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July 18, 2012

DANIEL S. DUCHNIAK, P.E.
GENERAL MANAGER
WAUKESHA WATER UTILITY
115 DELAFIELD STREET
WAUKESHA, WI 53188

Subject: Great Lakes Diversion Application Issues

Dear Mr. Duchniak:

I am writing as a follow-up to recent discussions between representatives of the City of Waukesha and the Department related to the City's application for a diversion of Great Lakes water, specifically including discussion of a designated water supply service area, a potential agreement with a water supplier, and the evaluation of return flow alternatives under the Great Lakes Compact criteria.

Water Supply Service Area Determination

Wisconsin's Water Supply Service Area planning requirement is codified in section 281.348 of the Wisconsin Statutes. In addition, Wisconsin's Great Lakes Compact implementing statute (s. 281.346, Stats.) specifies that, for purposes of applications for diversions of Great Lakes water, the Department shall consider the diversion area to be the water supply service area for the public water system as approved under s. 281.348, Stats.

The Water Supply Service Area Planning process is closely linked to long-established basin planning processes. In the late 1970s, Wisconsin implemented section 208 of the federal Clean Water Act by creating a system of statewide drainage basin planning, which included partnerships with local planning agencies. Having demonstrated its technical capacity and financial capability to perform federal and state planning requirements, the Southeastern Wisconsin Regional Planning Commission (SEWRPC) was designated by the Governor as an areawide water quality planning agency. With this designation, SEWRPC performed the technical work, intergovernmental coordination, and the public involvement activities needed to develop local basin plans—a key element of which has been the development of sewer service areas for every municipality in the seven county area. Once these plans were approved by the Department, they became enforceable through statutory requirements for conformance for Wisconsin Pollutant Discharge Elimination System (WPDES) permits, plan and specification approvals, and financial assistance programs. Waukesha's current sewer plan was developed in 1999 and approved by the Department and certified to EPA in early 2000.

By statute, SEWRPC, as a designated areawide water quality planning agency, was required to delineate a water supply service area for the City that is consistent with the sewer service area contained in an approved areawide water quality management plan. The water supply service area planning process is designed to encourage intergovernmental cooperation, and a person preparing a plan must consider regional water needs assessments and other regional water supply planning information. In addition, the Department is prohibited from limiting a water supply service area based on jurisdictional boundaries, except as necessary to prevent waters of the Great Lakes basin from being transferred to a county that lies entirely outside the Great Lakes basin.

Given the statutory requirements linking sewer service area planning and water service area planning, and the Compact's requirements to maximize the return of Great Lakes water and minimize the return of Mississippi basin water, the water supply service area ultimately approved must align with the approved sewer service area. It appears that the addition of the area in the southeast corner of the Town of Genesee—which was added to the water supply service area at the request of the Department due to concerns over bacterial contamination that prompted a special well casing area—is the only sewer service area change needed since the remainder of the sewer service area's 20-year growth boundary is unchanged from that in the 2000 revision.

As you know, the governing body of the Town of Waukesha has yet to approve the City's water supply service area plan and the Town's inclusion in the water supply service area as delineated by SEWRPC. Such action is a prerequisite to the Department's determination of the final water supply service area and the water demand associated with the water supply service area. At the latest, the Town of Waukesha must make a decision on the water supply service area plan within 30 days of the Waukesha City Council's approval of an agreement with a preferred water supplier. If the Town of Waukesha should refuse to act within that 30-day period, the Department will assume that the Town has elected to disapprove the water supply service area plan. In that event, any potential future diversion of Great Lakes water to the Town of Waukesha would require a separate diversion application that would require approval of all Great Lakes States.

Water Supplier Agreement

It is my understanding that memoranda of understanding or similar agreements with potential water suppliers may be presented to the Waukesha City Council for approval in August 2012.

Given its jurisdiction to supervise and regulate public water utilities, which includes setting rates and approving wholesale agreements between utilities, the Public Service Commission (PSC) has requested an opportunity to review the City's agreement with a preferred water supplier before the Department would forward the City's application to the Regional Body.

In addition to any proposed agreement between the City and its supplier, information supplied to the PSC should include identification of the plant and facilities that would be needed to implement the agreement, the estimated cost of those facilities, identification of which party would be responsible for those facility costs, and any other payments or costs—including non-utility costs—that would be required under the proposed agreements.

The PSC estimates that it would take at least 60 days to complete its review.

Return Flow Alternatives

The following paragraphs outline remaining Compact related requirements for Underwood Creek and Root River return flow alternatives.

In addition to the technical analyses already prepared related to a potential discharge to Underwood Creek, the City is undertaking additional work to evaluate implications of the current Total Maximum Daily Load (TMDL). However, the TMDL allocations for Underwood Creek, as part of the Menomonee River TMDL, will not be determined for several months. Further evaluation of an Underwood Creek discharge must include the following steps.

Underwood Creek

- Although the City's wastewater facility plan submittal includes state-of-the-art phosphorus control technology, the Department will not specify an effluent limit determination until the TMDL wasteload allocations (WLA) are completed and approved by the US EPA. The Department is not the lead in developing this TMDL and does not control the process timeline. To have the Department's review of an

Underwood Creek return flow alternative proceed faster than the TMDL process, the City will need to pursue the 'worst case scenario' in which its WLA would be zero. To meet this scenario, the City will need willing stakeholders among existing dischargers to participate in water quality trading; and the Department will need an analysis which indicates trading partners exist in sufficient quantity to address the worst case load restrictions.

- The return flow management plan would need to be revised to have a continuous return flow to Underwood Creek with a management system that meets the Great Lakes Compact's exception standard criteria.
- The application would need to be supplemented with a detailed description of the program to be utilized to minimize the amount of non-Great Lakes basin water and maximize the amount of Great Lakes basin water in the return flow.

Given the TMDL related issues and concerns over the potential for flooding related to a return flow discharge to Underwood Creek, the City is encouraged to further evaluate a Root River discharge alternative, a listed option in the City's 2010 application. A further evaluation of a Root River discharge alternative must include the following steps.

Root River

- The City must identify a preferred discharge site to the Root River or a tributary to the Root River, and forward affirmation from the riparian landowner of the landowner's willingness to be a co-applicant for any necessary Chapter 30 permit.
- The current facility plan submitted to the Department would have to be revised to change the discharge location, concurrent with the Chapter 30 requirements, to determine the appropriate design and location for an outfall structure.
- The City must submit plans for a program to minimize the amount of non-Great Lakes basin water and maximize the amount of Great Lakes basin water in the return flow. This may be addressed in part through the Wisconsin Pollutant Discharge Elimination System (WPDES) permit requirements for Clearwater Reduction Reports, with the results incorporated as part of the facility plan.
- SEWRPC should be engaged to ensure regional plan consistency or to initiate changes to reflect discharge locations, service area boundaries, and designated local management agency status for wastewater conveyance and treatment.
- The City should establish a communication plan to ensure that interested stakeholders or affected parties are aware of and involved in the development of the refined proposal (local governments, chambers of commerce, fishing and watershed associations such as the Great Lakes Fishery Commission and Root-Pike Watershed Initiative Network.)
- The City must evaluate potential downstream impacts of the effluent and ensure that the potential discharge would not cause or contribute to downstream impairments, since no TMDL is currently scheduled for the Root River Basin. Similar to an Underwood Creek discharge alternative, the City may need partners to engage in water quality trading to offset phosphorus loading or show that the new discharge of phosphorus will improve water quality in the impaired segment.
- The City must also assess positive and negative impacts of the return flow and the relationships of the continuous discharge return flow volumes to the base flows and flood flows of the Root River. Depending on the discharge location, studies from the "Flood Insurance Study" for the Federal Emergency Management Agency indicate that Waukesha's maximum discharge during a flood event could possibly be approximately 3% of the discharge during peak flows of a 10-year storm event and as little as 1% during peak flows of a 100-year storm event.

Department staff will be available to work with the City and its consultants to compile relevant water quality data, fisheries and habitat information, and flow volumes for purposes of a Root River discharge analysis.

As previously discussed, either of these return flow options would eventually require WPDES and Chapter 30 permit applications and plan approvals.

Water Conservation and Efficiency & Population and Demand Estimates

Additionally, the Department continues to review other aspects of the City's application, including the City's Water Conservation and Efficiency Plan and population and demand estimates within the proposed water supply service area. We will contact you if we have questions or need additional information in these areas.

Please feel free to contact Eric Ebersberger should you have other questions regarding this letter or your project. We look forward to working with you and your representatives to resolve the issues remaining related to the City's application.

Sincerely,

A handwritten signature in blue ink that reads "Kenneth G. Johnson". The signature is fluid and cursive, with a long horizontal line extending to the right.

Kenneth G. Johnson, P. E.
Water Division Administrator

cc Eric Ebersberger