



May 17, 2021

Jason Peters
Village Administrator
P.O. Box 197
Somers WI 53171

Subject: Great lakes Diversion Application – Additional Information

Dear Mr. Peters:

The Department of Natural Resources (DNR) is reviewing the Village of Somers (Village) diversion application. Our principal goal of this review is to determine if the Village's application meets the Great Lakes Compact and state statutory criteria for a diversion to a straddling community. The DNR has identified some elements of the diversion application, water conservation plan and water supply service area plan that are incomplete and require additional information.

We require the following information for the diversion application.

1. The maps provided as part of the application indicate that a portion of the Village, within the Lake Michigan basin, is provided water service by the City of Racine. Please clarify how water and wastewater services are provided in this area and relationship between the Village of Somers Water Utility and the Racine Waterworks.
2. Provide incorporation maps and maps of subsequent annexations/attachments since 2008.
3. The Village has indicated that the boundaries of the proposed diversion area have changed with a recent attachment to the Village. Please provide updated maps and any other updates to the diversion application affected by the additional land area, such as updated diversion request amounts. (Note below the questions on the diversion area water demand projections.)
4. The Village and diversion area acreage are not consistent through the application materials. Please provide the acreage for the Village and the diversion area and provide a description of how the acreage was calculated.

We require the following information for the water conservation and efficiency plan.

5. Additional information on current water use trends (2015 – 2020 or most recent 5 years) including water sales total, water sales by customer class, maximum day sales, maximum to average day ratio, population served (including how the population served is estimated) and residential class per capita water use.
6. Identify the source of Table 2 of the water conservation and efficiency plan and provide the actual 2010 and 2020 estimated populations served and water demands.
7. The water conservation and efficiency plan cites a goal of reducing the Residential Equivalent Unit metric by 10%, from a 2018 baseline of 276 to 248. Provide a brief description of the REU metric, a citation for the table of REU equivalents and the planned timeline for achieving this reduction.

8. The water conservation efficiency plan indicates that water mains were intended to be replaced in 2020 (pg. 13). Provide an update on the status of these water mains replacements and a schedule or plans for replacing the referenced 1960's cast iron pipe on Sheridan Road.
9. Ch. NR 852, Wis. Admin. Code requires that PWS-3 has been implemented. Provide the URL for information on water conservation and efficiency and the Village's goals on the Village website.
10. Ch. NR 852, Wis. Admin. Code requires that all Table 1 Conservation and Efficiency Measures (CEMs) be implemented. Confirm that the Village water conservation plan will implement PWS-4 Source Management.
11. Identify actions to partner with University of Wisconsin - Parkside (UW - Parkside) on water conservation and efficiency in the past and the future. Provide additional information on when the UW - Parkside fixtures were updated and any information available on changes UW - Parkside water use since the fixtures were updated.
12. The Village is required to implement Tier 3 Water Conservation under NR852.02 (3)(a), Wis. Admin. Code, and evaluate additional CEMs in addition to those provided in the Tier 2 table. (s. NR 852.06(1), Wis. Admin. Code). Choose additional CEMs to evaluate through the Alliance for Water Efficiency tool (such as showerhead replacements, toilet replacements, more frequent billing of customers, rebate programs for more efficient appliances and plumbing fixtures), report the results of the evaluation and implement any that are cost-effective.
13. Section NR 852.05(5) requires diversion applicants to have implemented cost-effective CEMs identified in Ch. NR 852, Table 2. PWS-R2 requires the Village to have a residential water management program. Please ensure that this program is implemented and available to residential customers. The Village's water conservation and efficiency plan also indicates planned future actions, such as a future meter reading system and implementing voluntary-lawn-sprinkling restrictions to implement PWS-R2. Provide a timeline for implementing these actions.
14. Section NR 852.07(2)(d), Wis. Admin. Code requires the Village to prepare a monitoring plan to assess the impacts of CEM implementation. To comply with this requirement, the Village must identify what data will be collected, and how the information will be used to adaptively manage the Village's water resources.
15. Please provide additional information on the AWE Tracking Tool inputs are used to determine the cost-effectiveness of different CEM's.

The DNR requires the following as part of the water supply service area plan (WSSAP).

16. The Village frequently references SEWRPC as the source of maps in the WSSAP. Identify the SEWRPC report and page number for each map. If the source of the map is not SEWRPC, please provide a complete reference, including a copy of the report or a website/link to the report.
17. Section 2.2 'Land use' states that "SEWRPC 2050 land use was used to estimate population, population density, and water demand forecasts." In addition, the flow tables in the WSSAP (Tables 2, 3, and 4) reference SEWRPC for the land use. It is the DNR's understanding that the '[A Multi-Jurisdictional Comprehensive Plan for Kenosha County: 2035](#)' (not the SEWRPC 2050 Land Use plan) is the basis for these calculations. If that is accurate, please update the sections and citations with the correct source.
18. Identify and correct the citation for Figure 3 as this land use map does not match SEWRPC's Vision 2050 land use map¹.

¹ SEWRPC VISION 2050 Interactive Land Use Map

<https://sewrpc1.maps.arcgis.com/apps/webappviewer/index.html?id=1ada4a2835514455912a221d7e3bfd9c>

19. The DNR notes that the water demand coefficients used cite SEWRPC Water Supply Plan (PR 52), but the Villages demand coefficients only match SEWRPC's demand coefficients for institutional and park and recreational land uses. Describe why the Village chose a different demand coefficient from the SEWRPC Water Supply Plan (PR 52). The DNR does not require that demand estimate coefficient match the SEWRPC Water Supply Plan, but the DNR does require explanation and justification for how the water demand estimate coefficients were derived. Additionally, if the Village's residential demand coefficient use for planning purposes is different than the calculated per capita residential water use provided in the water conservation and efficiency plan, please justify this difference.

SEWRPC Demand Estimates (SEWRPC, PR52)

Water Use Type	Average day water use
Residential	70 gpd/capita
Industrial	1,500 gpd/acre
Commercial/Institutional	800 gpd/acre
Other Municipal Uses	100 gpd/acre

20. The population estimates between the reports are different and the demand numbers also do not match (1,960 people on p. 14 of the WSSAP vs. 1,937 people on p. 12 of the application). Please cite and further discuss how the population projections were developed for the WSSAP.
21. Wis. Stat. 281.348(3)(c)4. requires a WSSAP to identify water supply options to supply water within the service area. The current plan only notes the intergovernmental agreement with Kenosha and says no other options are viable or reviewed. Please identify additional options that are approvable under other applicable statutes and are cost-effective.
22. Please confirm whether the Multi-Jurisdictional Comprehensive Plan for Kenosha County: 2035 is the Village's current comprehensive plan, and whether the Village has amended the plan.

The DNR continues to review the Village of Somers diversion application. The DNR requires the Village to submit the requested information above to complete our review. Please contact me if you have questions related to requests for additional information listed above.

Sincerely,



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

Cc: Steve Elmore, Director, Bureau of Drinking Water and Groundwater Bureau (email only)
Jim Zellmer, Deputy Director, Environmental Management Division (email only)
Doug Snyder, Baxter and Woodman (email only)