

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

NEW BERLIN DIVERSION APPLICATION
PUBLIC COMMENTS AND RESPONSE SUMMARY

Introduction

The City of New Berlin (City) submitted an application to the Wisconsin Department of Natural Resources (DNR) for a proposed diversion of Great Lakes water. DNR held a public hearing on the proposed diversion on March 12, 2009 at the City Hall in New Berlin. DNR accepted written comments on the application until March 27, 2009. Listed below is a restatement of the public comments received and DNR's responses.

Administrative Rules

Comment: The DNR should adopt all of the rules required under the Great Lakes Compact before acting on the request for approval of the diversion. The rules are needed to ensure that uniform and consistent standards and procedures are applied. Without final rules, it is unclear what standards will apply, what conservation measures are required and what criteria the department will use to determine completeness and adequacy of the application.

Response: The Compact and the related implementing legislation direct the DNR to adopt several administrative rules, but they do not require that such rules be adopted prior to the DNR taking action on New Berlin's diversion request. The statutes provide the basic framework and specific criteria by which the DNR will process and evaluate the request and ultimately make a final decision. The statutory provisions are sufficiently detailed and clear, and the DNR is confident that it can appropriately apply the statutory criteria to the New Berlin diversion application prior to adopting administrative rules.

Water Conservation

Comment: The issue of water conservation has not been adequately addressed. The need for the diversion could be avoided through aggressive water conservation efforts. New Berlin has failed to demonstrate a commitment to water conservation and has not submitted an adequate plan. The City must submit a complete water conservation plan that includes goals, specific conservation actions/measures with an emphasis on outdoor water use and monitoring or assessment components.

Response: The DNR agrees that the initial conservation plan submitted by the City did not have a definitive goal for future water conservation. Subsequently, the City submitted a resolution (Resolution No. 09-11 adopted April 28, 2009) in which the City commits to implementing a Water Conservation Plan and commits to a water conservation goal of reducing residential water consumption by 10% over January 2008 levels by January 2020. Further, the City has already incorporated a number of supply-side best management practices for water conservation, such as: quarterly water audits; 100% metering and billing; a meter testing and replacement program; a water main replacement program; and a water billing system that flags sudden increases or decreases in water usage.

Further, as a condition of its approval of the diversion request, the DNR requires the City to submit the details that constitute the future Water Conservation Plan including specific actions to achieve the 10% goal and details for regular monitoring and assessment of the program. In addition, the approval will stipulate that the City will be subject to the water conservation and efficiency requirements delineated in the administrative rules to be adopted by the DNR.

Conservation Rate Structure

Comment: New Berlin should pursue adoption of a conservation rate structure to further encourage water conservation.

Response: The DNR does not have the authority to mandate a specific rate structure. Rates charged by public utilities are regulated by the Wisconsin Public Service Commission.

In various submittals related to the diversion request, including Resolution 09-11 mentioned in the preceding response, the City of New Berlin has stated that it has considered or continues to investigate the efficacy of a conservation rate structure. Adoption of a water rate structure that encourages conservation is certainly one of the options available to the City as it develops and implements a water conservation and efficiency plan.

Completeness of Application

Comment: The application is incomplete. Specifically, as required under the Compact and Wisconsin's implementing statutes, water conservation and efficiency has not been adequately addressed.

Response: The DNR evaluated the completeness of New Berlin's diversion application and Water Supply Service Area Plan in consideration of the required elements specified by statute. The DNR determined that the application was complete in that it addressed all required elements. Where the DNR determined that additional, clarifying information would be helpful during its detailed evaluation, the DNR requested supplemental information, and the City provided it. The issue of whether the application adequately addresses water conservation and efficiency is discussed in a previous comment and response.

Official Approval by the City of New Berlin

Comment: There does not appear to be any evidence that the City of New Berlin, as an official governing body, has approved the Water Supply Service Area Plan or the application for a diversion.

Response: Section 281.348(3)(b)2., Stats., requires that a Water Supply Service Area Plan be approved by the governing body of the city whose public water supply is addressed by that plan. The City of New Berlin has satisfied that requirement through adoption of a resolution (Resolution No. 09-04) by the Common Council indicating its approval of the plan. The resolution was approved on February 10, 2009. While there is no similar statutory provision relating to approval of diversion applications by the governing body, the Common Council, in expressing its support for the Water Supply Service Area Plan, also acknowledged that the City had submitted a diversion request to the DNR.

Delineation of the Diversion Area and Water Supply Service Area

Comment: It is unclear what area is intended to be served by Lake Michigan water obtained under the proposed diversion. There needs to be a clear delineation of the diversion area and the water supply service area. What happens if the City wishes to change the extent of the area in the future?

Response: Correspondence from the City's consultant has confirmed that the proposed diversion area and water supply service area are those areas depicted in Figure 2-1 of the Water Supply Service Area Plan dated February 11, 2009. The DNR delineated these areas in its approval of the diversion request and plan approval. Any future modification of these areas will be dealt with in accordance with the relevant procedures and requirements in effect at the time of the proposed modification, as established by statute, administrative rule, or DNR guidance.

Commitment to Affirmative Restorative Action

Comment: The DNR should require a commitment to an affirmative restorative action to a resource in the basin.

Response: During the development of the Great Lakes St. Lawrence River Basin Water Resources Compact (Compact), consideration was given to requiring an improvement standard as part of any diversion. This requirement was rejected in favor of support for a ban on diversions with limited exceptions. Consequently, the state's statutes implementing the Compact do not require restoration or improvement as part of a proposal for a diversion. Applicants may, at their discretion, submit a proposal for restoration, and if they do, the DNR would be allowed under state statutes to consider it.

The New Berlin Diversion Application Decision as Precedent

Comment: The standards the Wisconsin DNR applies to New Berlin will inevitably set a precedent for all subsequent applications for Great Lakes water.

Response: The DNR believes that every diversion application within the Great Lakes basin will be clearly distinguishable on its facts and will be reviewed by DNR based on the individual facts. The degree to which New Berlin's approved diversion would create any precedential value for future diversion requests is extremely limited and would depend on the level of similarity between the facts of each request. The DNR considers New Berlin's situation and diversion request to be unique and not likely to influence DNR's decisions on future diversion applications.

Radium

Comment: Radium in the City's well water is a health concern.

Response: Detectable levels of radium along with other radionuclides are common in water samples from wells that draw water from the deep aquifer in Southeast Wisconsin. At higher levels, long-term (or "chronic") exposure to radionuclides in drinking water may cause cancer. The maximum contaminant level for combined radium-226 and radium-228 as established in Chapter NR 809, Wis. Adm. Code, is 5 Picocuries per liter. Water sample results from some of the water supply wells that currently serve New Berlin have exceeded the maximum contaminant level. The water supply from Lake Michigan is essentially free of radionuclides. Consequently, approval of the diversion will result in a safer drinking water supply within the diversion area.

Coordination Between the City of New Berlin and MMSD

Comment: I am concerned about the lack of coordination between the City of New Berlin and Milwaukee Metropolitan Sewerage District (MMSD), and also about the capability of MMSD to accept the wastewater, especially during high flow events.

Response: The area proposed to receive diverted Lake Michigan basin water is already served by MMSD for sanitary sewerage. Thus, the diversion by itself will not cause any increase in wastewater discharge to MMSD. Furthermore, it is anticipated that there will be a slight reduction in sanitary sewer discharge after the diversion because most water utility customers within the diversion area that have water softeners are expected to stop using water softeners, reducing the discharge from the regeneration cycle from those water softeners. The City also is performing ongoing work to reduce inflow and infiltration into the sanitary sewer system to reduce excessive water into the sewer system during storm events. Regarding the coordination between New Berlin and MMSD, the DNR received a copy of a letter from Kevin Shafer, Executive Director of MMSD to Mayor Jack Chiovatero, dated March 20, 2009 that affirms MMSD's acceptance of return flows of the diverted water from New Berlin. A copy of this letter is posted on the DNR's website.

Cost of Diversion versus Cost of Treating Well Water

Comment: The diversion is less costly to the City than water treatment of well water.

Response: According to information from the City, the capital costs to construct water treatment devices on the City's water wells to meet radium standards is expected to be approximately \$4,000,000. The DNR believes that the initial costs to the City to implement the diversion are approximately \$480,000 for infrastructure and a one-time payment of \$1,500,000 to the City of Milwaukee pursuant to the Intergovernmental Cooperation Agreement between the cities. Thus, initial costs to implement the diversion are roughly half of the cost to install treatment devices on the wells. Annual operation and maintenance costs over the long term are also expected to be lower under the diversion scenario than the costs related to operation and maintenance of water treatment systems on the water wells.

Quality of the Utility's Well Water

Comment: The quality of the utility's well water, in our judgment, has not been satisfactory requiring us to use a costly water softener, and bottled water for drinking.

Response: The diversion is expected to result in the delivery of safer drinking water to water users in the diversion area and the water quality is anticipated to be sufficient so that most water users will stop using water softeners. This is expected to result in lower costs for the individual water users when they no longer have to operate water softeners, and the diversion will reduce or eliminate bottled water costs for water users that switch to tap water for drinking water.

Aquifer Depletion

Comment: The aquifer is depleting rapidly. New Berlin will have to look elsewhere to meet future water needs if the diversion is not approved.

Response: Declining aquifer levels in Southeast Wisconsin is a concern and water withdrawals from the deep aquifer are occurring at an unsustainable rate. According to SEWRPC (2002, Technical Report 37, Table 21), a decade ago the withdrawal rate from the deep aquifer was estimated to be 31.5 million gallons per day within Waukesha County; however, the recharge rate was only 14.8 million gallons per day. In some areas, the water levels in the deep aquifer have declined by several hundred feet. Some of the municipal wells have drawn down the aquifer to the point that part of the aquifer is dewatered near the wells when those wells are operating. This condition can lead to adverse geochemical reactions and may cause additional aquifer fouling, which damages the long-term viability of the groundwater resource. Although the diversion in New Berlin will not fully alleviate the unsustainable withdrawal rates from the deep aquifer in Southeast Wisconsin, it will reduce the imbalance between recharge and withdrawal rates.