BEFORE THE GREAT LAKES-ST. LAWRENCE RIVER WATER RESOURCES REGIONAL BODY

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

DECLARATION OF FINDING

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 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

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

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Impact Statement procedures under Wisconsin's Environmental Policy Act, with public participation.

4. Regional Body Review Process. In fulfillment of the Agreement and the Interim Procedures under the Agreement, as adopted on June 10, 2010, the public and the Regional Body 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 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 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 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 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. Two jurisdictions (Michigan and Ontario) submitted their own technical reviews to the Regional Body on March 22, 2016.

A public meeting of the Regional Body was held for the purpose of considering this 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.

The Regional Body established <u>www.waukeshadiversion.org</u> 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 the materials in the record of decision, to determine whether it meets the requirements of the Agreement and Compact criteria related to the ban on Diversions and the Exception criteria for a Diversion to a Community within a Straddling County, the Regional Body 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. (Agreement Article 103 and 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." (Agreement Article 201 ¶ 3.a and Compact § 4.9.3.a)
- **3. Applicant Without Adequate Supplies of Potable Water.** The Applicant is without adequate sustainable supplies of potable water. (Agreement Article 201 ¶ 3.a and 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.

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

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. In addition, none 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. (Agreement Article 201 ¶ 3.d and Compact § 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 Regional Body finds that the difference in an 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

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

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

⁵ Originating Party Technical Review, Section AC1.

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 Agreement and Compact require Adaptive Management approaches to conservation and management of Basin Water resources (Agreement Article 100 ¶ 1.h and Compact § 1.3.2.h) and application of a scientific basis for sound decision making. (Agreement Article 302 and 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 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. 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. The Regional Body finds that the Diversion amount that is consistent with the Agreement and the Compact is 8.2 MGD as an annual ADD to meet the projected demands ("Recommended Diversion Amount") within the Recommended Diversion Area (defined below), subject to the conditions contained in this Declaration, including, without limitation, those listed in Section III.2 below. The Regional Body finds that this Recommended Diversion Amount and Recommended Diversion Area are appropriately limited in quantity and area and are considered reasonable for the purposes for which the Diversion is proposed. (Agreement Article 201 ¶ 4.b and 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 Declaration of Finding (collectively, the "Recommended Diversion Area"). The limits of this Recommended Diversion Area are fixed as of the date of this Declaration:
 - 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 the date of this Declaration. This land is referred to as the "Current Area Served" (and colored in dark blue) on Attachment 1; and,

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

- 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 fully surrounded by territory incorporated in the City of Waukesha. For the purposes of defining the Recommended 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. (Agreement Article 201 ¶ 4.a and 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 Recommended 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 Regional Body's determination of the Recommended Diversion Amount, this corresponds to 0.8 MGD in conservation savings.
- **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 approximately equal to the volume of water withdrawn from Lake Michigan will be returned to the Lake Michigan watershed. 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. Returned water will be required to meet Clean Water Act water quality discharge standards and prevent the introduction of invasive species into the Basin. (Agreement Article 201 ¶ 3.b and 4.c and 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 periods and improving spawning

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.

conditions for salmonids to the Wisconsin Department of Natural Resources ("WDNR")¹⁰ Root River Steelhead Facility.¹¹

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. (Agreement Article 201 ¶ 3.e and 4.d and 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. ¹²

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. ¹³

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.

¹⁰ 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.

¹¹ Originating Party Preliminary Final EIS, Section 4.4.2.3.1.7.

¹² See Application, Volume 4.

¹³ See Application, Volume 2.

- **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 Regional Body 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. (Agreement Article 201 ¶ 4.f and Compact § 4.9.4.f)
- **10. Precedent-Setting Impacts.** The Regional Body 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. (Article 201 ¶ 4.d and Compact § 4.9.4.d)
 - 10a. Based on these facts and circumstances, the findings in this Declaration 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 comply with radium 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; Agreement Article 201 ¶ 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).

- **13. Regional Review.** The Application has undergone Regional Review in accordance with the Agreement and the Interim Procedures as adopted on June 10, 2010. (Agreement Article 201 ¶ 3.f and Compact § 4.9.3.f)
- **14. Authority to Condition.** The Regional Body has the authority to condition its findings in this Declaration of Finding on the Application. (Agreement Article 506 ¶ 2.c and Compact § 4.5.5.b.iii)
- 15. Enforceability. Pursuant to section 7.3.2.a of the Compact, "...the Council may initiate actions to compel compliance with the provisions of [the] Compact." The Regional Body finds that an approval of this Application; approval of this Application with conditions; or, disapproval of this Application by the Council will be an action under the provisions of the Compact and acknowledges that this will be enforceable by the Council under the Compact pursuant to section 7.3.2.a.

III.Declaration and Conditions

1. Application Satisfies Agreement and Compact Criteria

The Regional Body finds that the Application for a Diversion of Basin water to a Community in a Straddling County as submitted by Wisconsin, as the Originating Party, 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. (Agreement Article 201 ¶ 3 and 4 and Compact § 4.9.3 and 4.9.4)

2. Conditions on the Diversion

The Regional Body has found the Originating Party has the authority to manage the Applicant's Diversion of Basin water, and the Originating Party will manage and regulate the Diversion pursuant to the requirements in Agreement Article 201 ¶ 3.c and Compact § 4.9.3.c, including all conditions of this Declaration of Finding, including without limitation, the following specific conditions:

- **A.** The Applicant will implement the Diversion in accordance with the overarching principles of the Agreement and Compact.
- **B.** The Applicant must continue to implement and enforce all elements of its current water conservation and efficiency plan (and any future revisions) in the Recommended 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.
- C. 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.

- **D.** The Recommended 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 Recommended Diversion Amount. No part of the Diversion of water from the Basin authorized as the Recommended Diversion Amount may be used by the Originating Party or the Applicant for any territory outside of the Recommended Diversion Area.
- E. 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 Recommended Diversion Amount for the Recommended 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 recommendation 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 Recommended Diversion Area.
- **F.** The Application, the Originating Party's Technical Review and other comments submitted during the Regional Review process identified that the Recommended Diversion Amount for the Recommended 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 recommendation of the Diversion, WDNR should use all of its available legal authority to prevent any other groundwater withdrawals that would reverse this benefit.
- **G.** 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.** 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).
- I. 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 by the due date established by the Regional Body 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. The Annual Report must also be made available to the public on the Applicant's webpage.

- **J.** 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.
- **K.** 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.

Approved by the Great Lakes-St. Lawrence River Water Resources Regional Body on this 18th day of May, 2016

AYES: (9) Illinois, Indiana, Michigan, New York, Ohio, Ontario,

Pennsylvania, Quebec and Wisconsin

NAYS: (0)

ABSTAIN: (1) Minnesota

Chair

Great Lakes-St. Lawrence River Water Resources Regional Body

Attachment 1: Recommended Diversion Area

Current Areas Served by Waukesha Water Utility and Town Islands updated 5-17-16

