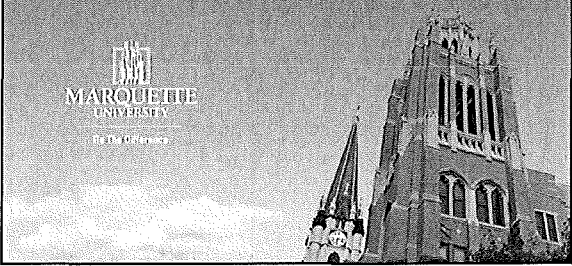


MARQUETTE UNIVERSITY LAW SCHOOL

Great Lakes Compact – background
 University of Toledo College of Law
 Great Lakes Water Conference (Nov. 4, 2016)
 David A. Striffling, Director, MULS Water Law and Policy Initiative



MARQUETTE UNIVERSITY LAW SCHOOL

Great Lakes Compact – How Did We Get Here?


Legal context

- Boundary Waters Treaty of 1909
 - Attempt to prevent or resolve United States/Canada water disputes over boundary levels and flows
 - Created International Joint Commission
- Great Lakes Charter of 1985
 - Voluntary, primarily non-substantive collective management agreement among Great Lakes states and Canadian provinces
- Water Resources Development Act of 1986
 - Federal statute subjecting large new diversions to approval by Great Lakes governors; no decision-making standard
- Great Lakes Charter Annex of 2001
 - “Agreement to agree” contained directives to develop binding agreement with decision-making standard




MARQUETTE UNIVERSITY LAW SCHOOL

Great Lakes Compact – How Did We Get Here?

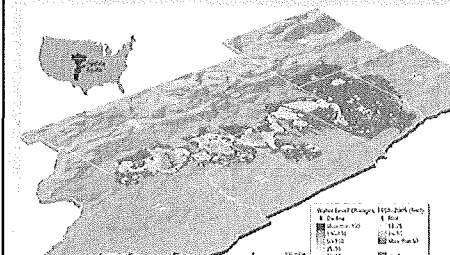


Late 1970s – proposal to construct coal slurry pipeline from Wyoming’s Powder River Basin to Duluth using Lake Superior water to suspend the coal




MARQUETTE UNIVERSITY LAW SCHOOL

Great Lakes Compact – How Did We Get Here?

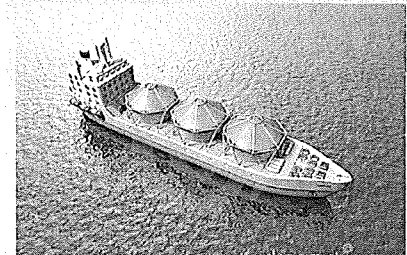


Early 1980s – U.S. Army Corps of Engineers studies the feasibility of using Great Lakes Water to replenish the Ogallala Aquifer



MARQUETTE UNIVERSITY LAW SCHOOL

Great Lakes Compact – How Did We Get Here?

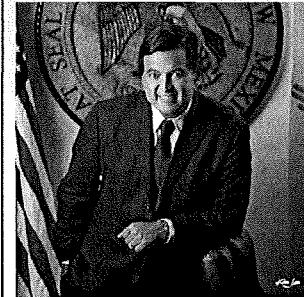


1998 – “Nova Group” proposal to ship Lake Superior water to private customers in Asia approved by Ontario




MARQUETTE UNIVERSITY LAW SCHOOL

Great Lakes Compact – How Did We Get Here?



Fall 2007 – presidential candidate Bill Richardson suggests that the Midwestern states “awash in water” should discuss a new water policy with arid western states



Great Lakes Agreement

Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement

- Good-faith, nonbinding policy agreement between the American member states (Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, Wisconsin) and Canadian member provinces (Ontario, Quebec)
- Governed by Great Lakes-St. Lawrence River Basin Water Resources Regional Body
 - Includes Governors, Premiers or designees
 - Oversees agreement implementation
 - Develop goals
 - Develop strategy
 - Forum for consultation and coordination



Great Lakes Compact

Great Lakes-St. Lawrence River Basin Water Resources Compact

- Binding and legally enforceable agreement administered primarily under the regulatory authority of individual Great Lakes states, consented to by Congress
- Embodies same principles as Agreement with Canadian provinces
- Became effective after final consent from U.S. Congress and passage of implementing legislation by states



Great Lakes Compact - significance

- Remarkable degree of political cooperation
- Recognition that the Great Lakes are a shared resource held "in trust" (Section 1.3)
 - Far from the typical experience in management of transboundary waters
- Carefully thought out to withstand scrutiny
- Relies on sound science
 - Ignores political boundaries
 - Relies on hydrogeology



Great Lakes Compact – essential features

Purposes and Goals (Section 1.3-1.4)

- Protect, conserve, restore, improve and efficiently manage the waters of the basin
- Provide for cooperative action and planning by the parties
- Facilitate consistent approaches and information sharing
- Prevent significant adverse impacts
- Advance an "adaptive management" approach
- Act guided by sound science



Great Lakes Compact – essential features

- In general, ban on new or increased diversions of water from the Basin (Section 4.8)
- *Exceptions possible in communities near the Basin* under certain circumstances (Section 4.9)
 - Straddling communities
 - Communities in straddling counties
- Member states use a consistent decision-making standard to review proposed uses of Basin water (Section 4.11)
 - Water withdrawn must be returned, less an allowance for consumption
 - Use must result in no significant adverse impacts to resource
 - Must incorporate conservation measures

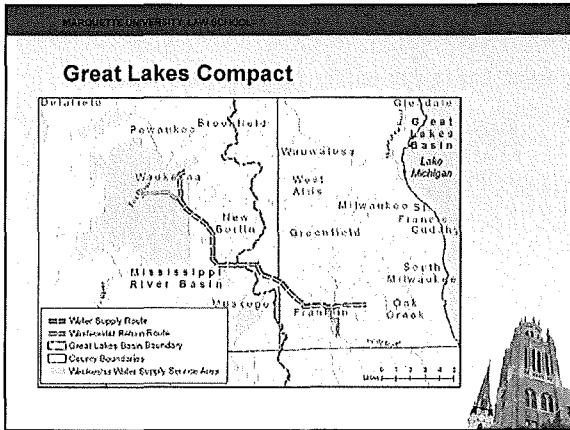


Great Lakes Compact – essential features

–Member states use a consistent decision-making standard to review proposed uses of Basin water (Section 4.11)

- Must be "reasonable"
 - Efficient use/minimize waste
 - Efficient use of existing supply
 - Balance between economic development, social development, and environmental protection
 - Source supply potential
 - Degree and duration of adverse impacts
 - Restoration (if proposed)





MARQUETTE UNIVERSITY LAW SCHOOL

Great Lakes Compact – community in a straddling county

- Waukesha water diversion application – a fascinating test case
 - Waukesha is completely outside the Basin, but is in a straddling county. (Section 4.9(3); see also Wis. Stat. 281.343(4n)(c)). Under these circumstances, diversions are only allowed if:
 - The water is used solely for public water supply purposes
 - The community is otherwise without an adequate supply of potable water (no "reasonable alternative")
 - Proposal undergoes Regional Review
 - Proposal is unanimously approved by all Council members (governors)

MARQUETTE UNIVERSITY LAW SCHOOL

Great Lakes Compact – community in a straddling county

–Waukesha is completely outside the Basin, but is in a straddling county. (Section 4.9(3); see also Wis. Stat. 281.343(4n)(c)). Under these circumstances, diversions are only allowed if (cont.):

- Proposal meets "exception standard" – (Section 4.9(4); see also 281.343(4n)(d))
 - Need can't be reasonably avoided through efficient use of existing supply
 - Limited to "reasonable" quantity
 - All water withdrawn must be returned after allowance for consumptive use
 - No significant individual or cumulative adverse impact on Basin
 - Incorporates environmentally sound and economically feasible water conservation measures

MARQUETTE UNIVERSITY LAW SCHOOL

Great Lakes Compact – community in a straddling county

–Regional Review process (Section 4.5)

- Proposal submitted by Originating Party to Regional Body
 - Public participation and review procedures
 - Comment
 - Hearing
 - Technical review
 - Originating Party provides – must "thoroughly analyze the Proposal"
 - Declaration of Finding
 - Must make "every reasonable effort to achieve consensus"
 - Considered by Compact Council in making its final decision

MARQUETTE UNIVERSITY LAW SCHOOL

Great Lakes Compact – community in a straddling county

–Summary for a community outside the basin but inside a straddling county (Waukesha):

- Qualify for "community in a straddling county" exception
- Undergo regional review
- Meet the exception standard
- Receive Compact Council approval (i.e., not vetoed by any of the Great Lakes governors)

MARQUETTE UNIVERSITY LAW SCHOOL

Great Lakes Compact – community in a straddling county

- Process for water diversion application
 - Submit proposal to "Originating State"
 - Originating State determination of whether application is "approvable"
 - Originating State determination of whether Regional Review is required
 - Originating State forwards proposal for Regional Review
 - Finding of Regional Body
 - Decision of Compact Council
 - WDNR has exhaustive Waukesha materials online: <http://dnr.wi.gov/topic/wateruse/waukeshadiversionsapp.html>

Great Lakes Compact – dispute resolution

- Dispute Resolution and Enforcement (Section 7)
 - Any person aggrieved by a Council action is entitled to a hearing before the Council
 - Any person aggrieved by a Party's action is entitled to a hearing pursuant to the Party's administrative procedures and laws
- Appeal rights
 - From Council hearing: right to judicial review in federal court
 - From Party administrative review: right to judicial review in Party's court of competent jurisdiction



Great Lakes Compact – open questions

- Specifics of dispute resolution process
 - What procedures and deadlines will apply to hearing before the Council?
 - Legal process may be as complex as technical process
 - Simultaneous actions possible in state and federal court (?)
 - Would courts accord any deference to determinations made by the parties, individually, or the Council, collectively?
- Precedential effect of Waukesha approval (if it stands)



June 21, 2016

**BEFORE THE GREAT LAKES-ST. LAWRENCE RIVER BASIN
WATER RESOURCES COUNCIL**

**In the Matter of the Application by the City
of Waukesha, Wisconsin for a Diversion of
Great Lakes Water from Lake Michigan and
an Exception to Allow the Diversion**

No. 2016-1

FINAL DECISION

I. Introduction and Background

- 1. Summary of the Application.** The City of Waukesha, Wisconsin (“Applicant”) applied for a New Diversion of Lake Michigan water from the Great Lakes-St. Lawrence River Basin (“Basin”) to serve the territory in the Waukesha water supply service area established under Wisconsin law. The Applicant requested to divert up to 10.1 million gallons per day (“MGD”) annual average day demand (“ADD”) of Basin water for this water supply service area, based on a projected average daily demand for the water supply service area at full build-out (approximately 2050) (“Application”).
- 2. Legal Basis for Submission of Application for a Diversion of Great Lakes Water.** Pursuant to Article 201 ¶ 3 of the Great Lakes—St. Lawrence River Basin Sustainable Water Resources Agreement (“Agreement”) and § 4.9.3 of the Great Lakes—St. Lawrence River Basin Water Resources Compact (“Compact”),¹ the State of Wisconsin, as the Originating Party, forwarded the Applicant’s Application for an exception to the prohibition of Diversions as a Community within a Straddling County on January 7, 2016 to the Great Lakes—St. Lawrence River Water Resources Regional Body (“Regional Body”) and the Great Lakes—St. Lawrence River Basin Water Resources Council (“Compact Council”) for Regional Review. The Originating Party provided a Technical Review, preliminary final Environmental Impact Statement, and the Application to the Regional Body and Compact Council for consideration.
- 3. Originating Party and Applicant Review Process.** The Originating Party has represented to the Regional Body that the Applicant held four informational meetings consisting of a presentation and questions and answers on a previous version of the Application submitted to the Originating Party in 2013. In addition, the Originating Party has represented to the Regional Body that it: (i) held three public comment periods in 2011, 2013, and 2015, and two sets of public hearings on various versions of the Application in 2011 and 2015 for a total of six public hearings prior to completing its technical review; (ii) considered public comments received during the public comment periods and hearings; (iii) provided opportunities for Tribal consultation via

¹ Capitalized terms used in this Final Decision that are not defined in this Final Decision shall have the meanings ascribed to them in the Agreement and the Compact.

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conference calls with Wisconsin Tribes on July 25, 2011 and July 14, 2015; and, (iv) although not required by the Compact, elected to follow the Environmental Impact Statement procedures under Wisconsin's Environmental Policy Act, with public participation.

4. **Regional Review Process.** In fulfillment of the Agreement and the Interim Procedures under the Agreement, as adopted on June 10, 2010, and the Compact and the Interim Guidance under the Compact, as adopted on June 10, 2010, the public as well as the Regional Body and Compact Council members were notified that the Application was submitted to the Regional Body and Compact Council for Regional Review on January 7, 2016. An opportunity for the public to comment on the Application was opened from January 12, 2016 to March 14, 2016. The Regional Body and Compact Council also notified the Tribes and First Nations that it had received an Application for a Diversion of Basin water and requested comments.

In addition, on February 17, 2016, the Regional Body and Compact Council toured sites in southeastern Wisconsin related to the Application, and in a face-to-face meeting in Waukesha, Wisconsin, asked a series of questions of the Wisconsin Department of Natural Resources and the Applicant regarding the Application. Furthermore, on February 18, 2016, the Regional Body and Compact Council held a meeting with Canadian First Nations and federally recognized U.S. Tribes, followed by a public meeting and hearing on the application in Waukesha, Wisconsin at which the public was provided an opportunity to provide comments to the Regional Body and Compact Council members.

The Originating Party received and answered questions on the technical review from six jurisdictions (Illinois, Michigan, Minnesota, New York, Ohio and Quebec) and the Originating Party responded to all questions submitted. The answers to questions were provided to the Regional Body and Compact Council. Two jurisdictions (Michigan and Ontario) submitted their own technical reviews to the Regional Body and Compact Council on March 22, 2016.

A public meeting of the Regional Body was held for the purpose of considering its Declaration of Finding, commencing on April 21-22, 2016 in Chicago, Illinois, and which was recessed to a May 2, 2016 meeting via webinar, which in turn was recessed to a public meeting held on May 10-11, 2016 in Chicago, and further recessed to a May 18, 2016 meeting via webinar. On May 18, 2016, the Regional Body approved its Declaration of Finding.

On May 20, 2016, the Regional Body and Compact Council notified the Regional Body and Compact Council members, the Applicant, the public, and Canadian First Nations and federally recognized U.S. Tribes that the Regional Body had issued its Declaration of Finding, and included with these notices a copy of the approved Declaration of Finding.

June 21, 2016

5. **Additional Compact Council Process.** On May 20, 2016, the Compact Council provided public notice as well as notice to the Tribes and First Nations that a Compact Council meeting would be held to consider the Application and the Regional Body's Declaration of Finding on the Application, in order to render a Compact Council decision on the Application. The Compact Council held a public meeting for these purposes on June 21, 2016 in Chicago, Illinois.
6. **Record of Decision.** The Regional Body and Compact Council jointly established the website www.waukeshadiversion.org to make all information, including all Application materials, transcripts of meetings, public comments, calendar of events, public notices, and other relevant information available to the public. All such materials together shall be considered the record of decision. In addition, paper copies of all materials are available for public inspection at the office of the Secretariat to the Regional Body.

II. Findings

After reviewing the Application, as well as Declaration of Finding and the materials in the record of decision, to determine whether the Application meets the Compact criteria related to the ban on Diversions and the Exception criteria for a Diversion to a Community within a Straddling County, the Compact Council makes the following findings. The bases for these findings as listed below are intended to highlight major reasons for reaching these findings without containing an exhaustive listing of every basis in the record that supports each finding.

1. **Community in a Straddling County.** The Applicant is located wholly outside the Basin and wholly inside Waukesha County, Wisconsin. Waukesha County straddles the Lake Michigan watershed boundary; therefore, the Applicant is a Community within a Straddling County. (Compact § 1.2)
2. **Water to Be Used for Public Water Supply.** The Applicant owns the Waukesha Water Utility, a public water supply system, and the Applicant has requested the use of the water solely for Public Water Supply Purposes. Public Water Supply Purposes means "water distributed to the public through a physically connected system of treatment, storage and distribution facilities serving a group of largely residential customers that may also serve industrial, commercial, and other institutional operators. Water Withdrawn directly from the Basin and not through such a system shall not be considered to be used for Public Water Supply Purposes." (Compact § 4.9.3.a)
3. **Applicant Without Adequate Supplies of Potable Water.** The Applicant is without adequate sustainable supplies of potable water. (Compact § 4.9.3.a)
 - 3a. The Applicant's deep aquifer wells draw from an aquifer that is part of a regional aquifer system where withdrawals have exceeded the natural recharge rate. A cone of depression in the deep aquifer centered in eastern Waukesha County is attributable in large part to withdrawals from the Applicant's deep aquifer wells.

Continued pumping at rates in excess of recharge rates is not sustainable. Even at lower pumping rates, water levels are still approximately 350 feet below pre-development water levels. The Applicant does not control the overall use of the regional aquifer system; however, the Southeastern Wisconsin Regional Planning Commission (“SEWRPC”) water supply plan has recommended reducing water utility reliance on this deep aquifer. Cessation of the Applicant pumping from the deep aquifer is anticipated to result in additional recovery of the deep aquifer system.

3b. The Applicant’s deep aquifer wells also have total combined radium (radium-226 and radium-228) concentrations that are above the Safe Drinking Water Act standard of 5 picocuries per liter (pCi/L). The Applicant’s current system of blending deep aquifer water with shallow water and treating some deep aquifer water still does not meet state drinking water standards. Furthermore, the Applicant is under a court order to address the naturally occurring radium contamination and comply with all state and federal drinking water radionuclide standards by June 30, 2018.²

3c. The groundwater depletion, along with the radium contamination issue, demonstrates that the deep aquifer is not a sustainable or safe source of water for the people served by the Applicant. Eliminating the Applicant’s withdrawal from the deep aquifer will eliminate the extraction and redistribution of radium by the Applicant from the deep aquifer through releases from treatment processes, disposal of wastewater treatment byproducts and/or dispersion of residual radium into the environment through incomplete treatment.

4. Applicant Without Reasonable Water Supply Alternative. All of the Applicant’s water supply alternatives within the Mississippi River Basin (“MRB”) are likely to have, and cannot be sustained without, greater adverse environmental impacts than the proposed diversion. The Compact Council further finds, as stated in several Findings including 4a, 4b, 7b, 8c, 8e, and 11a, that the diversion as conditioned in this Final Decision does not have significant adverse impacts in the Basin. In addition, none of the evaluated MRB alternatives were found to be reliable sources for a long-term, dependable, and sustainable public water supply and, therefore, the Applicant is without a reasonable water supply alternative. (Compact § 4.9.3 and 4.9.3.d)

4a. It is the obligation of the Applicant to provide its customers with a safe, reliable water supply. The Applicant and Originating Party screened fourteen potential MRB water supply alternatives and analyzed in-depth six water supply alternatives. Environmental review conducted by the Originating Party considered a demand production of 8.5 MGD ADD for modeling purposes, which is lower than the Application request of 10.1 MGD ADD. This demand is the low end of the range presented by the Applicant.³ The Compact Council finds that the difference in an

² State of Wisconsin v. City of Waukesha, Case No. 2009-CX-4 (Wis. Cir. Ct. Waukesha Cnty. Apr. 9, 2009).

³ Originating Party Technical Review, Section S2C. Environmental Impacts.

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environmental projection analysis at 8.5 MGD ADD versus 8.2 MGD ADD is within the margin of error for the model, and would not change the expectation of significant adverse impacts to wetlands or lakes. The environmental analyses of water supply alternatives that included use of the shallow aquifer near the Fox River predicted significant adverse impacts to hundreds of acres of wetlands. An analysis of a water supply alternative using the unconfined deep aquifer west of the City of Waukesha predicted significant impacts to several seepage lakes, including a 6 to 12 inch decrease in lake levels and a greater than 10% decrease in groundwater inflow to these lakes. These modeled impacts indicate that the evaluated sources within the MRB are unreliable and not sustainable without adverse environmental impacts.

Public water suppliers have a responsibility to meet public health and safety needs to the best of their ability. The Originating Party also determined that none of the MRB water supply alternatives is as protective of public health as the proposed Lake Michigan water supply, because of greater risk for contamination.⁴

4b. None of the water supply alternatives that relies on treating the radium-contaminated water pumped from the deep aquifer prevents extraction and redistribution of radioactive waste into the environment, whether by land application of Waste Water Treatment Plant (“WWTP”) sludge, landfilling of waste byproducts or release of residual radium levels into the WWTP-receiving waters. All such alternatives are, therefore, not reasonable or sustainable for this Applicant at these volumes over the long term and present potential current and future avoidable risks to the environment and human health.

4c. Groundwater flow models have demonstrated a direct interconnection between the deep confined aquifer from which the Applicant withdraws groundwater and the Basin. The U.S. Geological Survey (“USGS”) and the Wisconsin Geological and Natural History Survey (“WGNHS”) have estimated⁵ that about 30% of the replenishment of the water withdrawn by the Applicant’s deep wells originates from the Lake Michigan watershed. Water from the Lake Michigan watershed is then discharged into the MRB via the Fox River.

4d. The Compact requires Adaptive Management approaches to conservation and management of Basin Water resources (Compact § 1.3.2.h) and application of a scientific basis for sound decision making. (Compact § 1.4) USGS and WGNHS concluded⁶ that the shallow groundwater aquifer and deep groundwater aquifer are interconnected across the surface water divide. This is illustrated by figure 23 in the Originating Party’s Technical Review. The demonstrated hydrological interconnection has a scientific basis and creates a nexus between the Basin and the MRB that supports the consideration of adverse environmental impacts (*see* Section

⁴ Originating Party Technical Review, Section S2B. Public Health.

⁵ Originating Party Technical Review, Section AC1.

⁶ SEWRPC Simulation of Regional Groundwater Flow in Southeastern Wisconsin, Report 1 and 2, Technical Report #41 (06/2005).

June 21, 2016

II.11 below) on the MRB when analyzing the request for a Diversion from the Lake Michigan watershed.

4e. The Applicant's deep aquifer wells induce water from the Lake Michigan watershed to replenish groundwater withdrawn by the Applicant. These wells withdraw water that, without the withdrawals, would have flowed toward Lake Michigan and instead, after use, is discharged to the Fox River without return flow.

5. Proposed and Conditioned Diversion Amount and Area. The Application requests a Diversion amount of 10.1 MGD as an ADD to meet projected demand at full build-out (approximately 2050) for the Waukesha water supply service area established under Wisconsin law. Compact Section 4.9.3.a requires that the proposed diversion must be used solely for the Public Water Supply Purposes of a "Community within a Straddling County." The Compact Council finds that the diversion area set forth in the original Application did not clearly meet Compact criteria. The Compact Council further finds that the Approved Diversion Area (defined below) set forth in Attachment 1 is the equivalent of a city or town and meets the Compact definition of a Community within a Straddling County as set forth in Compact Section 1.2 for the reasons set forth in paragraph II.5.b of these Findings. The Compact Council finds that the Diversion amount that is consistent with the Compact is 8.2 MGD as an annual ADD to meet the projected demands ("Approved Diversion Amount") within the Approved Diversion Area (defined below), subject to the conditions contained in this Final Decision, including, without limitation, those listed in Section III.2 below. The Compact Council finds that this Approved Diversion Amount and Approved Diversion Area are appropriately limited in quantity and area and are considered reasonable for the purposes for which the Diversion is proposed. (Compact § 4.9.4.b)

5a. The Applicant's public water supply system is the only public water provider to be served by the Diversion.

5b. The Applicant may provide water supply service to the following areas, each of which are part of the Diversion area described and depicted in Attachment 1 attached to and made a part of this Final Decision (collectively, the "Approved Diversion Area"). The limits of this Approved Diversion Area are fixed as of May 18, 2016:

- i.** Incorporated land within the boundaries of the City of Waukesha and land outside the City of Waukesha's jurisdictional boundaries that is served with municipal water by the Applicant through the Waukesha Water Utility as of May 18, 2016. This land is referred to as the "Current Area Served" (and colored in dark blue) on Attachment 1; and,
- ii.** Land lying within the perimeter boundary of the City of Waukesha that is part of unincorporated land in the Town of Waukesha. These areas are referred to as the "Town Islands" (and colored in light blue) on Attachment 1. The Town Islands are transected or bordered by a Waukesha Water Utility water main and are either fully surrounded by

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territory incorporated in the City of Waukesha or are bordered on one side by a transportation right-of-way and on the remaining sides by territory incorporated in the City of Waukesha. For the purposes of defining the Approved Diversion Area, the Town Islands have been included because for all practical purposes they are within the Applicant's community boundaries.

- 6. Proposed Diversion Cannot Be Avoided Through Water Conservation and Efficiency.** The proposed Exception cannot be reasonably avoided through the efficient use and conservation of existing water supplies and the Exception will be implemented to incorporate environmentally sound and economically feasible water conservation measures to minimize water withdrawals. (Compact § 4.9.4.a and 4.9.4.e)

6a. The Applicant has implemented a water conservation program consistent with the Originating Party's state law. The Approved Diversion Amount found to be consistent with the Agreement and Compact in Section II.5 (8.2 MGD) assumes a ten percent demand reduction due to conservation and efficiency measures. The Applicant used the Alliance for Water Efficiency Conservation Tracking Tool and projected that at full system build-out, it would achieve 1.0 MGD in conservation savings. With the Compact Council's determination of the Approved Diversion Amount, this corresponds to 0.8 MGD in conservation savings.⁷

- 7. Maximize Return of Great Lakes Water and Minimize Discharge of Mississippi River Basin Water to Great Lakes.** The Applicant will return up to the previous year's average daily withdrawal amount per day and, therefore, a volume of water approximately⁸ equal to the volume of water withdrawn from Lake Michigan will be returned to the Lake Michigan watershed.⁹ The Applicant will maximize the portion of water returned to the source watershed (Lake Michigan watershed) and will minimize the water from outside the Lake Michigan watershed that is returned to the Basin.¹⁰ Returned water will be required to meet Clean Water Act water quality discharge standards and prevent the introduction of invasive species into the Basin. (Compact § 4.9.3.b and 4.9.4.c)

7a. Through the Applicant's proposed return flow management plan, approximately 100% of the volume withdrawn from the Basin will be returned via flow through the Root River, a tributary of the Basin. This effectively results in no net loss of water volume to the Basin.

7b. The changes in the characteristics of the flow within the Root River, while potentially creating some negative changes for certain aquatic and benthic organisms, is expected to provide an overall net benefit to the Root River and the Lake Michigan watershed, including stabilizing river flows to reduce low flow

⁷ Originating Party Technical Review, Sections C1 and C2.

⁸ Originating Party Technical Review, Section R1 and R2.

⁹ Originating Party Technical Review, Sections R1 and R2.

¹⁰ Originating Party Technical Review, Section R4.

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periods and improving spawning conditions for salmonids to the Wisconsin Department of Natural Resources (“WDNR”)¹¹ Root River Steelhead Facility.¹²

- 8. No Significant Individual or Cumulative Impacts.** The Diversion will be implemented to ensure 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 of the Basin with consideration given to the potential cumulative impacts of any precedent-setting consequences associated with the Application. (Compact § 4.9.3.e and 4.9.4.d)

8a. The antidegradation procedures in ch. NR 207 of the Wisconsin Administrative Code will be implemented to ensure the antidegradation standard in s. NR 102.05(1) is met. The Wisconsin Pollutant Discharge Elimination System (“WPDES”) permit terms and conditions and the application of antidegradation procedures will ensure that the diversion will comply with water quality standards in the receiving water and downstream waters (Lake Michigan). Chapter NR 207 requires a demonstration of at least one improvement to economic or social development and a Lake Michigan water supply with resulting return flow would provide several improvements. For example, it would correct a public health problem (radium contamination) by providing clean, safe and sustainable water in a manner that protects environmental, economic, and social health. WPDES permit terms and conditions will reflect applicable source reduction and pollution minimization practices and meet all applicable water quality standards. Additionally, the WDNR will ensure that the discharge is located in such a way to lessen any potentially deleterious environmental impacts as practicable.¹³

8b. The Originating Party and the Applicant, as part of their review of the Application, took into consideration the Regional Body and Compact Council’s “Cumulative Impact Assessment of Withdrawals, Consumptive Uses and Diversions: 2006-2010” that was released on December 4, 2013.

8c. A Diversion of Basin water will eliminate land-spreading of WWTP sludge that contains radium, and eliminate the introduction of radium into the environment from the City of Waukesha WWTP.

8d. Reduced withdrawals from the deep aquifer will support long-term recovery of that aquifer. The trend for groundwater levels to continue to recover may also contribute to the reduction of radium concentrations within the upper levels of the deep aquifer.¹⁴

¹¹ All references to future actions by, or submissions to, the Wisconsin Department of Natural Resources shall mean and include any future successor to its responsibilities that are the subject of this Declaration of Finding.

¹² Originating Party Preliminary Final EIS, Section 4.4.2.3.1.7.

¹³ See Application, Volume 4.

¹⁴ See Application, Volume 2.

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8e. The return of Basin water via the Root River is projected to provide a net environmental benefit to the Root River while simultaneously producing no loss of biological integrity to Lake Michigan.

8f. Eliminating the Applicant's withdrawal from the deep aquifer system will reduce the amount of groundwater lost from the Lake Michigan watershed without return flow (*see* Section II.11 below).

8g. The Applicant will be returning approximately 100% of the water Withdrawn.

8h. The return flow will meet the Originating Party's and federal permit requirements, providing high quality effluent to the Root River. The current WWTP processes include removal of chemical phosphorus, suspended solids and associated contaminants, as well as organic materials; tertiary filtration; and, ultraviolet light disinfection. The proposed phosphorus permit limits are well below the water quality standard for the Root River and are on an order of a magnitude lower than many existing dischargers to the Basin.

9. Application to Comply with Applicable Laws. The Compact Council has reviewed the Application and the Exception shall be implemented to comply with all applicable municipal, State, Provincial and federal laws as well as regional interstate, inter-provincial and international agreements, including the Boundary Waters Treaty of 1909. (Compact § 4.9.4.f)

10. Precedent-Setting Impacts. The Compact Council has reviewed the Application for precedent-setting impacts and finds that any precedent-setting consequences associated with the Application will not adversely impact the Waters and Water Dependent Natural Resources of the Basin. (Compact § 4.9.4.d)

10a. Based on these facts and circumstances, the findings in this Final Decision are unique to this Applicant and Application and do not necessarily apply to any other applicant or application. The unique circumstances in the Application include, without limitation:

- i.** The Applicant is under a court order to achieve complete compliance with all federal and state drinking water radionuclide standards by June 30, 2018.
- ii.** Terminating use of the existing deep aquifer well water supply system will eliminate Waukesha's water utility system as a source of radium and the dispersion of radium into the environment.
- iii.** The Applicant's wells in the deep aquifer are in a confined aquifer which restricts recharge and contributes to groundwater decline.
- iv.** The deep aquifer groundwater supply is hydrologically connected to waters of the Basin. Continued use of that aquifer draws groundwater away from the Basin. The subsequent discharge of treated wastewater into the MRB surface waters results in loss of water from the Lake Michigan watershed.

- v. An environmental analysis of MRB water supply alternatives predicts unavoidable significant impacts to hundreds of acres of wetlands or unavoidable significant impacts to three seepage lakes.
- vi. The Applicant's return flow management plan will return to the Lake Michigan watershed approximately 100% of the volume of water withdrawn.
- vii. The Applicant has separate storm and sanitary sewers, and the WWTP design and operation will prevent the spread of invasive species from the MRB and protect against return flow as the result of sewage overflow.
- viii. The Applicant's wastewater treatment plant includes removal of chemical phosphorus, suspended solids and associated contaminants, as well as organic materials; tertiary filtration; and, ultraviolet light disinfection.

11. Hydrologically Interconnected to Waters of the Great Lakes Basin. Most of the Applicant's existing water supply is derived from groundwater that is hydrologically interconnected to Waters of the Basin. Groundwater pumping from the deep aquifer in southeast Wisconsin has changed the predevelopment groundwater flow direction from flowing towards the Lake Michigan watershed to flowing towards pumping centers. Currently, the largest pumping center from the deep aquifer in southeast Wisconsin is in Waukesha County. The Applicant's existing deep aquifer wells are pumping and distributing water that once flowed towards the Lake Michigan watershed and is now flowing towards pumping centers. (Compact § 4.9.3)

11a. Groundwater modeling reported in 2005 (based on 2000 data) by USGS and the WGNHS estimated that about 30 percent of the replenishment of the water withdrawn by wells in the deep aquifer in southeast Wisconsin is derived from the Lake Michigan watershed. Of the Lake Michigan watershed water, approximately 4 percent is induced directly from Lake Michigan. Approving a diversion of Great Lakes water with return flow will result in a net increase of water in the Lake Michigan watershed.

11b. Reduced drawdown pressure on the regional deep aquifer would have important benefits to surface water hydrology and is of material interest to the Water Dependent Natural Resources of the Lake Michigan watershed and MRB.

11c. In 2014, the Applicant withdrew 6.6 MGD of water. Approximately 5.6 MGD of this withdrawal was from deep aquifer wells. Given the interconnection between the deep aquifer and the Lake Michigan watershed, cessation of this withdrawal will aid the recovery of the natural groundwater flow system.

11d. Based on USGS and WGNHS estimates and the Applicant's 2014 withdrawal rates, there will be approximately a 1.6 MGD net increase over time in water to the Lake Michigan watershed with cessation of the Applicant's withdrawals from the

deep aquifer. 1.6 MGD represents less than one percent of the total recharge of the Lake Michigan watershed in southeast Wisconsin.

- 12. Additional Benefit to the Basin.** The return flow will benefit a Basin tributary, the Root River, by adding flow during times of low flow on the river. Increased flow will result in an improvement of the fishery and benefits to the Basin salmonid egg collection facility located downstream on the Root River (*see* Section II.7.b above). (Compact § 4.9.3.e and 4.9.4.d)
- 13. Regional Review and Council Review.** The Application has undergone Regional Review by the Regional Body in accordance with the Agreement and the Interim Procedures as adopted on June 10, 2010, as well as Council Review in accordance with the Compact and the Interim Guidance as adopted on June 10, 2010. (Compact § 4.9.3.f and 4.7.2)
- 14. Authority to Condition.** The Compact Council has the authority to impose on its decision on the Application the conditions included in this Final Decision on the Application. (Compact § 4.5.5.b.iii and 4.7.2)
- 15. Enforceability.** The Compact Council finds that the authority to impose conditions on an approval is provided in several provisions of the Compact (Section 4.5.5.b.iii and 4.7.2). The Compact Council is also authorized under Section 4.7.2 to: “. . . take action on Proposals in accordance with this Compact and the Standard of Review and Decision.” The enforcement authority provided in Compact Section 7.3.2.a provides the authority to enforce any conditions so imposed. Pursuant to section 7.3.2.a of the Compact, “any Party or the Council may initiate actions to compel compliance with the provisions of this Compact.” Therefore, the Compact Council finds that an approval of this Application with conditions is an action authorized by and under the provisions of the Compact and further finds that this Final Decision and any conditions incorporated herein are enforceable by the Council and any Party to this Compact pursuant to section 7.3.2.a, up to and including voiding the diversion authorized by this Final Decision if warranted by the circumstances.

III. Final Decision and Conditions

1. Application Satisfies Agreement and Compact Criteria

The Compact Council approves the Application for a Diversion of Basin water to a Community in a Straddling County as submitted by Wisconsin, as the Originating Party, because it satisfies all Agreement and Compact criteria for an Exception to the ban on Diversions to a Community in a Straddling County, as long as the conditions in Section III.2 below are met. (Compact § 4.9.3 and 4.9.4)

2. Conditions on the Diversion

The Compact Council finds that, pursuant to the requirements in Compact § 4.9.3.c, the Originating Party has the authority to manage the Applicant’s Diversion of Basin

June 21, 2016

water, and that the Originating Party will manage and regulate the Diversion including all conditions of this Final Decision, including, without limitation, the following specific conditions:

- A. *Compact Principles.* The Applicant will implement the Diversion in accordance with the overarching principles of the Compact.
- B. *Approved Diversion Amount and Approved Diversion Area.* The Approved Diversion Area shall be as described in Section II.5 and depicted in Attachment 1, and the amount of water diverted from the Basin by the Applicant shall not exceed the Approved Diversion Amount as defined in Section II.5. No part of the Diversion of water from the Basin authorized as the Approved Diversion Amount may be used by the Originating Party or the Applicant for any territory outside of the Approved Diversion Area.
- C. *Water Conservation and Efficiency Plan.* The Applicant must continue to implement and enforce all elements of its current water conservation and efficiency plan (and any future revisions) in the Approved Diversion Area, in order to meet or exceed if possible the 10% demand reduction due to the implementation of the water conservation and efficiency plan. This plan must be updated at a minimum of once every ten years.
- D. *Existing Deep Aquifer Groundwater Wells.* Some existing deep aquifer groundwater wells may be maintained by the Applicant to be used only under emergency conditions, but only for the duration of the emergency. These wells shall not be used as part of the Applicant's regular water supply under any circumstances. The Applicant will meet all water quality discharge standards in accordance with state and federal law, including during those periods when the deep aquifer wells are used for emergency purposes.
- E. *Groundwater Withdrawals in Approved Diversion Area.* The Application, the Originating Party's Technical Review and other comments submitted during the Regional Review process identified adverse consequences that would be caused by increased use of shallow or deep groundwater to meet the Applicant's water supply needs as part of the basis for concluding that no other reasonable water supply alternatives were acceptable, thereby justifying the Approved Diversion Amount for the Approved Diversion Area. These adverse consequences included: (i) impacts to certain surface water resources and wetlands, (ii) continued extraction and dispersion of radium into the environment, and (iii) withdrawal of groundwater from the Lake Michigan watershed and discharge into the MRB without return flow. As a condition of the approval of the Diversion, WDNR should use all of its available legal authority to prevent the same or substantially similar consequences from any other groundwater withdrawals within the Approved Diversion Area.
- F. *Other Controls on Groundwater Withdrawals.* The Application, the Originating Party's Technical Review and other comments submitted during the Regional Review process identified that the Approved Diversion Amount for the Approved

Diversion Area with return flow will produce net benefits within the Lake Michigan watershed due to the hydrological connection between the MRB and the Lake Michigan watershed. As a condition of approving the Diversion, WDNR should use all of its available legal authority to prevent any other groundwater withdrawals that would reverse this benefit.

- G.** *Pharmaceutical and Personal Care Products Recycling and Impacts.* The Applicant must implement a comprehensive pharmaceutical and personal care products recycling program and continually use the best available methods to encourage the further reduction of such products into the wastewater as recommended by the Originating Party.
- H.** *Return Flow to Root River.* The Applicant must return to the Root River, a Lake Michigan tributary, a daily quantity of treated wastewater equivalent to or in excess of the previous calendar year's average daily Diversion. On any days when the total quantity of treated wastewater is insufficient to meet this target, all treated wastewater must be returned to the Root River.
- I.** *Monitoring of Root River Flow.* For a minimum of 10 years from the beginning of return flow to the Basin, the Applicant must implement a scientifically sound plan to monitor the mainstem of the Root River to determine changes that may have resulted from return flow (such as volumes, water temperatures, water quality and periodicity of discharge) in order to adapt future return flow to minimize potential adverse impacts or maximize potential benefits to water dependent resources of the Basin source watershed (*i.e.*, Lake Michigan).
- J.** *Annual Reporting.* The Applicant must complete an annual report that documents the daily, monthly and annual amounts of water diverted and returned to the Lake Michigan watershed over the previous calendar year ("Annual Report"). An Annual Report must be submitted by the Originating Party to the Regional Body and the Compact Council by the due date established by the Regional Body and the Compact Council for the Annual Water Use Reporting to the Great Lakes water use repository, and include a section on the implementation and effectiveness of the water conservation and efficiency program, a summary of the results of the work conducted under Section III.2.I and a status and verification of compliance with each of the conditions stated in this Section III.2. The Annual Report must also be made available to the public on the Applicant's webpage.
- K.** *Federal and State Permits and Approvals; Incorporating Conditions into Originating Party Permits and Approvals.* The Applicant must obtain, and be in compliance with, all necessary federal and state permits and approvals from the Originating Party and other relevant governmental agencies before beginning the Diversion, and all of the above conditions imposing obligations upon the Applicant must be incorporated into the state permit or approval as legally enforceable provisions under the Originating Party's state law.

June 21, 2016

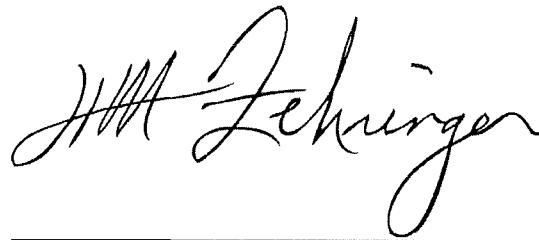
- L. *Performance Audit.* For as long as the City of Waukesha withdraws Basin water pursuant to this approved diversion, the City of Waukesha upon 30 days advance written notice shall allow the Compact Council or any Party to conduct an inspection and audit of the City of Waukesha operations; and the WDNR, upon 30 days advance written notice shall allow the Compact Council or any Party to inspect its records related to enforcement of this diversion and all conditions stated in this Section III.2.
- M. *Enforcement.* This Final Decision will be enforceable by the Compact Council and any Party (as defined under Section 1.2 of the Compact) under the Compact pursuant to Compact Section 7.3.2.a.

Approved on this 21st day of June, 2016 by the Great Lakes-St. Lawrence River Basin Water Resources Council

AYES: (8)

NAYS: (0)

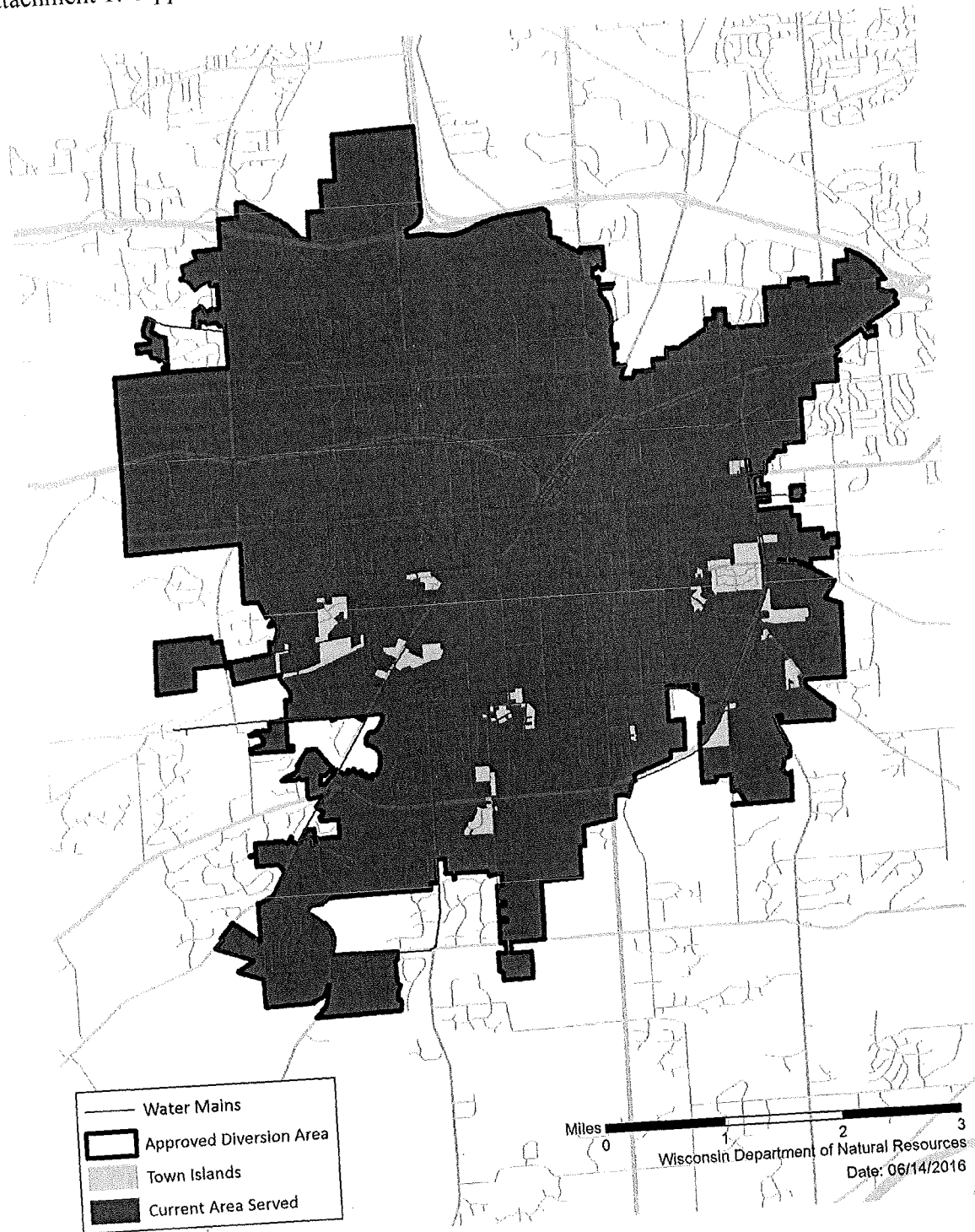
ABSTAIN: (0)



Chair
Great Lakes-St. Lawrence River
Basin Water Resources Council

June 21, 2016

Attachment 1: Approved Diversion Area



June 21, 2016

This Attachment was prepared based on the following as of May 18, 2016: (1) the City of Waukesha boundaries as recorded by the Waukesha County Register of Deeds; (2) unincorporated land lying within the perimeter boundary of the City of Waukesha, as recorded by the Waukesha County Register of Deeds, that is either fully surrounded by territory incorporated in the City of Waukesha or is bordered on one side by a transportation right-of-way and on the remaining sides by territory incorporated in the City of Waukesha; and (3) areas currently served that are outside the City of Waukesha's jurisdictional boundaries, consisting of the following tax parcels as registered by the Waukesha County Register of Deeds:

We Energies

WAKT1298986003	PWC 0983031
WAKT1298985	PWC 0983040
WAKT1297938	PWC 0983041
WAKT1297937	PWC 0983042
WAKT1298986001	PWC 0983043
WAKT1298986006	PWC 0983044
WAKT1298986005	PWC 0983030
WAKT1297936	PWC 0983028
WAKT1298986004	PWC 0983012
WAKT1298999	PWC 0983045

Cloverland Farms

PWC 0983017	PWC 0983029
PWC 0983018	PWC 0983046
PWC 0983020	PWC 0983011
PWC 0983016	PWC 0983047
PWC 0983019	PWC 0983010
PWC 0983021	PWC 0983009
PWC 0983015	PWC 0983048
PWC 0983022	PWC 0983008
PWC 0983014	PWC 0983049
PWC 0983025	PWC 0983007
PWC 0983023	PWC 0983006
PWC 0983039	PWC 0983050
PWC 0983038	PWC 0983005
PWC 0983037	PWC 0983051
PWC 0983024	PWC 0983004
PWC 0983026	PWC 0983052
PWC 0983036	PWC 0983003
PWC 0983035	PWC 0983053
PWC 0983034	PWC 0983002
PWC 0983033	PWC 0983054
PWC 0983013	PWC 0983001
PWC 0983032	PWC 0983055
PWC 0983027	PWC 0983056

VIA E-MAIL AND HAND DELIVERY

September 16, 2016

Jill M. Hutchison
Tel +1 312 840 7490
JHutchison@jenner.com

Executive Director
Great Lakes-St. Lawrence River Basin
Water Resources Council
c/o Council of Great Lakes Governors
20 North Wacker Drive, Suite 2700
Chicago, Illinois 60606

Re: Written Submission and Hearing re Final Decision in the Matter of the Application by the City of Waukesha, Wisconsin for a Diversion of Great Lakes Water, No. 2016-1

To the Executive Director of the Great Lakes-St. Lawrence River Basin Water Resources Council:

On behalf of the Great Lakes and St. Lawrence Cities Initiative (the "GLSL Cities Initiative"), enclosed please find GLSL Cities Initiative's Written Statement in Furtherance of Request for Hearing and Compact Council Consideration ("Written Statement"), as referenced in my August 19, 2016 letter. Also enclosed is an Appendix, consisting of three volumes.

As detailed further in the Written Statement, the GLSL Cities Initiative respectfully submits that the Compact Council should:

1. Suspend the Final Decision pending further review.
2. Reverse the Final Decision regarding the Applicant's eligibility as a "Community within a Straddling County" and restrict the delineated service area to be consistent with the City of Waukesha boundaries.
3. Apply fundamental principles of contract interpretation and statutory construction to redefine how the Compact and the Council evaluates "no reasonable water supply alternative." A standard consistent with the Compact, rather than one improperly imported from Wisconsin law, would consider (a) whether an alternative would be allowed under existing regulations; (b) whether an alternative is consistent with existing permitted water uses and criteria in the region or with routinely-permitted exemptions granted by regulators; and (c) whether an alternative is feasible.
4. Require supplemental technical analysis (including a supplemental EIS) that details demand forecasts for a service area consistent with the boundaries of the City of Waukesha, or at a minimum the narrowed service area delineated in the

Final Decision, and that analyzes alternatives for supplying all *or part* of that demand.

5. Permit additional public comment on the proposed Diversion, including on alternatives associated with the narrower service area and on any supplemental technical analysis.
6. Conduct a substantive review of the Application that takes into account the supplemental technical analysis, new public comments, any revised interpretation of key Compact provisions, any further modifications to the delineated service area, and the requisite attention to the cumulative impact of the decision, including its precedential effects. Determine whether the narrowed proposal still meets the clarified criteria for an Exception for a Community in a Straddling County, including whether it meets the appropriate "no reasonable water supply alternative" standard and whether all or part of the Diversion can be avoided. Carefully evaluate the impact of the return flow on any water body to ensure that the return flow does not result in an adverse impact.
7. After proper interpretation and due consideration, for the reasons further explained in this submittal, the Compact Council should find that the Proposal does not satisfy the Exception criteria in the Compact and deny the Application.
8. If, after proper interpretation and due consideration, the Compact Council finds that this Proposal does not meet the criteria for an Exception to the prohibition on Diversions absent conditions and/or modifications, but finds that the Proposal could and should be approved with conditions and/or modifications, provide the draft Final Decision for public comment on the conditions or modifications prior to a final vote of the Compact Council. Going forward, revise the Compact Council's Interim Guidance and Draft Sequence of Events for Consideration of "Straddling County" Exceptions to the Prohibition on Diversions to encompass this critical opportunity for full review of impactful modifications and conditions.

Above all else, clarification and rigorous application of appropriate, consistent standards is critical given the precedent-setting nature of this decision and the need to ensure a predictable process and equal treatment for any future applications.

Further, the GLSL Cities Initiative renews its request for prompt notice of the date, time, and location of the hearing, as well as any further guidance on procedures for such a hearing beyond those incorporated in the Compact or the Guidance, Resolutions, and other documents previously adopted by the Council and posted on the Council's website. In particular, the GLSL Cities Initiative asks to be informed of the format of the hearing, including whether additional public comment will be permitted at the hearing. Further, as a matter of procedure, should the Applicant or any other entity submit a response in opposition to this Request, as the Petitioner the GLSL Cities Initiative

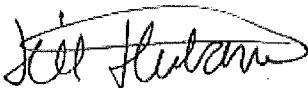
September 16, 2016

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respectfully requests the opportunity to submit a reply to any such opposition prior to any hearing on the matter.

The GLSL Cities Initiative continues to reserve all of its rights under the Compact and under all other applicable state, federal, and international laws regarding the hearing, as well as its ability to challenge the Compact Council's June 21, 2016 Final Decision in Matter No. 2016-1 through any other avenue or in any related matters.

Respectfully submitted,



Jill M. Hutchison

Cc by U.S. Mail without hard copy appendix:

State of Wisconsin

c/o Cathy Stepp, Secretary of the Wisconsin Department of Natural Resources

101 S. Webster St.

Box 7921

Madison, WI 53707-7921

City of Waukesha

c/o Mayor Shawn Reilly

201 Delafield Street

Waukesha, WI 53188

David Ullrich, Executive Director

Great Lakes and St. Lawrence Cities Initiative

20 N. Wacker Dr., #2700

Chicago, IL 60606

Board of Directors of the Great Lakes and St. Lawrence Cities Initiative

Great Lakes and St. Lawrence Cities Initiative

20 N. Wacker Dr., #2700

Chicago, IL 60606

Cc by email to members of the GLSL Cities Initiative as follows:

Regional Chair Roger Anderson, Durham Region, Ontario

Mayor Steve Arnold, Township of St. Clair, Ontario

Warden Tom Bain, Essex County, Ontario

Mayor Tom Barrett, Milwaukee, Wisconsin

Mayor Jocelyne Bates, Sainte-Catherine, Quebec

Mayor Nelson Bédard, Portneuf, Quebec
Mayor Alexandre Belisle, Vercheres, Quebec
Mayor Rosalynn Bliss and Former Mayor George K. Heartwell, Grand Rapids, Michigan
Mayor Randy Bolen, Two Harbors, Minnesota
Mayor Georges Bourrelle, Beaconsfield, Quebec
Mayor Mike Bradley, Sarnia, Ontario
Mayor Larry Braid, Township of Georgian Bay, Ontario
Mayor Dennis Bring, Sheffield Lake, Ohio
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Mayor Violaine Doyle, Port Cartier, Quebec
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Mayor Anne Eadie, Municipality of Kincardine, Ontario
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Mayor Sylvain Hudon, La Pocatiere, Quebec
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Mayor April Jeffs, Wainfleet, Ontario
Reeve Peter Ketchum, Township of Archipelago, Ontario
Mayor Mike Konoval, Carling Township, Ontario
Mayor Régis Labeaume, Québec Metropolitan Community, Quebec
Prefet Jean A. Lalonde, Vaudreuil-Soulanges (MRC de), Quebec
Mayor Wendy Landry, Shuniah, Ontario
Mayor Denis Lapointe, Salaberry-de-Valleyfield, Quebec
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Mayor Deb Lewis, Ashland, Wisconsin
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Mayor Jamie McGarvey, Parry Sound, Ontario
Mayor Gord McKay, Town of Midland, Ontario
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Mayor Gary McNamara, Tecumseh, Ontario
Mayor Ron Meer, Michigan City, Indiana
Mayor Don Mitchell, Whitby, Ontario
Mayor Tom Mlada, Port Washington, Wisconsin
Mayor Kevin Morrisson, Goderich, Ontario
Mayor Wayne Motley, Waukegan, Illinois

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Mayor Justin Nickels, Manitowoc, Wisconsin
Mayor Leslie O'Shaughnessy, Cornwall, Ontario
Mayor Steve Parish, Ajax, Ontario
Mayor Bryan Paterson, Kingston, Ontario
Mayor John Paterson, Leamington, Ontario
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Mayor Gary Starr, Middleburg Heights, Ohio
Mairesse Caroline St-Hilaire, Longueuil, Quebec
Mayor Elizabeth Tisdahl, Evanston, Illinois
Mayor John Tory, Toronto, Ontario
Mayor Mitch Twolan, Township of Huron-Kinloss, Ontario and Warden of Bruce County, Ontario
Reeve Ben Van Diepenbeek, Ashfield-Colborne-Wawanosh, Ontario
Mayor Mike Vandersteen, Sheboygan, Wisconsin
Mayor Scott Warnock, Township of Tay, Ontario
Mayor Lovely Warren, Rochester, New York
Mayor Karen Weaver, Flint, Michigan

Cc by email:

E. Lynn Grayson

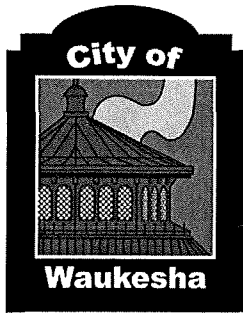
Steven S. Siros

Anne S. Kenney

Allison A. Torrence

Stephen A. Armstrong

Laura C. Bishop



OFFICE OF THE MAYOR

201 DELAFIELD STREET
WAUKESHA, WISCONSIN 53188-3633
TELEPHONE 262/524-3701 FAX 262/524-3899

Shawn N. Reilly
sreilly@ci.waukesha.wi.us

TO: Members, Great Lakes and St. Lawrence Cities Initiative
CC: GLSLCI staff
FM: Mayor Shawn Reilly, City of Waukesha
DT: September 12, 2016
RE: Response to GLSLCI criticisms of the approval of our borrowing of Great Lakes water

The board of the Great Lakes and St. Lawrence Cities Initiative recently authorized an attorney to request a rehearing of the unanimous approval by the Great Lakes Governors, with input from the Great Lakes Premiers, of Waukesha's request to borrow and return Lake Michigan water under the Great Lakes Compact. Press accounts have indicated a court challenge by GLSLCI is also possible.

Those press accounts have also included a number of misstatements by mayors about the facts of our approved proposal and about the Compact review process. As the Mayor of Waukesha, I would like to respond to the concerns that have been raised in the GLSLCI press release and in the media by members. For instance, despite various claims in the media about harm to the lake levels, our project will not create any such harm or precedent. In fact, our project will actually increase, not decrease, the amount of water in the Great Lakes watershed.

I have also attached excerpts of the actual Compact Council approval by the Great Lakes Governors, including the conclusion that our unique proposal will benefit, not harm, the Great Lakes watershed and the Root River.

The process shows that the Compact works

The Compact and the related Agreement with Canadian provinces allow for diversions in certain limited cases like Waukesha's, but with return flow. The Compact's requirement of return flow means that Waukesha's use of water **will not cause a water loss**.

The intensive scrutiny of our 3,000-page application over the past six years – including the drafting of an Environmental Impact Statement and the Regional Body's Finding of Facts by the Great Lakes Governors and Premieres – shows that the Compact is working as designed.

The experts and representatives from the states and provinces – the jurisdictions that wrote and adopted the Compact – took their responsibilities seriously. They upheld the Compact by dedicating tremendous resources from the eight states and two provinces to do their good faith, nonpolitical review of the scientific and legal issues.



Approvals for diversions – with required return flow – for communities in straddling counties can only be granted in very limited circumstances. Even though it was expected that Waukesha would apply when the Compact was adopted, approval was difficult and expensive for us to obtain under that law. The intensive and lengthy review will certainly discourage others who may someday consider applying.

And few, if any, communities will have the same set of circumstances as ours. For instance, as the review by the states and provinces noted, a switch by Waukesha to Lake Michigan surface water ***will actually result in a net gain for the Great Lakes watershed*** of more than 500,000,000 gallons of water per year, because Waukesha's current wells draw Great Lakes groundwater (without return).

The review by the states and provinces was extensive

GLSLCI claims Waukesha has not met the Compact standards. However, the eight states and the two provinces that created the Compact standards unanimously found that we do meet the standards, with the conditions they imposed after their extensive review. GLSLCI's challenge of their conclusion is also a challenge to the heart of the Compact: that the states and provinces, acting in good faith, will conduct the fact-finding that the Great Lakes Governors will base their decision on.

Racine Mayor John Dickert, in discussing the GLSLCI challenge, recently said, "This was ramrodded through, it was done in one meeting." Nothing could be further from the truth. The State of Wisconsin conducted more than five years of review, with public input in multiple locations at several stages of the process, including two public hearings in the city of Racine by the state and two public hearings in Racine by the City of Waukesha. The Great Lakes states and provinces met on seven separate days over several months to gather facts and consider Waukesha's application, prior to the final meeting by the Great Lakes Governor's Compact Council.

In addition to their hearing, the states and provinces received numerous written comments via mail and the Internet for more than two months. Michigan and Minnesota also held their own hearings. Michigan and Ontario conducted their own public technical reviews. Seven states and provinces publicly submitted written questions to Wisconsin and Waukesha and answers were publicly posted.

Despite assertions by some of your fellow mayors, alternative analysis, return flow requirements and impacts, water conservation, precedent-setting and other relevant topics were all investigated and fully considered, with extensive public input. The Compact Council clearly considered the public input, and added conditions to its approval as a result.

GLSLCI also says that additional comments were not taken on conditions adopted by the Compact Council after the hearing and public comment period. However, since the changes reflected the type of modifications that GLSLCI and others had asked for during those hearings – restricting the service area and volume of water, setting conditions and monitoring of the Root River discharge, requiring extensive reporting by Waukesha, reaffirming the authority of the Compact Council to enforce the conditions, etc. – it would serve no material purpose to take additional comments from entities that requested the changes.

Waukesha will benefit, not harm, the Great Lakes

Press accounts of statements by various mayors on the challenges have included quotes about a “catastrophic” “ecological disaster” by diversions that will “lower our waterways.”

Such rhetoric ignores one of the central provisions of the Great Lakes Compact – that water must be returned to the Lakes after use and treatment. In the case of Waukesha, ***we will use less than 1/1,000,000th of 1% of Great Lakes water*** per day. But, most importantly, ***we will return approximately 100% of that amount***, making up even the consumptive use. We will have absolutely no impact on Great Lakes levels. Return flow means any future approved projects will also be expected to have no impact on lake levels.

In fact, the only precedent Waukesha will set is to ***increase*** the amount of water in the Great Lakes watershed. Because our current deep groundwater supply is actually hydrologically connected to the Lake Michigan watershed, our switch to surface water, with return flow, “will result in a net increase of water in the Lake Michigan watershed,” the states and provinces found. ***The net increase is more than a half billion gallons of water per year.***

Waukesha’s return flow will be a benefit to the Root River

GLSLCI has also raised concerns about the impacts of our return flow on the Root River, a Lake Michigan tributary. In fact, the objective scientific review by the Great Lakes states and provinces concluded that “[t]he return of Basin water via the Root River is projected to provide a net environmental benefit to the Root River.”

Due to development, the Root River has very little flow during warmer months. It gets too low for fish like salmon and trout to pass. For decades, state and regional planners have explored ways to add flow to the river, but it was too expensive. Waukesha’s return flow water will finally add that flow, at no cost to others. It will improve the fishery, benefit a state fish egg collection facility and expand angling opportunities.

Our return flow water is actually cleaner than the water in the Root River. It will lower, not increase, the concentration of phosphorus in the river. We switched our return flow to the Root River because of those benefits, although it was \$40 million more than our original return flow route.

Discharging wastewater to a river is not unusual; it is the norm. In Wisconsin, for instance, 94% of the more than 500 municipal utilities in the state discharge their treated wastewater to rivers and streams. There is nothing unusual about our discharge, except for the high level of treatment our wastewater facility actually provides. Only a handful of communities in the state provide the same levels of treatment that we do. ***It is likely that only a small minority of GLSLCI members provide advanced wastewater treatment like ours.***

The fact-finding by the Governors and Premiers found there will be no significant individual or cumulative impacts from our return flow, saying our treatment includes “removal of chemical phosphorus, suspended solids and associated contaminants, as well as organic materials; tertiary filtration; and, ultraviolet light disinfection. The proposed phosphorus permit limits are well below the water quality standard for the Root River and are on an order of magnitude lower than many existing dischargers to the [Great Lakes] Basin.”

Waukesha itself is downstream from the wastewater facilities of two other municipalities on the Fox River. Our residents use and enjoy the river and our riverwalk. We have never had any concern or problems about the dischargers upstream. The same is true of the people downstream from our own current discharge to the Fox. In fact, several downstream communities on the Fox were concerned about the **loss** of flow from Waukesha's wastewater treatment plant and submitted comments reflecting their concerns.

Mayor Dickert – who once wanted to sell water to Waukesha – has not explained why the wastewater laws that are good enough to protect every other community will cause a “disaster” in Racine.

Mayors have also recently made public comments about untreated overflows entering the Root River or Lake Michigan. As we explained to the Regional Body during their tour of our Clean Water facility, there is no way that overflows will reach the Root River or Lake Michigan.

Waukesha does not have combined sanitary and storm sewers. But even in the unlikely event of an overflow at our plant, it has been designed so that all overflow would stay in the Mississippi River Basin. It could not get to the pumps and pipes that lead to the Root River.

Waukesha has no reasonable alternative

Waukesha's drinking water is contaminated with naturally-occurring radium, a carcinogen. We exceed federal standards and are under a court order to come into compliance.

GLSLCI argued that Waukesha could simply treat its existing water supply for radium. The Great Lakes states and provinces – as had the Wisconsin Department of Natural Resources – thoroughly examined that issue and disagreed.

Our drinking water supply, in addition to being contaminated, is **unsustainable**. A layer of shale rock above the deep aquifer restricts recharge by rain and snow in the deep aquifer. It has dropped more than 350 feet. Waukesha, as the largest user of the aquifer in southeastern Wisconsin, has the largest impacts on it. The treatment process suggested by GLSLCI wastes large quantities of water, meaning Waukesha would need to increase its pumping by 20%, offsetting the benefits of our extensive water conservation programs.

After examining Waukesha's unique facts, the fact-finding by the Governors and Premiers concluded that the deep aquifer “is not a safe or sustainable source of water.” Due to Waukesha's location near to environmentally sensitive areas, adding more shallow wells would have “significant adverse impacts to hundreds of acres of wetlands,” as well as lakes, they found.

Approval for Waukesha does not set a dangerous precedent

Claims have been made that approval of Waukesha's application will lead to hundreds of applications to borrow Great Lakes water. There are no facts to substantiate such claims. In fact, the numbers say just the opposite.

Waukesha was eligible to apply because it is a community in a county that straddles the Great Lakes Basin surface divide. The entire population of such communities is about 2,640,000 people, or the equivalent of fewer than 37 Waukesha (population 72,000).

But a community in a straddling county that wishes to apply must show that it has no reasonable alternative to a Great Lakes water supply. Few communities will be able to show similar health and sustainability issues as Waukesha.

Just as importantly, many of those communities will be too far away to make the use and return of lake water economically feasible. And most observers say that the millions of dollars and years of effort that our application required will be a big disincentive to potential applicants. The financial implications alone (\$5 million for our six-year application review and \$200 million for construction, in our case) would bar many small communities from applying. Few communities can take on those types of costs. For instance, there is only one community in a straddling county – Canton, Ohio – that is larger than Waukesha, and there are only three with populations of more than 50,000.

Only one study has ever been done to determine if there are other communities in straddling counties that may one day apply for water. In 2013, the Alliance for the Great Lakes ***found only four other communities that might have such a need*** in the foreseeable future. The combined population of those communities is less than Waukesha's.

That same study also said four communities that actually straddle the divide might apply someday. Unlike Waukesha, those communities only need permission from their home states and do not need to show need under the Compact. But not a single such community has applied or even expressed an interest to apply since New Berlin, Wisconsin was approved in 2009.

Although Mayor Dickert recently claimed that there are a “hundred-plus communities that are looking to put their straw into the Great Lakes,” he has failed to identify a single one. But no matter how many straws might ever be approved from a straddling community, ***the Compact requires an equal number of straws going back*** with return flow. A significant impact on Great Lakes water levels is simply not allowed under the Compact.

Mayors have also compared our approval to the drying up of the Aral Sea. However, the lack of a return flow requirement is what led to the demise of the Aral Sea. By understanding what has happened in the past, the drafters of the Compact ensured that such harm would not happen to the Great Lakes by requiring return flow.

I realize, of course, that many people oppose water going to a community in a straddling county under any condition. But you cannot pick and choose which Compact provisions to support. Failing to support the straddling county provisions of the Compact in good faith threatens the viability of the entire law.

Waukesha's unique circumstances also limit the precedent

The Great Lakes Governors who approved our application noted that Waukesha's ***unique circumstances*** limited any precedent for future applicants. (See <http://www.waukeshadiversion.org/media/1825/waukesha-final-decision-of-compact-council-6-21-16.pdf>.)

The unique circumstances, according to the Compact Council approval, include the court order to reduce naturally-occurring radium in our drinking water, the limited recharge of our water supply, our hydrological connection to the Great Lakes, the environmental impacts of water supply alternatives, the high quality of our water treatment, the protection against overflows, and the return of approximately 100% of the water.

Clearly, few, if any, communities in straddling counties will ever match these circumstances. Even if they do, the Compact will require that they return the water to the Great Lakes after use and treatment.

Areas outside of the city were eliminated at the request of opponents

The GLSLCI press release says it is opposed to the Compact Council's approval of Waukesha's application because of "the availability of reasonable alternatives to Waukesha for water supply, the impact of the return flow of Waukesha sewage on the Root River, and the service area that includes communities that are not part of the City of Waukesha."

The first two issues are addressed elsewhere in this document. But the inclusion of the third issue is especially surprising, since *it was completely resolved to the satisfaction of opponents with the conditions imposed during the review process.*

Waukesha's original application includes portions of four other municipalities because those areas are also in its sewer service area. However, the Great Lakes states and provinces determined that including those areas, even if it made sense from a planning perspective, did not fit within the requirements of the Compact. So the approval reduced the water supply service area so that it only includes the City of Waukesha, areas outside of the city that are already receiving Waukesha water and small portions of the Town of Waukesha that are completely surrounded by the city.

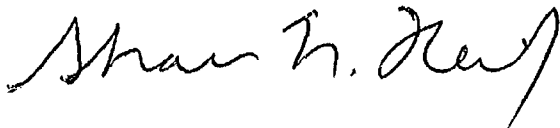
The volume allowed for Waukesha was reduced because of this reduction in the service area, from a maximum average day of 10.1 million gallons per day down to 8.2 million gallons per day.

The only areas outside of our city limits that were actually approved are about 26 acres in the City of Pewaukee and about 468 acres in the Town of Waukesha. The approval by the Governors said, "For the purposes of defining the Approved Diversion Area, the Town Islands have been included because for all practical purposes they are within the Applicant's community boundaries."

It is difficult to understand why GLSLCI is still raising – and threatening to sue over – an issue that has been resolved as they requested.

In conclusion, I hope that reviewing additional details of the fact-finding and the approval will convince you that litigation is both unnecessary and unwise. I would also encourage you to have continued dialogue with the representatives from each state and province that served on the Regional Body and Compact Council to gain an understanding of how the GLSLCI concerns were addressed in the final unanimous approval. If there truly are remaining questions or concerns, this would be the most productive way to address them.

Thanks for your considerations.



Shawn N Reilly, Mayor

City of Waukesha

Key Facts from the Great Lakes Compact Council's Approval of Waukesha's Application

The Great Lakes-St. Lawrence River Water Resources Compact Council approved Waukesha's proposal to use and return Lake Michigan water under the Great Lakes Compact. The key findings of the approval (www.waukeshadiversion.org/application) include the following (highlighting added):

- “[A]pproximately 100% of the volume withdrawn from the Basin will be returned via flow through the Root River, a tributary of the Basin. This effectively results in no net loss of water volume to the Basin.”
- “The deep aquifer groundwater supply is hydrologically connected to waters of the Basin. Continued use of that aquifer draws groundwater away from the Basin” without being returned.
- “Approving a diversion of Great Lakes water with return flow will result in a net increase of water in the Lake Michigan watershed.”
- “[N]one of the evaluated alternatives were found to be reliable sources for a long-term, dependable, and sustainable public water supply and, therefore, the Applicant is without a reasonable water supply alternative” to Lake Michigan water.
- “The Applicant’s deep aquifer wells draw from an aquifer that is part of a regional aquifer system where withdrawals have exceeded the natural recharge rate.”
- “The Applicant’s wells in the deep aquifer are in a confined aquifer which restricts recharge and contributes to groundwater decline.”
- “The Applicant’s deep aquifer wells also have total combined radium . . . concentrations that are above the Safe Drinking Water Act standard.”
- Approval will “eliminate the introduction of radium into the environment.”
- “The groundwater depletion, along with the radium concentration issue, demonstrates that the deep aquifer is not a sustainable or safe source of water for the people served by the Applicant.”
- “The proposed Exception cannot be reasonably avoided through the efficient use and conservation of existing water supplies and the Exception will be implemented

to incorporate environmentally sound and economically feasible water conservation measures to minimize water withdrawals.”

- The return flow will benefit a Basin tributary, the Root River . . . Increased flow will result in an improvement of the fishery and benefits to the Basin salmonid egg collection facility located downstream on the Root River.”
- Waukesha’s “high quality” wastewater treatment includes “removal of chemical phosphorus, suspended solids and associated contaminants, as well as organic materials; tertiary filtration; and, ultraviolet light disinfection. The proposed phosphorus permit limits are well below the water quality standard for the Root River and are on an order of magnitude lower than many existing dischargers to the Basin.”
- Waukesha must monitor the Root River “in order to adapt future return flow to minimize potential adverse impacts or maximize potential benefits.”
- “The Applicant must implement a comprehensive pharmaceutical and personal care products recycling program and continually use the best available methods to encourage the further reduction of such products into the wastewater as recommended by the Originating Party.”
- “The findings in this Final Decision are unique . . . and do not necessarily apply to any other applicant or application. The unique circumstances . . . include:”
 - The court order for Waukesha to comply with radium standards;
 - The elimination of a source of radium into the environment by ending use of Waukesha groundwater;
 - The current use of confined aquifer that has limited groundwater recharge;
 - The groundwater interconnection and the current loss of water from the Lake Michigan watershed;
 - The unavoidable significant environmental impacts of alternatives to Lake Michigan surface water;
 - Waukesha’s return of approximately 100% of Lake Michigan water;
 - The protection against sewage overflows; and
 - The quality of Waukesha’s wastewater treatment.

Prepared by the Office of the Mayor, City of Waukesha