

BEFORE THE STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL MANAGEMENT DIVISION

FINDINGS OF FACT
CONCLUSIONS OF LAW
AND DIVERSION APPROVAL

The Wisconsin Department of Natural Resources (DNR) has the authority under Wis. Stat. §§ 281.343(4n)(a) and 281.346(4)(c), to approve a proposal to begin a diversion of Great Lakes water to an area within a straddling community but outside of the Great Lakes basin if certain conditions are met. DNR has reviewed an application for a proposed diversion from the City of Racine to a straddling community, the Village of Mount Pleasant, and issues the following Findings of Fact, Conclusions of Law and Diversion Approval.

FINDINGS OF FACT

The Department of Natural Resources (DNR) finds that:

- 1) The City of Racine (applicant) applied to DNR for a diversion of Great Lakes water under Wis. Stat § 281.346(4)(b) on January 26, 2018.
- 2) The application and supplemental materials included the following: The City of Racine Application (application) for a Water Diversion including a water conservation plan; Racine Water Utility Volumes 1995 through 2016, memorandum dated January 30, 2018; Racine Water Utility Customers by Class in Mount Pleasant, memorandum dated February 15, 2018; Racine Industrial Pretreatment memorandum and a copy of Racine Wastewater Utility's Industrial Pretreatment Program's Enforcement Response Plan (Approved July 20, 2013) dated April 2, 2018; Consumptive Use Coefficient memorandum (Ruekert and Mielke) dated April 3, 2018; and Foxconn's responses to DNR questions regarding Water efficiency, Cooling and Consumptive Use memorandum (Ruekert and Mielke) dated April 24, 2018.
- 3) The applicant owns and operates a public water supply system which provides Lake Michigan water for public water supply purposes to the City of Racine, Village of Sturtevant, and portions of the Villages of Mount Pleasant and Somers within the Great Lakes basin.
- 4) The Racine Water Utility is a public water system as defined by Wis. Admin. Code § NR 811.02(56), and is a public water utility under Wis. Stat. § 196.01(5), subject to the Public Service Commission of Wisconsin (PSC) regulation.
- 5) The Racine Water Utility distributes water to the public through a physically connected system of treatment, storage and distribution facilities serving a group of largely residential customers and also serves industrial, commercial and other institutional customers.
- 6) The diversion application proposes to expand Racine Water Utility service to portions of the Village of Mount Pleasant within the Mississippi River basin. The areas outside the Great Lakes basin to which the City of Racine proposes to extend Lake Michigan water are currently served by private wells. See Attachment A.

- 7) The Village of Mount Pleasant is a “straddling community” per Wis. Stat. § 281.346(1)(t).
- 8) Ninety-two percent of the total area of the Village of Mount Pleasant (approximately 20,000 acres) lies within the Great Lakes Basin. Customers in the Village that are served by a public water supply system are currently served solely by the by the City of Racine Water Utility. Eight percent of the total area of the Village of Mount Pleasant (approximately 1,800 acres) lies within the Mississippi River Basin.
- 9) The applicant requests to divert up to 7,000,000 gallons of water per day to the area within the Village of Mount Pleasant that lies outside the Great Lakes basin.
- 10) The Racine Water Utility has a water use permit, dated Dec. 8, 2011, issued pursuant to Wis. Stat. § 281.346(5)(c), with an approved water withdrawal amount of 60,010,000 gallons a day, as determined under Wis. Stat. § 281.346(4g), and established as the baseline per Wis. Stat. §§ 281.343(4t)(b) and 281.346(4e), based on the maximum hydraulic capacity of the most restrictive component of the water supply system as of Dec. 8, 2008.
- 11) The Racine Water Utility reported to the DNR that it withdrew an average of 17,144,688 gallons a day in 2017.
- 12) The Racine Water Utility has sufficient capacity to supply the proposed diversion within Racine’s baseline withdrawal amount. Racine’s excess capacity is due in part to reported decreases in water sales to industrial customers. Racine’s industrial water use decreased by 51% between 1995 and 2016, from 10.5 million gallons per day (MGD) to 5.1 MGD (see Racine Water Utility Volumes 1995 through 2016, memorandum dated January 30, 2018).
- 13) As of February 8, 2018, the Racine Water Utility served water to 6,321 customers in the Village of Mount Pleasant including 5,579 residential single-family customers, 349 residential multi-family customers, 353 commercial customers, 33 industrial customers, and 7 public authority customers (see Racine Water Utility Customers by Class in Mount Pleasant, memorandum dated February 15, 2018).
- 14) Eighty-eight percent of the Racine water utility customers within the Village of Mount Pleasant are residential customers. The proposed additional industrial and commercial customers within the diversion area will not significantly change the fact that the utility’s distribution of water to the public in the Village of Mount Pleasant will serve a group of largely residential customers.
- 15) The percentage of residential customers served within the Village of Mount Pleasant (eighty-eight percent) is comparable to the percentage of residential customers served by other municipal water suppliers drawing water from Lake Michigan (range of eighty-seven percent to ninety-three percent).
- 16) The applicant proposes to return the diverted water to the basin through the Racine wastewater treatment plant. The Racine wastewater treatment plant discharges to Lake Michigan. The discharge is regulated by a Wisconsin Pollutant Discharge Elimination System (WPDES) permit, issued pursuant to Wis. Stat. § 283.31.
- 17) The application included a letter dated October 26, 2017, indicating the willingness and capacity of the City of Racine’s Wastewater Utility to accept the return flow of the diverted water (see application, Appendix F).

- 18) The City of Racine's Wastewater Utility is designed for an average flow of 35.5 MGD. The Racine Wastewater Utility treated an average flow of 21.4 MGD in 2017. The application indicates that the diversion would result in a maximum of 4.3 MGD returned to the Racine Wastewater Utility.
- 19) The State of Wisconsin has delegated the Racine Wastewater Utility to act as the local control authority for permitting industries that discharge to the Racine Wastewater Utility. The Racine Wastewater Utility issues Industrial Wastewater Discharge Permits and requires dischargers to abide by applicable local, state and federal requirements (see pretreatment standards and requirements in Wis. Stat § 283.21(2), Wis. Admin. Code chs. NR 211, 220 through 297, and Racine Municipal Code §§ 98-150 through 98-156). Industrial customers must apply for a permit at least 90 days before connecting to the wastewater system (see Racine Industrial Pretreatment memorandum and a copy of Racine Wastewater Utility's Industrial Pretreatment Program's Enforcement Response Plan (Approved July 20, 2013) dated April 2, 2018).
- 20) Under Wis. Stat. § 281.346(4)(c)2., no surface water or groundwater from outside the Great Lakes basin may be returned to the Great Lakes basin unless the returned water will be from a wastewater treatment system that combines water from inside and outside the Great Lakes basin and that minimizes the amount of water from outside the Great Lakes basin that will be returned. The application indicates that the only Mississippi River Basin water that will be included in the return flow would be through infiltration and inflow and that all new infrastructure for the wastewater from the Village of Mount Pleasant will minimize infiltration and inflow in the diversion area.
- 21) The proposed diversion will result in a new water loss from consumptive use of up to 2.7 MGD. This consumptive use level is under the 5 MGD threshold that would require regional review by the regional body, under Wis. Stat. §§ 281.346(4)(c)4 and 281.343(4n)(a)3., Compact Section 4.9.1.c. and Agreement Article 201 1.c.
- 22) Industrial consumptive use is highly variable and site specific. However, given the projected uses of the diverted water, the estimated consumptive use of approximately 40 percent is within the consumptive use ranges for comparable processes.
- 23) The DNR held a public hearing on March 7, 2018 at the SC Johnson iMET Center, 2320 Renaissance Boulevard, Sturtevant, Wisconsin to give interested persons an opportunity to comment on the diversion application. Prior to the public comment portion of the hearing, the DNR held an informational meeting and question and answer session.
- 24) The DNR issued a summary of the comments and a response to comments dated April 25, 2018, which includes additional information and findings.

CONCLUSIONS OF LAW

DNR concludes that:

- 1) The City of Racine’s diversion application complies with the requirements of Wis. Stat. § 281.346(4)(b).
- 2) The Racine Water Utility operates a public water supply system, as defined by Wis. Admin. Code § NR 811.02(56), that would receive water from the proposed diversion.
- 3) The Racine Water Utility will serve water in the Village of Mount Pleasant, a “straddling community,” as defined in Wis. Stat. § 281.346(1)(t).
- 4) The diversion proposal is governed by the requirements of Wis. Stat. § 281.346(4)(c) because the proposal is to provide a public water supply within a single “straddling community.”
- 5) The proposed diversion is for “public water supply” purposes, as defined in Wis. Stat. § 281.346(1)(pm) (see also Wis. Stat. § 281.343 (1)(pm)) and in compliance with Wis. Stat. § 281.346(4)(c)(intro.), because the Racine Water Utility currently serves and will continue to serve a group of largely residential customers including within the straddling community of the Village of Mount Pleasant. The Utility will also serve industrial, commercial, and other institutional customers within the Village.
- 6) The City of Racine’s diversion application complies with the requirements of Wis. Stat. § 281.346(4)(c)1., because an amount of water equal to the amount of water withdrawn from the Great Lakes basin, less an allowance for consumptive use, will be returned to Lake Michigan.
- 7) The City of Racine’s diversion application complies with the requirements of Wis. Stat. § 281.346(4)(c)2., because the water will be treated to meet applicable state and federal water quality discharge standards and returned to Lake Michigan through the Racine wastewater treatment plant. The proposal maximizes the amount of diverted water that will be returned and minimizes the amount of Mississippi River Basin water that will be returned to Lake Michigan. The returned water will be required to meet applicable water quality discharge standards under Wis. Stat. § 283.31 and to prevent the introduction of invasive species into the Great Lakes basin.
- 8) The City of Racine’s submitted Water Conservation and Efficiency Plan meets the requirements of Wis. Admin. Code §. NR 852.07, promulgated pursuant to Wis. Stat. § 281.346(8).
- 9) The straddling community of the Village of Mount Pleasant includes an electronics and information technology manufacturing zone designated under Wis. Stat. § 238.396(1m). Therefore, pursuant to Wis. Stat. § 281.346(4)(c)2m., the diversion proposal is not required to be consistent with an approved water supply service area plan.
- 10) The requirements of Wis. Stat. § 281.346(4)(c)3. do not apply because the proposal will not result in a new withdrawal or an increase in a withdrawal that would average 100,000 gallons or more per day in any 90-day period.
- 11) The requirements of Wis. Stat. § 281.346(4)(c)4 do not apply because the proposal will not result in a new water loss or an increase in water loss from consumptive use that would average 5,000,000 gallons or more per day in any 90-day period.
- 12) DNR complied with the public notice and comment and public hearing procedures set forth in Wis. Stat. § 281.346(9).

APPROVAL

The Wisconsin Department of Natural Resources (DNR), pursuant to its authority in Wis. Stat. § 281.346(4) hereby approves the City of Racine's proposal to divert Lake Michigan water to an area outside of the Great Lakes basin and approves the water conservation plan, as outlined in the City of Racine's Diversion Application. This approval is subject to the terms and conditions described in this approval.

1. Approved Diversion Area

The approved diversion area includes part or all sections of 1903N22E, 2003N22E, 2903N22E, 3003N22E, 3103N22E, and 3203N22E in Racine County. Attachment B entitled "Approved City of Racine Diversion Area" shows the approved diversion area and is included herein for reference.

The subcontinental divide boundary between the Lake Michigan basin and the Mississippi River basin is identified as the watershed boundary between Hydrological Unit Code 04 and Hydrological Unit Code 07 identified in the National Hydrography Dataset available from the United States Geological Survey.

2. Approved Diversion Amount

Lake Michigan water diverted pursuant to this approval shall be used solely for "public water supply" purposes, as defined in Wis. Stat. § 281.346(1)(pm), in the approved diversion area. The DNR approves a maximum diversion amount of 7,000,000 gallons per day averaged over a calendar year.

3. Conservation and Efficiency Plan

The Conservation and Efficiency Plan submitted by the applicant meets all requirements outlined in Wis. Admin. Code Ch. NR 852 and is hereby approved.

4. Monitoring

The approved diversion amount shall be monitored by the City of Racine by measuring water sales or usage by customers of Racine's Water Utility. The City of Racine shall accurately report to DNR the amount of water diverted to the Mississippi River Basin, as specified in section 6 below.

The City shall use the boundary between the Hydrological Unit Code 04 and Hydrological Unit Code 07 identified in the National Hydrography Dataset available from the United States Geological Survey to determine the extent of the Great Lakes Basin.

As customers are added to the City's water utility, the City shall update its database of water utility customers to assign each customer of the utility to either the Lake Michigan basin or the Mississippi River basin. For residential customers, where the basin line passes through a single parcel, the City shall assign the water customer or customers that occupy that parcel to the basin in which the junction of the water main and the service line to the parcel is located. Any alternative method of assigning water customers to either the Lake Michigan basin or the Mississippi River basin must be approved by the DNR. For all other Public Service Commission

(PSC) customer classes, where the basin line passes through a single parcel, the City shall consult with the DNR to determine the basin to which to assign the customer.

The City shall assign each water utility customer within the approved diversion area to one of the Public Service Commission (PSC) categories of water user.

The City shall maintain records of quarterly or monthly sales to each water customer within the approved diversion area. The City shall read all meters within two weeks of the close of each quarter or month. The City may reassign a customer to another category to reflect water user changes.

Each new customer the city adds outside of the Great Lakes Basin will be identified as such in the city's records to monitor and record all sales or delivery of water to the diversion area.

5. Return Flow

All water diverted, less an allowance for consumptive use, shall be returned to the Lake Michigan basin. Discharge from the Racine Wastewater Treatment Plant to Lake Michigan is required to meet all applicable WPDES permit requirements under Wis. Stat. § 281.31 and to prevent the introduction of invasive species into the Lake Michigan basin. Any industrial discharger within the diversion area will be required to meet federal, state and local requirements under the Racine Wastewater Utility's pretreatment program. All water returned from the diversion area to the Lake Michigan basin will be routed through and treated by the Racine Wastewater Utility.

The Racine Water Utility, in cooperation with the Racine Wastewater Utility and the Village of Mount Pleasant Wastewater Utility, shall monitor return flow from the diversion area. Return flow from within the approved diversion area shall be monitored and reported separately from return flow from areas outside of the diversion area. The Utilities are required to obtain approval from DNR for the methods for monitoring and estimation of sanitary sewerage system return flow and the methods shall be consistent with best engineering practices.

All new water supply customers in the diversion area must simultaneously connect to sewer service¹ with return to the Racine Wastewater Treatment Facility.

6. Reporting

On or before March 1st, on an annual basis, the City of Racine shall report to DNR the following information for the prior calendar year:

1. The total amount of water sold monthly or quarterly to each category of customer within the approved diversion area.
2. The total monthly sewerage flow to the City of Racine Wastewater Plant from the diversion area.

¹ On March 15, 2018, the DNR received a request to amend the regional water quality management plan as detailed in the SERWPC Community Assistance Planning Report No. 147 (2nd Edition) *Sanitary Sewer Service Area for the City of Racine and Environs, Racine and Kenosha Counties, Wisconsin*, which was formally adopted by the Regional Planning Commission on March 7, 2018.

3. The total consumptive use as specified by the DNR.
4. A summary of the impact of the implemented Conservation and Efficiency Measures (CEMs) required under Wis. Admin. Code §§ NR 852.04 and NR 852.05, including quantifiable impacts to water use intensity, as defined in Wis. Admin. Code § NR 852.03(29).
5. A description of any additional CEMs implemented.

7. Non-Compliance

Failure to comply with the terms of this approval is subject to the penalty provisions in Wis. Stat. § 281.346(14).

8. Revisions

If the City of Racine wishes to revise the approved diversion amount or the approved diversion area, the City shall apply to DNR for approval, in accordance with the requirements in Wis. Stat. § 281.346(4) and any administrative rules promulgated by the DNR to implement this statute.



James Zellmer, Deputy Division Administrator
Division of Environmental Management

04/25/2018

Date

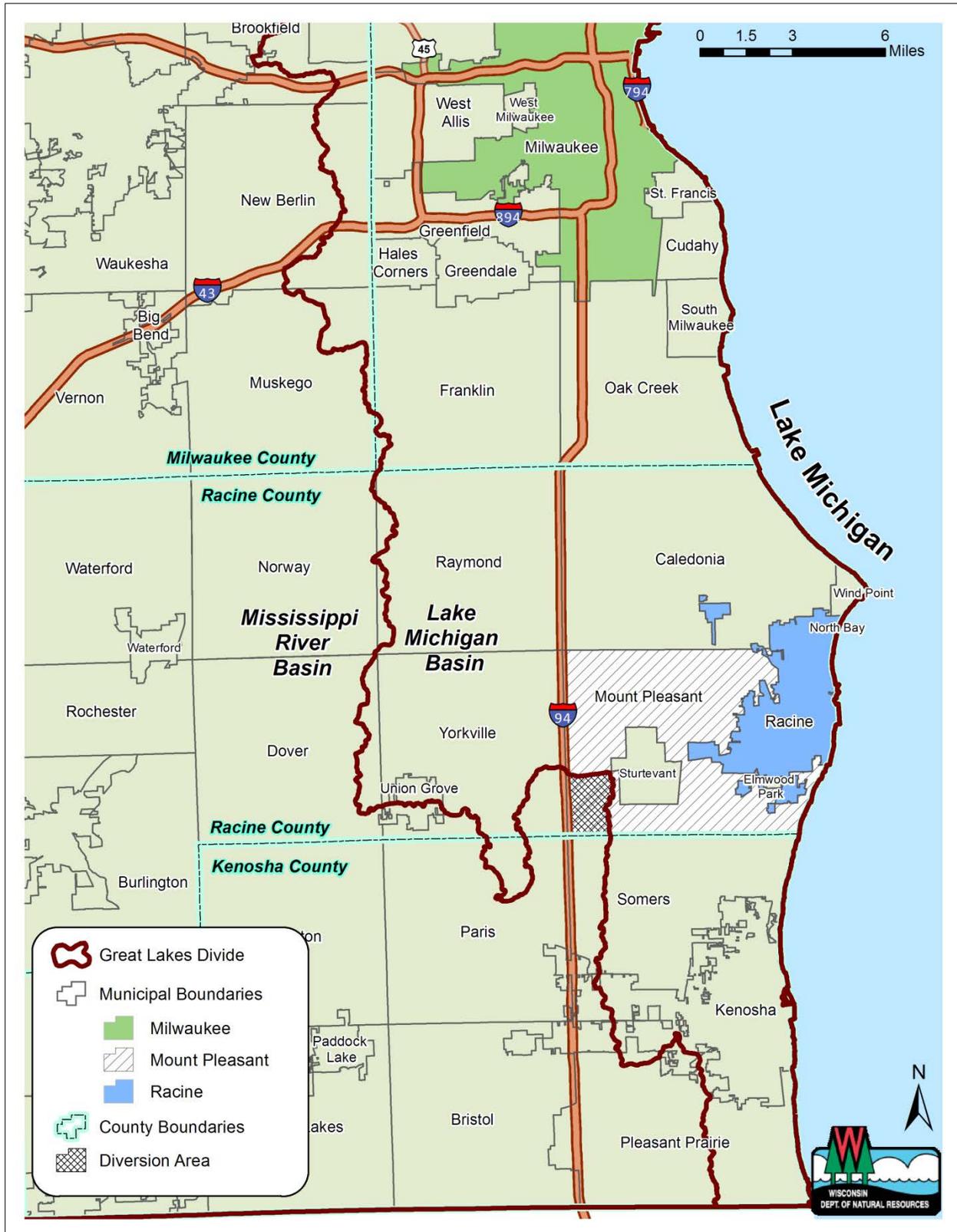


Adam Freihoefer, Chief
Water Use Section
Bureau of Drinking Water & Groundwater

04-25-2018

Date

Attachment A - Diversion Area within Southeast Wisconsin



Attachment B – Diversion Area Map (Mount Pleasant, Sections)

