State of Wisconsin **DEPARTMENT OF NATURAL RESOURCES** 101 S. Webster Street Box 7921 Madison WI 53707-7921

Tony Evers, Governor Adam N. Payne, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463



June 5, 2024

JASON PETERS (email) VILLAGE OF SOMERS P.O. BOX 197 **SOMERS WI 53171** 

Dear Mr. Peters.

The Department of Natural Resources (DNR) received Village of Somers, Somers Water Utility Annual Water Diversion Report 2023 on March 8, 2024 and subsequent revision to the report on May 31, 3024 (report).

The DNR issued the diversion approval on February 23, 2022 that requires the Village of Somers to submit annual reporting information to the DNR by March 1<sup>st</sup> of the following year. Thank you for submitting your report. The following paragraphs briefly summarize the DNR's review. Text in italic are the reporting requirements in the Village's approval.

- 1. The total amount of water diverted monthly within the approved diversion area. The Village diverted 11,277,000 gallons, or an average of 30,895 gallons per day. Somers is allowed to divert up to 1,200,000 gallons per day.
- 2. The total amount of water sold quarterly or monthly to each category of customer within the approved diversion area. The Village sold a total 4,556,068 gallons of water in the diversion area. See table 2 for details.
- 3. The total consumptive use as specified by the DNR. The report indicates that the Villages consumptive use in the diversion area was 53%. The high consumptive use was due to water main flushing for several new water mains being placed into serve in the second and third quarter of 2023.
- 4. The total monthly sewerage flow to the City of Kenosha Wastewater Plant from the diversion area. Somers's reports 5,293,000 gallons returned from the diversion area to the Kenosha wastewater treatment plant for treatment before discharge to the Great Lakes.
- 5. Water use intensity metrics. The report includes three water use intensity metrics for 2023:
  - Residential per capita water use: The Village reports 41.9 gallons per person per day. The DNR believes there is an error in the calculation for multifamily residential. Previous calculations underestimated the number of multifamily units and population. The current method is likely an overestimate of multifamily population, as it is unlikely that there are an average of 2.32 residents per bedroom in apartment and condo units.



Customer	Number of	<b>Estimated Population</b>	Volume of water	Residential gallons per
Class	Customers	served	Sold	capita per day
Single family	1019	2365	55,334,000	64
residential		(customers x 2.32)		
Multifamily	177	4044	42,656,000	28.9
residential	(Bedrooms 1,162)	(bedrooms x 2.32)		
Combined	1196	6,409	97,990,000	41.9

- The ratio of maximum day to average day water use: 2.1
- The average day water use per residential equivalent units: 176 gallons per day per REU
- 6. 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. The report summarizes the Village's implementation of CEMs in Table 6.
- 7. A description of any additional CEMs implemented. The village reports that the Sheridan Road water main replace was successful at reducing non-revenue water to 6% for the Sheridan Road area and 10% for the Village for 2023. Note that a calculation from the AWWA water audit indicates that the non-revenue water is 14%. Previously the Village reported non-revenue water as up to 30%. See pages 4 and 9 of the report.

The DNR concludes that the 2023 report meets reporting requirements. We ask that you to include the following details in Table 6 (Conservation and Efficiency Measures) in your 2024 Diversion report:

- Specific timelines or dates shall be included for the conservation and efficiency measures identified as "not started"
- Water Use Audit: Annually include the most recent audit year, and the non-revenue water percentage.
- Leak Detection and Repair Program: Include annually leak detection activities and feet of water mains replaced.
- Outreach and Education: The DNR recommends additional information and outreach on water conservation to be included annually. An example would be including brochures in mailed water bills notifying residents of water conservation resources or how to save water in their home.

Finally, the Village has made progress in estimating the multifamily population for calculation of the residential per capita water use, however, the population estimate is now very likely an overestimate. For example, a review of the information posted on UW-Parkside's website indicates that the dormitories are all doubles or singles (no triples). The 2024 report should include a further refinement of the multifamily population to better reflect the per capita residential water use.

Please contact Shaili Pfeiffer, <u>Shaili.pfeiffer@wisconsin.gov</u> or 608-219-2216 with any additional questions regarding your annual report requirements.

Sincerely,

Adam Freihoefer

Manager, Water Use Section

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Bureau of Drinking Water and Groundwater

cc: Douglas, Snyder, Baxter and Woodman Wisconsin Manager (email) Shaili Pfeiffer, DNR (email)