



WISCONSIN LEGISLATIVE COUNCIL STAFF MEMORANDUM

Memo No. 7

TO: MEMBERS OF THE SPECIAL COMMITTEE ON GREAT LAKES WATER RESOURCES COMPACT

FROM: John Stolzenberg, Chief of Research Services and Rachel Letzing, Senior Staff Attorney

RE: Options on the Registration and Reporting by Water Users and State Water Resources Inventory Required Under the Great Lakes-St. Lawrence River Basin Water Resources Compact

DATE: November 6, 2006

At the October 4, 2006 meeting, committee members discussed Great Lakes-St. Lawrence River Basin Water Resources Compact ("compact") provisions identified in Memo. No. 4, which provide flexibility to the party states. One area in which a state has flexibility in implementing the compact is on the design of the registry and reporting of water use and the state water resources inventory required under the compact.

The purpose of this Memo is to present options for the committee's consideration related to the registry, reporting, and inventory. After the committee chooses which option or options it prefers, the committee's choice will then provide the basis for drafting instructions to committee staff. The list of options presented here is not intended to be exhaustive. Committee members may offer additional options or combine options listed in this Memo.

The Memo is divided into the following sections:

- Relevant provisions of the compact, LRB-0058/P1.
- Relevant provisions in current law.
- Other information.
- Discussion, including relevant options not included in this Memo.
- Options for committee discussion.

Compact (LRB-0058/P1)

Registration

The compact requires that, within five years of its effective date, any person who withdraws groundwater or surface water from the Great Lakes-St. Lawrence River Basin, as defined in the compact, in an amount of 100,000 gallons per day or greater average in any 30-day period from all sources, or diverts water of any amount, must register the withdrawal or diversion by a date set by the Great Lakes-St. Lawrence River Basin Water Resources Council (the council) with the State of Wisconsin unless the person has previously registered in accordance with an existing state program. [Proposed s. 281.343 (4) (c), as created by LRB-0058/P1.] Consumptive uses of water are included within withdrawals subject to this requirement. The compact also requires that the registration be on a form prescribed by the state and that the registration must include all of the following:

- The name and address of the registrant.
- The date of registration.
- The locations and sources of the withdrawal or diversion.
- The capacity of the withdrawal or diversion per day and the amount withdrawn or diverted from each source. The amount of the withdrawal or diversion must be estimated in terms of gallons per day average in any 30-day period.
- The uses made of the water.
- The places of use and places of discharge of the water.
- Any other information required by the state.

As noted above, if a person has multiple sources of withdrawal, the compact specifies that the volume from all the sources must be combined to determine whether the 100,000 gallons per day threshold for registering the withdrawals has been met. In addition, the compact states that the total volume of surface water and groundwater resources that supply a common distribution system shall determine the volume of the withdrawal, consumptive use, or diversion. [Proposed s. 281.343 (4t) (f).]

If the committee chooses to use the registration and reporting information addressed in this Memo to delineate whether a withdrawal, diversion, or consumptive use occurs within the Great Lakes-St. Lawrence River Basin under one or more of the regulatory programs called for in the compact, then the compact's prescription that "the basin surface water divide shall be used for the purpose of managing and regulating new or increased diversions, consumptive uses, or withdrawals of surface water and groundwater" governs this delineation. [Proposed s. 281.343 (4t) (e).]

Reporting

The compact directs all registrants in the registry described above to annually report to the state the monthly volumes of the withdrawal, consumptive use, and diversion in gallons and any other information requested by the state. [Proposed s. 281.343 (4) (d).]

Inventory

The compact directs the state to develop and maintain a water resources inventory within five years of the effective date of the compact. [Proposed s. 281.343 (4) (a).] The purpose of the inventory is to assist with the collection, interpretation, storage, retrieval, exchange, and dissemination of information concerning the water resources of the state. The inventory must include information on the location, type, quantity, and use of those resources; the location, type, and quantity of withdrawals, diversions, and consumptive uses, and other information identified by the state.

In addition, to the extent feasible, the compact directs the state to develop its water resources inventory in cooperation with the council, and local, state, federal, tribal, and other private agencies and entities.

Current Law

Statutes

A number of the current state regulatory programs administered by the Department of Natural Resources (DNR) governing the withdrawal or diversion of water from surface water or groundwater, described in Memo No. 1, *State Law Regarding Water Withdrawals and Diversions* (dated August 31, 2006), require persons regulated under these programs to report to the DNR the amounts of water the person withdraws or diverts. These statewide reporting requirements include the following:

- Each s. 30.18 water diversion permittee must report the volume and rate of withdrawal and the volume and rate of water loss, if any, in the form and at the times specified by the DNR. [s. 30.18 (6) (c), Stats.]
- Each owner of a high capacity well approved under s. 281.17 (1), 2001 Stats., or 281.34 must identify for the DNR the location of the well and submit to the DNR an annual pumping report. [s. 281.34 (5) (e) 2. and (6) (a), Stats.]
- Each owner of a water or sewerage system or sewage or refuse disposal plant for which the DNR has approved the system's or plant's plans under s. 281.41 must report the volume and rate of water withdrawal and rate of water loss, if any, in the form and at the times specified by the DNR. [s. 281.41 (1) (c), Stats.]
- Each person subject to one of the above approvals (s. 30.18 water diversion permit, high capacity well approval or s. 281.41 plan approval) who is also required to obtain an approval under s. 281.35 (5) for a water withdrawal resulting in a water loss averaging more than two million gallons per day in any 30-day period must report the volumes and rate of withdrawal and other requirements for metering, surveillance, and reporting specified by the DNR. [s. 281.35 (6) (a) 6. and 8., Stats.]
- Except for the persons noted below who are subject to other reporting requirements, any person who is making a withdrawal averaging more than 100,000 gallons per day in any 30-day period must register the withdrawal with the DNR. The registration must identify the source of the withdrawal, the location of any discharge return flow, the location and nature of

the proposed or existing water use, and the actual estimated average annual and monthly volumes and rates of withdrawal, and of water loss from the withdrawal. [s. 281.35 (3), Stats.] This general reporting requirement does not apply to any person subject to one of the approvals listed in the preceding bullet points who is reporting the volume and rate of withdrawal under the conditions of the approval; a public utility reporting a withdrawal to the Public Service Commission (PSC); or a person holding a permit under the Wisconsin Pollution Discharge Elimination System (WPDES) under s. 281.31, Stats., or the Federal Water Pollution Control Act, for discharging pollutants into waters of the state for whom the DNR has established an allowable water loss.

For purposes of the reporting of a water loss under the fourth and fifth bullet points, “water loss” is defined in s. 281.35 (1) (L) to mean a loss of water from the basin from which it is withdrawn as a result of interbasin diversion or consumptive use or both. “Consumptive use” is defined in s. 281.35 (1) (c) to mean a use of waters of the state, other than an interbasin diversion, that results in a failure to return any or all of the water to the basin from which it is withdrawn. “Consumptive uses” include, but are not limited to, evaporation and incorporation of water into a product or agricultural crop. Section 281.35 (10) (a) 3., directs the DNR to promulgate by rule the method for determining what portion of a withdrawal constitutes a consumptive use.

The reporting requirements identified in the second bullet point, above, were created by 2003 Wisconsin Act 310. The other reporting requirements predate that Act. These earlier reporting requirements also applied to owners of high-capacity wells approved under s. 281.17 (1), 2001 Stats. The status and content of current and proposed DNR rules implementing these requirements are described below in the next subsection.

In addition to the above reporting requirements administered by the DNR, each public utility is required under s. 196.07, Stats., to annually file with the PSC by April 1 its balance sheet for the previous calendar year together with any other information the PSC prescribes. Besides a variety of types of information on a utility’s finances and physical plant, the PSC also requires each public water utility to include in its annual report statistics on the utility’s source of supply, pumping, and purchased water.

With respect to the water resources inventory called for in the compact, s. 281.35 (8) directed the Natural Resources Board to adopt and submit to the Legislature by August 1, 1988 a long-term state water quantity resources plan for the protection, conservation and management of the waters of the state. The plan shall include the following:

- The description of a system for allocating this state’s water resources during a water shortage or other emergency.
- Identification of the existing uses of the waters of the state.
- An estimate of future trends in water use.
- Recommendations for the use, management, and protection of the waters of the state and related land resources that will affect persons subject to the two million gallons or greater water loss approvals identified above.

While the plan's identification of the use of the waters of the state, the second bullet point in this list, is an element of the water resources inventory called for in the compact, staff at the DNR report that the department has not revised the original state water quantity resources plan prepared under this provision in 1988, and the original version of this identification of existing water uses is now out of date.

Administrative Rules

In October 1988, the DNR promulgated ch. NR 142 requiring the registration of withdrawals averaging more than 100,000 gallons per day in any 30-day period of "waters of the state." As explained below, the DNR is presently not enforcing the registration and reporting requirements in this rule. The DNR has also initiated the process to promulgate a separate rule implementing the high capacity well pumping report called for in 2003 Wisconsin Act 310. This proposed rule is summarized below.

Chapter NR 142 Registration and Reporting Requirements

Current s. NR 142.03 (1) requires any person who was making a withdrawal of water from the waters of the state on or before January 1, 1986, or who proposes to begin a withdrawal after that date to register the withdrawal with the DNR if the withdrawal averages more than 100,000 gallons per day in any 30-day period. In calculating the total amount of the withdrawal for purposes of determining the applicability of this registration requirement, s. NR 142.03 (2) requires a person to include all separate withdrawals which the person makes or proposes to make for a single facility or irrigated property under common ownership or control located on contiguous properties.

This registration requirement does not apply to persons exempted under s. 281.35 (3), described above. In addition, the definition of "withdrawal" in s. NR 142.02 (20) excludes from this definition and thus from the registration requirement the passage of water through a hydro-electric generating facility and the diversion of surface water from any source for the purposes of harvesting or cultivating cranberries.

Each registration under these provisions must include the following information and supporting documentation.

- The source of the withdrawal.
- The location of the discharge or return flow.
- The location and nature of the water use.
- The average annual and monthly volume and rates of withdrawal.
- The actual or estimated average annual and monthly volume and rates of water loss resulting from the withdrawal.

All persons registering under these requirements must submit annually to the DNR revised information identified in the last two bullet points above. Similarly, the persons exempt from the registration requirement by virtue of being subject of reporting requirements under one of the specified

permits or approvals must submit revised versions of the information in the last two bullets points at the times and the manner specified in the applicable rules or approvals. [s. NR 142.03 (3) (c).]

Section NR 142.04 sets forth methodology for determining the volume and rate of a consumptive use under applicable provisions in ch. NR 142, including the registration requirement. This methodology is based upon the specification of a consumptive use coefficient, or percentage of the withdrawal that is consumptive use, for different types of water users. This section specifies a presumptive value of the coefficient for irrigation purposes of 70% and nonirrigation agricultural activities of 90%; directs the person required to provide the consumptive use information to determine the coefficient on a case-by-case basis if the person is operating a power plant, commercial facility, mine, or public water system; and requires the DNR to determine, where possible, the coefficient for the operation of industrial facilities based on flow diagrams or other water use information submitted to the DNR under WPDES permits and permit applications.

Staff at the DNR report that 1985 Wisconsin Act 60, the act that created the statute now numbered s. 281.35, including the registration and reporting requirements now in s. 281.35 (3), Stats., directed the DNR to set by rule fees for new registrations under this registration requirement. Revenues from these fees were to be used for DNR's expenses in administering the programs in s. 281.35. The DNR promulgated these fees in s. NR 142.03 (4). Subsequent Acts changed these fees to a statutory schedule of fees, then converted this funding from program revenue fees to an appropriation from the General Fund. Over the last 10 years, there have been a number of agency wide reductions in General Fund appropriations, and in response to these reductions the DNR has eliminated the funding and positions for administering these programs.

As a result, DNR staff report that the department is not now implementing or enforcing the registration and reporting requirements in ch. NR 142.

Proposed ch. NR 820

At its October 25, 2006 meeting, the Natural Resources Board authorized DNR staff to hold public hearings on the rule in Board Order DG-37-06 implementing 2003 Wisconsin Act 310. This order creates ch. NR 820. Part of this chapter implements the high capacity well annual pumping report in this act described above.

In particular, the proposed rule directs owners of high-capacity wells throughout the state to record pumpage data on a monthly basis and report this information to the DNR at least annually. Pumpage data for a given calendar year must be reported no later than the first day of March in the following calendar year, using methods and forms provided by the DNR. [Proposed s. NR 820.13 (1).]

The rule provides the following guidance if the property contains more than one high capacity well:

- An individual report must be prepared for any well with the capacity to withdraw water at a rate of 100,000 gallons per day or more.

- If a property does not contain a single well with the individual capacity to withdraw water at a rate of 100,000 gallons per day or more, but does contain a “high capacity well” under the statutory definition that aggregates the capacities of multiple wells on the same property,¹ annual pumpage may be reported as a composite volume for the entire property based on estimated water usage using a method prescribed by the DNR.
- If the property contains multiple wells with at least one having the individual capacity to withdraw water at a rate of at least 100,000 gallons per day, the annual pumpage for all of the wells with a maximum pumping capacity less than 100,000 gallons per day may be reported based on estimated water usage using a method prescribed by the DNR. [Proposed s. NR 820.13 (2) to (4).]

Other Information

Currently available information on the categories of persons making major water withdrawals in Wisconsin and the amounts of their withdrawals is reported in Memo No. 8, *Information on Major Water Withdrawals and Users in Wisconsin* (dated November 6, 2006).

Discussion

The options relating to the registration and reporting of withdrawals, diversions and consumptive uses and the water resources inventory given in the next section focus on the major elements of these requirements. The options do not address two significant aspects of the implementation of these requirements; namely, the specification of any staff and financial resources for the DNR to administer the requirements and the management and regulatory framework in which the requirements will be implemented and resulting data used.

Current law on managing the quantity and usage of water resources in the state is based on a combination of frameworks. With the enactment of 2003 Wisconsin Act 310, significant groundwater withdrawals are managed under a “resource based” framework that tiers the regulations based on the impact of a withdrawal on groundwater resources. Other statutes manage water usage through a “regulatory function” framework in which one or more elements of water quantity management are added to a pre-existing regulation created for another purpose. Within the context of this Memo, examples of the regulatory function approach are the collection of water usage data through the WPDES permit program and the regulation of water utilities. The committee could choose to continue or modify the current hybrid approach or could recommend that water resource usage be managed under a single framework, such as a statewide water use management program.

Legislative Council staff anticipate that the committee will address these implementation issues at a later time after considering other components of its recommendations to implement the compact.

¹ Section 281.34 (1) (b), Stats., defines “high capacity well” to mean a well that, together with all other wells on the same property, has a capacity of more than 100,000 gallons per day.

Options

Registration

Options relating to the registration program required under the compact include the following:

Required Information

1. Require all registrants to submit the information specified in the compact.

Comment: This information includes the registrant's name and address; date of registration; locations, sources and daily capacities of withdrawals and diversions; amount withdrawn or diverted from each source; uses made of the water; and places of use and discharge.

2. Adopt option 1 plus authorize the DNR to require other information by rule.
3. Adopt option 1 or 2 plus specify by statute other information identified by the committee.

Applicability - Amount

1. Apply to persons withdrawing or diverting at least the amount of water specified in the compact.

Comment: These amounts are withdrawals of 100,000 gallons per day or greater average in any 30-day period, including consumptive uses, and any amount of diversion. Registration under s. 281.35 (3), Stats., is based on a 30-day average; reporting under proposed s. NR 820.13 is not based on any averaging period.

2. Apply to persons withdrawing a specified amount less than 100,000 gallons per day average in any 30-day period and any amount of diversion.
3. Adopt option 1 or 2 and provide by statute additional guidance to the DNR identified by the committee for modifying the department's existing rules for determining consumptive use.

Applicability - Location

1. Apply to persons withdrawing or diverting water within the Great Lakes basin.
2. Adopt option 1 plus apply to persons withdrawing or diverting water in part or all of the remaining part of the state not in the Great Lakes basin.

Comment: The registration and reporting requirements in current law apply statewide.

Registration Deadline

1. Require existing water users to register by the deadline in the compact.

Comment: This deadline is a date set by the council within five years of the compact's effective date.

2. Require existing water users to register by an earlier deadline than under option 1 set by statute.

Comment: Statutory deadlines are typically set as either an absolute date, e.g., January 1, 2008, or a relative date, e.g., the first day of the ninth month after the effective date of a bill.

3. Require existing water users to register by an earlier deadline than under option 1 set by DNR by rule.

Reporting

Options relating to the water usage reporting required under the compact include the following:

Required Information

1. Require all registrants to report the minimum information specified in the compact

Comment: This information is the monthly volumes of the withdrawal, consumptive use, or diversion in gallons, reported annually.

2. Adopt option 1 plus authorize the DNR to require other information or more frequent reporting by rule.
3. Adopt option 1 or 2 plus specify by statute other information or more frequent reporting identified by the committee.

Applicability

1. Apply the reporting requirements to the persons subject to the registration requirements identified above.
2. Adopt option 1 plus authorize the DNR to apply the reporting requirements to other persons by rule.
3. Adopt option 1 or 2 plus specify by statute other persons identified by the committee subject to the reporting requirements.

Inventory

Options relating to the water resources inventory required under the compact include the following:

Content

1. Direct the DNR to prepare the inventory containing the information specified in the compact.

Comment: This information is the location, type, quantity, and use of the water resources of the state, and the location, type, and quantity of withdrawals, diversions, and consumptive uses.

2. Adopt option 1 plus require the DNR to base the portion of the inventory on the location, type, and quantity of the specified types of water uses on the registry identified above.
3. Adopt option 1 or option 2 plus specify by statute additional guidance identified by the committee on the information on the water resources of the state to be included in the inventory.

Development Process

1. Direct the DNR to develop the inventory in cooperation with the entities specified in the compact.

Comment: These entities are the council and local, state, federal, tribal, and other private agencies and entities.

2. Direct the DNR to develop the inventory using a process identified by the committee and specified by statute.

Deadline

1. Direct the DNR to prepare the inventory by the deadline in the compact.

Comment: This deadline is within five years of the compact's effective date.

2. Direct the DNR to prepare the inventory by an earlier date identified by the committee and set by statute.