. The development of the process for appealing inclusion on the baseline list should include provisions for registered facilities to demonstrate that they provide water to multiple distribution systems and should be disaggregated.

Issue 4: The proposed methods for determining baseline withdrawal, consumptive use, and diversion volumes are not well described.

Section 4.12.2(a) of the Compact requires that, to establish a baseline for determining a new or increased diversion, consumptive use, or withdrawal, the states will develop either or both of the following: (1) a list of existing withdrawal approvals as of the effective date of the Compact and/or (2) a list of the capacity of existing systems as of the effective date of this Compact. It further requires that the capacity of the existing systems be presented in terms of withdrawal capacity, treatment capacity, distribution capacity, or other capacity limiting factors, that the capacity of the existing systems must represent the state of the systems, and that the existing capacity determinations be based on approval limits or the most restrictive capacity information.

ORC §1522.07(A)(1) states the intent of the general assembly that for establishing the baseline list, the amount of each existing diversion, consumptive use, or withdrawal will be the larger of (a) the applicable limitation specified in a permit issued under ORC §1501.32, §1501.33, or §1501.34 or another permit issued by an agency of the state that specifically regulates and limits the amount of a water diversion, consumptive use, or withdrawal; or (b) the physical capacity of the withdrawal system of the applicable facility as of the effective date of the Compact. ORC §1522.07(A)(2) instructs that, for establishing the baseline list, (a) a wastewater discharge permit issued under ORC Chapter 6111 shall not be considered a permit that regulates or limits the amount of an existing diversion, consumptive use, or withdrawal; and (b) approval of a public water supply system under ORC Chapter 6109 shall not be considered a permit that regulates or limits the amount of an existing diversion, consumptive use, or withdrawal unless the approval contains a specific and legally enforceable limitation on the amount of the diversion, consumptive use, or withdrawal.

The ODNR has proposed to report baseline withdrawal volumes by using the water withdrawal capacity reported in the WWFRP registrations as the “physical capacity of the withdrawal system” referred to in ORC §1522.07(A)(1). In December 2008, Division of Water staff sent forms to registrants in the Lake Erie Basin portion of Ohio asking them to check their withdrawal capacity information to make sure it is current. No rules have been promulgated specifying how registrants are to report withdrawal capacity; the instructions that are sent along with WWFRP registration forms instruct registrants to “indicate the total amount of water that can be withdrawn by all wells and surface-water intakes. This is generally equal to the sum of the pump capacities of all wells plus the sum of the intake or pump capacities of all surface-water intakes.”

Concern has been raised that consistency must be applied between Section 4.12.2 of the Compact and ORC §1522.07, specifically that Section 4.12.2 appears to require the baseline capacity be reported as the most restrictive (i.e., the smallest) of the withdrawal capacity, treatment capacity, distribution capacity, or other capacity limiting factor while ORC §1522.07 appears to require the baseline capacity to be reported as the larger of the “approval amount” or the withdrawal system and also appears to prohibit consideration of approvals of public water supply systems under ORC Chapter 6109 in determining the baseline volumes. Concern has been raised that it is not adequately clear how the baseline volumes of withdrawal are to be determined, and that there needs to be a codified definition for the purposes of formulating the baseline list.

ORC §1522.05(B) prohibits the governor, the ODNR, or any other state agency from adopting rules or implementing any program regulating the use, withdrawal, consumptive use, or diversion of water pursuant to sections 4.10 and 4.12.2 of the Compact unless the general assembly enacts legislation authorizing the implementation of the program or adoption of rules.

It should be pointed out that, for many withdrawers, withdrawal capacity is the only relevant capacity. Many withdrawers use untreated water (no treatment capacity) at the point of withdrawal (no distribution capacity), and are not otherwise limited (no other capacity-limiting factor). There are also no “approval amounts” for withdrawals, since no permits have

been issued under ORC §§1501.33-1501.34 and no other state statutes require permits for water withdrawal (ODNR staff is continuing to research state statutes).

Concern has also been raised that using existing capacities reported by the withdrawers for the baseline volumes is not appropriate, and that withdrawers should be required to verify the existing capacities by providing information certified by a licensed engineer.

Neither the Compact nor the state implementing provisions (ORC §§1522.02–1522.08) provide guidance as to methods for determining the baseline volumes of existing consumptive uses and diversions.

For diversions, the ODNR is intending to use the amounts specified in the permits or approvals for those diversions permitted under ORC §1501.32 or approved under 100 Stat. 4230, 42 U.S.C.A. 1962d-20. For other diversions (i.e., those for which diversion quantities have been too small to require a permit under ORC §1501.32 and those which have not been defined as diversions under ORC §1501.32 because the unused water is returned to the basin after use), the ODNR will be collecting relevant information from the diverters and determining existing diversion capacities. Concern has been raised that the quantities of these diversions need to be verified by providing information certified by a licensed engineer.

For consumptive uses, one approach would be to base consumptive use capacities on the actual proportion of consumptive use to withdrawal for those withdrawers where this information is available. For those withdrawers where it is not available, consumptive use coefficients will be applied to the withdrawal baseline volumes. Since the proportion of the withdrawal quantities that are consumed depends largely on the type of use to which the water is put, the coefficients will vary by use category. Some uses, such as quarry dewatering, do not consume water at all while other uses, such as irrigation, consume most of the water withdrawn. Consumptive use coefficients have been applied to average annual water withdrawals for many years by Great Lakes Basin agencies to estimate average annual consumptive uses associated with these withdrawals. Since the baseline volumes are intended to estimate consumptive use capacities, different coefficients representing maximum seasonal consumptive use rates need to be determined. Because consumptive use coefficients are by nature estimates, the consumptive use baseline volumes could possibly be considered “provisional” and subject to change if estimation methods improve in the future.

It has been suggested that consumptive use volumes should be reported equal to the withdrawal volumes for all withdrawals, but it has also been pointed out that for many large water use categories (e.g., electricity generation, municipal water use, quarry dewatering) consumptive use is a relatively small proportion of the water withdrawn, and it is important that these uses be distinguished from diversions and from withdrawals that do not return water to the basin after use, since such sustainable uses may warrant less regulatory oversight.

Issue 5: The proposed process for appealing inclusion on the baseline list is inadequate, and there are no provisions for appealing the baseline volumes or exclusion from the baseline list

Concern has been raised that the proposed process for formulating the baseline list does not address a method for establishing review and appeal requirements. It has been recommended that the Advisory Board recommend to the General Assembly that a more extensive appeals process be developed legislatively that will detail how withdrawers can appeal their inclusion on the baseline list, appeal their exclusion from the list, and appeal determinations of baseline volumes of withdrawal, diversion, and consumptive use.