



WISCONSIN LEGISLATIVE COUNCIL STAFF MEMORANDUM

Memo No. 1

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

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

RE: State Law Regarding Water Withdrawals and Diversions

DATE: August 31, 2006

One part of the work of the Special Committee on the Great Lakes Water Resources Compact is to review current Wisconsin laws to determine how they may be affected by the implementation of the Great Lakes-St. Lawrence River Basin Water Resources Compact (“the compact”). This Memo provides an overview of current state law regarding surface water and groundwater withdrawals and diversions that relate to provisions in the compact. The overview is organized under the following categories of programs:

- Data collection and reporting.
- Regulatory programs - withdrawals and diversions.
- Regulatory programs - water conservation and efficiency.
- Financial assistance programs - water conservation and efficiency.
- Additional reports, plans, and technical assistance.

The Memo does not summarize the laws governing the enforcement of the statutes identified in the Memo. In addition, the Memo does not summarize laws that provide a general grant of authority under which a state or local agency could regulate or manage water use, unless the Legislative Council staff is aware of an agency exercising that authority.

DATA COLLECTION AND REPORTING

A number of the current state regulatory programs governing the withdrawal or diversion of water from surface water or groundwater, described below, require persons regulated under the program to report to the Department of Natural Resources (DNR) the amounts of water the person withdraws or diverts. These 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) (c) 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 2 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.]
- Any person not subject to any of the above approvals, or who is not a public utility reporting a withdrawal to the Public Service Commission (PSC), 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.]

REGULATORY PROGRAMS - WITHDRAWALS AND DIVERSIONS.

Section 30.18, Stats. - Surface Water Withdrawals and Diversions

Withdrawal of surface water is regulated by the DNR in two circumstances: diversions from streams for irrigation or to maintain water levels, and large scale lake and stream diversions.

Section 30.18 (2) (a) requires an individual permit for water diversion for two types of activities:

- Diversion of water from a stream if the diversion is for the purpose of maintaining or restoring the normal level of a navigable lake or the normal flow of a navigable stream.

- Diversion of water from a stream if the diversion is for the purpose of agriculture or irrigation.

An application must be submitted to DNR setting forth the location of the diversion and riparian status of the land to which the water is to be diverted, the amount to be diverted, the means by which water will be diverted, the period when the diversion will occur, plans, maps, and other information. For diversions of water from streams for agriculture or irrigation, statements of consent must be obtained from all riparian owners who are making beneficial use of the water to be diverted.

The DNR must issue a permit for diversion of a stream if the DNR determines that the proposed diversion will not injure any public rights in navigable waters and that the diverted water is surplus water (any water of a stream that is not being beneficially used, as determined by the DNR) or, if it is not surplus water, all that riparians who may be adversely affected by the diversion have consented. The DNR must specify on each permit the quantity of water that may be diverted and the times during which water may be diverted, and require reporting of volume and rate of withdrawal and volume and rate of water loss, if any.

Large scale diversions of water from a lake or stream resulting in a water loss averaging 2 million gallons per day in any 30-day period above a person's authorized base level of water loss require an individual permit from DNR under s. 30.18 (2) (b), Stats. "Authorized base level of water loss" means the maximum 30-day average water loss authorized as a condition of an approval, or, if this does not apply, the highest average daily water loss over any 30-day period that is reported to DNR or the PSC, or if there is no water loss from an existing withdrawal, zero gallons per day. Approval for large scale diversions from streams or lakes must also meet the standards under s. 281.35, Stats. If a large scale diversion involves activities regulated under s. 30.18 (2) (a), those standards must also be met.

The DNR has independent authority under s. 30.18 (8), Stats., to raise water levels in any navigable lake or stream for conservation purposes.

If a proposed utility facility is subject to one or more navigable waters permits under ch. 30, Stats., including a s. 30.18 water diversion permit, and to a certificate of approval or certificate of public convenience and necessity issued by the PSC, then s. 30.025, Stats., sets forth a process for the DNR to issue its approvals that is coordinated with the PSC's approval process. The DNR must issue, or authorize proceeding under, the necessary permits if it finds that the applicant has shown that the proposal complies with environmental statutes and rules administered by DNR and federal environmental standards which the DNR has the authority to enforce, and the proposal does not unduly affect public rights and interests in navigable waterways; the effective flood flow capacity of a stream; the rights or other riparian owners; or water quality.

Section 94.26, Stats., authorizes cranberry growers to construct dams, drains, and ditches as necessary to flood and drain cranberry growing lands. This section also exempts cranberry growers from the permit requirements of s. 30.18 for diversion of water for agricultural purposes. [*State v. Zawistowski*, 95 Wis. 2d 250, 290 N.W.2d 303 (1980).]

Section 281.34, Stats. - High Capacity Wells (Groundwater Withdrawals and Diversions)

Section 281.34, Stats., sets standards and conditions for approval of high capacity wells by the DNR and other requirements for the management and use of groundwater. A high capacity well is

defined as a well that, together with all other wells on the same property, has a capacity of more than 100,000 gallons per day.

Under current law, an owner is required to obtain approval of a high capacity well from the DNR prior to construction, pay a one-time fee of \$500, and submit an annual pumping report to DNR. A high capacity well may not be constructed or operated without DNR approval. DNR is required to issue a single approval for all high capacity wells used for the temporary dewatering of one construction site (such as buildings, roads, or utilities), and to allow amendments to the scope of the project. The applicant pays a single \$500 fee for this approval. For any well that is not a high capacity well, the owner is required to notify DNR of the location of the well prior to construction and pay a one-time fee of \$50.

The DNR may modify or rescind the approval of any high capacity well, whether approved under s. 281.34, Stats., or the prior statute, s. 281.17, 2001 Stats., if the well or its use is not in conformance with standards or conditions applicable to the approval of the well.

Current law requires DNR to undertake an environmental review under ch. NR 150, Wis. Adm. Code, for the following proposed high capacity wells:

- A high capacity well proposed in a “groundwater protection area” (an area within 1,200 feet of an outstanding or exceptional resource water or any class I, II, or III trout stream as designated by the DNR, but excluding trout streams that consist of a farm drainage ditch with no prior stream history).
- A high capacity well that loses more than 95% of the amount of water withdrawn.
- A high capacity well that may have a significant environmental impact on a spring (an area of groundwater discharge at the land’s surface that results in a flow of at least one cubic foot per second for at least 80% of the time).

The DNR is required to impose conditions on the approval for these three classes of high capacity wells, including location, depth, pumping capacity, rate of flow, and ultimate use, if the DNR determines pursuant to its environmental review that an environmental impact report must be prepared by the applicant for the proposed high capacity well.

The DNR is required to impose conditions on these approvals to assure that the high capacity wells do not cause significant environmental impact. However, if the proposed high capacity well will be a public utility water supply and the well is proposed for either a groundwater protection area or may have a significant environmental impact on a spring, different standards of approval apply to the well. In this case, the DNR may not base its approval of the well on whether the well causes a significant environmental impact if: (a) DNR determines there is no other reasonable alternative location of the well; and (b) the DNR imposes conditions regarding the location, depth, pumping capacity, rate of flow, and ultimate use that ensure a balance between the environmental impact of the well and the public benefit of the well related to public health and safety.

Current law also requires a high capacity well to comply with the statute on large-scale withdrawals and diversions of water, s. 281.35, Stats., described below, if applicable.

In addition to the provisions described above regarding groundwater protection areas and the approval of individual high capacity wells in those areas, DNR is required to create accurate images (such as maps) of groundwater protection areas and authorizes any person who proposes to construct a high capacity well to ask DNR to determine whether the proposed location is within a groundwater protection area. DNR is directed to administer a mitigation program for wells of all sizes in groundwater protection areas. Under the program, DNR may require abandonment or replacement of a well, and other management strategies, in order to mitigate the effects of wells constructed in those areas before May 7, 2004. The DNR may only require mitigation if it can provide funding for the full cost of mitigation, unless abandonment is necessary to protect public health.

The DNR is required to designate, by administrative rule, two groundwater management areas in the area surrounding Brown and Waukesha Counties, and consisting of each city, village, and town at least a portion or which is within the area determined by DNR in which great than a 150-foot decline in the level to which groundwater will rise is a well placed in the aquifer has occurred. In groundwater management areas, DNR is directed to assist local governmental units (a term defined broadly to include all governmental entities and special purpose district that provide public water supply services) and regional planning commissions, by providing advice, incentives, and funding for research and planning related to groundwater management.

2003 Wisconsin Act 310, which created s. 281.34, Stats., also establishes a nonstatutory Groundwater Advisory Committee consisting of 14 members and directs that committee, by December 31, 2006, to recommend legislation and administrative rules to address the management of groundwater in groundwater management areas and any other areas of the state where long-term withdrawal of groundwater adversely affects water quality and quantity. The Groundwater Advisory Committee is further directed by December 31, 2007, to review the implementation of s. 281.34, Stats., and to recommend further changes in the regulation of high capacity wells that are in groundwater protection areas, that have a water loss of 95% or more, or that have a significant environmental impact on a spring. If the groundwater advisory committee fails to submit either one of these reports, DNR is authorized to promulgate rules using its existing statutory authority to address the management of groundwater in groundwater management areas.

Section 281.41, Stats. – Plans for Water and Sewerage Systems and Plant

Current law under s. 281.41, Stats., requires owners of water or sewerage systems or sewage or refuse disposal plants to submit plans and obtain plan approval from the DNR for new construction or modification of the system or plan. This requirement applies to any municipal or non-industrial water or sewerage system with the exceptions of building plumbing, the service pipes from buildings to municipally owned sewers, and small private onsite wastewater treatment systems that are regulated by the Department of Commerce (Commerce). DNR has 90 days to review the construction plans as well as related water withdrawals, monitoring systems, and groundwater monitoring wells.

The DNR must determine if the proposed plans comply with the approval requirements under s. 281.35, Stats., described below for water losses above 2 million gallons if applicable.

Section 281.35, Stats. - Large Scale Withdrawals and Diversions

2 Million Gallons Per Day Water Loss

If a person has a permit under s. 30.18, Stats., high capacity well approval under s. 281.17 (1), 2001 Stats., or s. 281.34 or 281.41, Stats., and wants to begin a new withdrawal or increase an existing withdrawal (the removal or taking of water from the waters of the state) that will result in a water loss averaging 2 million gallons per day within a 30-day period, the person must also obtain an approval from the DNR under s. 281.35, Stats. In order to determine whether to grant the application, the DNR must determine all of the following:

- That no public water rights in navigable waters will be adversely affected.
- That the proposed withdrawal does not conflict with any applicable plan for future uses of the waters of the state.
- That both the applicant's current water use, if any, and the applicant's proposed plans for withdrawal, transportation, development, and use of water resources incorporate reasonable conservation practices.
- That the proposed withdrawal and uses will not have a significant adverse impact of the environment and ecosystem of the Great Lakes basin or the upper Mississippi River basin.
- That the proposed withdrawal and uses are consistent with the protection of public health, safety, and welfare and will not be detrimental to the public interest.
- That the proposed withdrawal will not have a significant detrimental effect on the quantity and quality of the waters of this state.

If the proposed withdrawal will result in an interbasin diversion (a transfer of the waters of the state from either the Great Lakes basin or the upper Mississippi River basin to any other basin) the DNR must, in addition to the criteria applicable to withdrawals, examine the following additional set of criteria:

- That each state or province to which the water will be diverted has developed and is implementing a plan to manage and conserve its own water quantity resources, and that further development of its water resources is impracticable or would have a substantial adverse economic, social, or environmental impact;
- That granting the application will not impair the ability of the Great Lakes basin or upper Mississippi River to meet its own water needs;
- That the interbasin diversion alone, or in combination with other water losses, will not have a significant adverse impact on lake levels, water use, the environment or the ecosystem of the Great Lakes basin or upper Mississippi River basin; and
- That the proposed withdrawal is consistent with all applicable federal, regional, and interstate water resources plans.

An approved application must specify the location of the withdrawal, the authorized base level of water loss from the withdrawal, the date or seasons when water may be withdrawn, the uses for withdrawn water, the amount and quality of return flow required and the place of discharge, reporting requirements for the annual and monthly volumes and rates of withdrawal and water loss, any conditions, limitations, and restrictions DNR determines are necessary to protect the environment, and public health, safety, and welfare and to ensure the conservation and proper management of the waters of this state; any requirements DNR determines are necessary regarding metering, surveillance and reporting; and, if DNR determines a time limit is necessary, the date of which the approval for the withdrawal expires.

The DNR must review each approval prior to its expiration date, if any, or within five years from the date the approval is issued, and at least every five years thereafter. The DNR may propose modifications or additional conditions, restrictions, and limitations to an approval, and may revoke an approval if a person is unable to comply with the conditions of the approval.

5 Million Gallons Per Day Water Loss to the Great Lakes

Section 281.35, Stats., also provides requirements for certain withdrawals and diversions in the Great Lakes basin. If the DNR receives an application that, if approved, will result in a new diversion or an increase in an existing withdrawal that results in a water loss to the Great Lakes of more than 5 million gallons per day in a 30-day period, the DNR must notify the governors and premiers of the states and provinces in the Great Lakes region. The DNR must also request comments from the governors and premiers and consider these comments when determining whether to grant the application. If DNR receives a written request from a governor or premier or their designated representative, the DNR must convene a meeting of the Great Lakes states and provinces to discuss the application. At the meeting, the DNR must provide a draft decision memorandum which includes findings of fact and its proposed decision to deny, approve, or conditionally approve the application. Prior to issuing a final decision on the application, the DNR must allow 30 days for the Great Lakes states and provinces to provide written comments on the draft decision memorandum. The DNR's final notice of decision must be distributed to the Great Lakes states and provinces within 15 days after the permit is issued or denied.

REGULATORY PROGRAMS - WATER CONSERVATION AND EFFICIENCY

Section 281.35, Stats. – Approval Water Conservation Requirements

Before approving an application to begin a new water withdrawal or increase an existing withdrawal that will result in a water loss averaging more than 2 million gallons per day in any 30-day period, DNR must determine that both the applicant's current water use, if any, and the applicant's proposed plans incorporate reasonable conservation practices. [s. 281.35 (5) (d) 3., Stats.] If the proposed withdrawal will result in an interbasin diversion, the DNR must determine that each state or province to which the water will be diverted has developed and implemented a plan to manage and conserve its own water quality resources, and that further development of its water resources is impracticable or would have a substantial adverse, economic, social, or environmental impact. [s. 281.35 (5) (d) 7. a., Stats.]

Each existing or new approval under s. 281.35 (5), Stats., for a water withdrawal resulting in a water loss averaging more than 2 million gallons per day in any 30-day period must specify conditions,

limitations, and restrictions that the DNR determines are necessary to protect the environment and the public health, safety, and welfare and to ensure the conservation and proper management of the waters of the state. [s. 281.35 (6) (a) 7., Stats.]

State Plumbing Code

Commerce has promulgated the State Plumbing Code in chs. Comm 81 to 87 under its general powers in s. 145.02, Stats. The following provisions in the code relate to water conservation:

- The basic plumbing principles and basic requirements in the code specify that plumbing systems shall be designed and adjusted to use the minimum quantity of water consistent with proper performance and cleaning and that suitable provision shall be made for treating, recycling, dispersing, or holding the wastewater, where plumbing fixtures exist in a building that is not connected to a public sewer system. [s. Comm 82.10 (1) (b) and (2) (d), Wis. Adm Code.]
- The code includes requirements for the design, installation, and maintenance of stormwater and clearwater subsurface infiltration plumbing systems serving building sites. These requirements are designed to ensure that these types of water can get back to the groundwater aquifer with acceptable quality and thus be available for reuse. [s. Comm 82.365, Wis. Adm Code.]
- The code specifies plumbing treatment standards for plumbing systems that supply water to varying types of outlets, such as for drinking and cooking, surface irrigation or toilet flushing. These standards provide guidance that encourages the reuse of different types of water. [s. Comm 82.70, Wis. Adm Code.]
- The code specifies design standards for plumbing fixtures, appliances, and equipment. These standards include, for example, water conservation requirements for water conserving faucets, spouts, and plumbing fixtures. [s. Comm 84.20, Wis. Adm Code.]

Manual Flushing Devices for Urinals

Section 101.07, Stats., prescribes that Commerce shall not promulgate rules which directly or indirectly prohibit the use of manual flushing devices for urinals. This section also directs the department to take steps to encourage the use of these devices.

FINANCIAL ASSISTANCE PROGRAMS - WATER CONSERVATION AND EFFICIENCY

Certain financial assistance programs administered by the DNR require that recipients must develop or adopt a water conservation program as a condition of receiving financial assistance. These programs include the following:

- Each municipality receiving financial assistance for constructing a point source pollution abatement facility must develop and adopt a water conservation program at least as stringent as the federal requirements. [s. 281.57 (8) (a), Stats.]

- Each municipality receiving financial assistance under the clean water fund program must, among other things, develop and adopt a water conservation program as required by DNR. [s. 281.58 (14) (b) 5., Stats.]
- Each local governmental unit receiving financial assistance under the safe drinking water loan program must, among other things, develop and adopt a water conservation program as required by DNR. [s. 281.61 (8m) (c), Stats.]

ADDITIONAL REPORTS, PLANS, AND TECHNICAL ASSISTANCE

A number of state regulatory programs require DNR to conduct studies, establish policies, develop plans, and provide technical assistance relating to the use and management of the state's water resources. These requirements include the following:

- The DNR is directed to coordinate the activities of state agencies in managing and regulating the state's water resources, in order to help fulfill the state's role as trustee of its navigable waters. To that end, DNR must make studies, establish policies and make plans for the efficient use, conservation, development, and protection of the state's water resources. On the basis of these studies and plans, DNR must make recommendations to state agencies relative to their water resource activities, collect data available from state, regional, and federal agencies, the University of Wisconsin, local units of government and other sources, and serve as a clearinghouse for information relating to water resources. [s. 281.31 (3), Stats.]
- The DNR, municipalities, and all state agencies must cooperate to accomplish the objective of s. 281.31, Stats., to achieve the efficient use, conservation, and development of Wisconsin's water resources. The DNR must consult with and provide assistance to municipalities to establish voluntary uniformity of regulations, so far as practicable. [s. 281.31 (7), Stats.]
- The high capacity well statute directs the DNR, with the advice of the Groundwater Coordinating Council, to conduct monitoring and research related to the interaction of groundwater and surface water, characterization of groundwater resources, and strategies for managing water. [s. 281.34 (10), Stats.]
- The DNR must, before August 1, 1988, adopt and submit to the Legislature a long-term state water quantity resources plan for the protection, conservation and management of the waters of the state. The plan must describe a system for allocating the state's water resources during a water shortage or other emergency, identify existing uses of the waters of the state, estimate future trends in water use and provide recommendations for the use, management and protection of the waters of the state and related land resources that will affect 30.18 permittees, owners of high capacity wells approved under s. 281.17, 2001 Stats., 281.34, 281.35, or owners of water or sewerage systems or sewage or refuse disposal plants approved under s. 281.41, Stats. [s. 281.35 (8), Stats.]
- The DNR is directed to cooperate with other Great Lakes states and provinces to: develop and maintain information on the use and management of water resources in the Great Lakes

basin; collect and maintain information about the locations, types, and quantities of water use and water losses in a form comparable to the form used by the other Great Lakes states and provinces; collect, maintain and exchange information on current and projected future water needs; develop a long-term plan for developing, conserving and managing the water resources of the Great Lakes basin; participate in development of a regional consultation procedure for use in exchanging information of effects of proposed interbasin diversions and consumptive uses, as provided in the Great Lakes charter; and participate in the development of a upper Mississippi River basin regional consultation procedure to exchange information of the effects of proposed water losses from that basin. [s. 281.35 (11), Stats.]

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