



June 4, 2020

THE HONORABLE CORY MASON
MAYOR'S OFFICE
730 WASHINGTON AVE
RACINE, WISCONSIN 53403

Subject: 2020 Documentation of Reporting Requirements for the City of Racine Diversion of Lake Michigan water.

Dear Mayor Mason:

On April 8, 2020 the department received the 2019 City of Racine, Wisconsin Report on Water Diversion (Report).

The Diversion Approval (Approval) issued by the department on April 25, 2018 requires the City of Racine (City) to submit annual reporting information to the department by March 1st of the following year. Specifically, Section 6 of the Approval requires the City to report the following information for the prior year (2019) to the department:

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.
3. The total consumptive use as specified by the DNR.
4. A summary of the impact of the implemented conservation and efficiency measures required under Wisconsin Administrative Code NR 852.04 and NR 852.05, including quantifiable impacts to water use intensity, as defined in Wisconsin Administrative Code NR 852.03(29).
5. A description of any additional conservation and efficiency measures implemented.

The following paragraphs briefly summarize the department's review.

1. *The total amount of water sold within the approved diversion area.* The City sold 46,244 gallons of water in the diversion area in 2019. The City diverted an additional 2,743,000 gallons of water to the diversion area in 2019 to flush newly constructed water mains. The City diverted a total of 2,789,244 gallons of water in 2019 (or an average of 7,642 gallons per day). The City is authorized to divert an average of 7,000,000 gallons per day.
2. *The total monthly sewerage flow to the City of Racine Wastewater Plant from the diversion area.* None of the water diverted was returned to the City of Racine Wastewater Plant. The diversion report indicates that the sanitary sewer infrastructure has not been constructed yet, should be completed in 2021 and uses this as the rationale for not returning wastewater.

The diversion approval issued to the City of Racine, April 25, 2018, indicates that "all water less an allowance for consumptive use shall be returned to the Great Lakes Basin." The lack of sanitary sewer does not eliminate the need for the requirements of the approval to be met. The report indicates that the water sold was to commercial customers, but the report does not describe the water use further to indicate if the water uses generated wastewater and if so, where that wastewater was discharged.

3. *The total consumptive use.* The diversion report indicates that the total consumptive use in 2019 was equal to the total diversion, 2,789,244 gallons of water.

Consumptive use is defined in §. 281.346(1) (e) as “a use of water that results in the loss of or failure to return some or all of the water to the basin from which the water is withdrawn due to evaporation, incorporation into products, or other processes.” The diversion report does not explain how the water diverted meets this definition of consumptive use to justify that the water was not returned to the Great Lakes Basin.

4. *Water use intensity metrics.* The per capita water use calculation is described in Figure 4 of the Report. The residential per capita water use is reported as 45 gallons per capita per day in 2019. The ratio of maximum day water use to average day water use is described in Figure 5 of the Report. The maximum day to average day water use ratio was 1.55 in 2019. The average day water use per residential equivalent unit calculation is described in Figure 6 and 7 of the Report. The average day water use per residential equivalent units was 238 gallons per day per residential equivalent unit.
5. *A summary of the impacts of the implementation of conservation and efficiency measures.* Figure 8 of the Report details the City’s efforts to implement water conservation and efficiency measures.
6. *A description of any additional conservation and efficiency measures implemented.* The City has contracted with AECOM to conduct a leak detection survey and has worked with an industrial customer to reduce water use by 300,000,000 gallons of water per year by installing a new chilling plant.

The items required in the diversion report are intended to ensure that the City of Racine is in compliance with its diversion approval. The diversion report provided is not sufficient to properly assess whether “all water less an allowance for consumptive use” was returned to the Great Lakes Basin and does not explain the reported 100% consumptive use of diverted water.

Please provide the department with the following additional information:

- The purpose of the diverted water sold to customers. If the diverted water generated wastewater describe to the best of your knowledge how the wastewater was handled, for example, were holding tanks used and if so where was the water taken or discharged.
- Clarify your report of consumptive use based on the definition of consumptive use. For each water use distinguish between water loss from evaporation or incorporation into products and water not returned to the basin for other reasons.

Please be aware that for 2020 the department will expect a more thorough report. By July 1, 2020, please provide the department with a description of the expected water customers in the diversion area in 2020, the anticipated wastewater volumes and plans to collect this wastewater and return it to the City’s wastewater treatment plant.

The department recognizes that the City’s primary role is to serve water to the diversion area. However, the diversion approval granted to the City also provides responsibility to the City to ensure that all conditions of the diversion approval are met. This may require the City to coordinate with water customers, the Village of Mount Pleasant, the Department of Transportation and others to ensure that the wastewater return and other conditions of the diversion approval are met. Non-compliance with the diversion approval is subject to penalty in accordance with 281.346 (14). The department has no plans to take any further action concerning this matter if additional information is provided and the City ensures that the diversion approval is fully implemented in 2020.

The City’s 2020 Annual Report is to be submitted to the department by March 1st, 2021.

Please contact Shaili Pfeiffer, Shaili.pfeiffer@wisconsin.gov, (608) 267-7630 with any additional questions regarding your annual reporting.

Sincerely,

A handwritten signature in cursive script that reads "Adam Freihoefer".

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

cc. Keith Haas, Water Utility Manager, City of Racine (email only)
Ed Maxwell, Economic Consultant, Ruekert Mielke (email only)
Denise Schmidt, Water Division Administrator, PSC (email only)
Shaili Pfeiffer, Natural Resources Specialist, WDNR (email only)
Steve Elmore, Drinking Water and Groundwater Bureau Director, WDNR (email only)
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