



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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March 3, 2009

Steven H. Schultz, P.E.
Ruekert-Mielke
W233 N2080 Ridgeview Parkway
Waukesha, WI 53188-1020

Subject: City of New Berlin -- Diversion Application Documents

Dear Mr. Schultz:

The Department continues to review the documents requesting approval for diverting water from Lake Michigan that you submitted on behalf of the City of New Berlin. I'd appreciate it if you could respond to the following questions and comments related to the application materials.

RE: Amended Sample Application for Straddling Community Water Diversion Volume 1

1. According to Table 3 '*Residential Water Demand: 1979-2005*', which is derived from New Berlin's own data, the per capita residential water use in the City of New Berlin in 2005 is 89 gallons per day, yet the application (p. 10, 4th par.) cites a SEWRPC study that found the residential per capita water use to be 58.5 gallons per day. Please explain this discrepancy.
2. The application (p. 18, last par.) suggests that the utility would be reviewing additional conservation measures and would recommend further actions to achieve greater conservation and efficiency. Please provide an updated discussion of the most current water conservation and efficiency plan currently being implemented in the City, including an assessment of the program's effectiveness.
3. Also please explain the discrepancy between the reference on p. 20 indicating that 641 million gallons of water was pumped from Lake Michigan to in-basin customers in 2006, and the annual report from Milwaukee Water Works (as submitted to the PSC), which indicates they only sold 479 million gallons in that period. (The volumes match up much closer in subsequent years.)
4. The information summarized in Table 9 (p. 22) is derived from water use information from 2005. Please update this information using the most recent water use and sewage flow data available. Further, rather than extrapolating the City's water needs only to the year 2050, the application must also include a 20-year projection of the pumpage and sewage flows to coincide with the planning period covered by the Water Supply Service Area Plan.
5. Additionally, please indicate what the City will do with the existing wells. Identify which of the wells will be permanently filled and sealed, which will be temporarily abandoned, and which may be used with some regularity. Also, for each well indicate whether it is located in the Mississippi River Basin or the Lake

Michigan Basin and whether the well is within the water supply service area.

RE: Water Supply Service Area Plan, dated February 11, 2009

1. There is a general lack of information on volumes that are currently pumped from wells, and current volumes of purchased water from Milwaukee. Please submit the following information in graphical form, for each well (including those that were abandoned within the past 5 years), for purchased water and for any anticipated future wells that may be necessary:

- X axis, years, starting five years ago and extending up to 20 years into the future (2004 to 2029)
- Y axis, volume pumped each year, both past and anticipated.
- A trend line of the volume actually pumped each year for past years.
- For future years, two trend lines should be drawn. One showing the anticipated volume if the diversion is approved and the other depicting the projected volume if the diversion is not approved. For the wells, this should consider current aquifer conditions and aquifer drawdown trends which may limit or reduce future attainable pumpage from a particular well. There could be two predicted trends under the diversion-not-approved scenario, where one trend line allows the pumping level to extend below the overlying confining layer and another trend line that limits pumping level in the well to no deeper than the depth of the overlying confining layer.
- If the anticipated life of a well is less than 20 years into the future, the graph should show approximately when that well would be taken out of service and pumpage would fall to zero.
- The graphs should be based solely on quantity available, not on water quality issues unless water treatment is not practicable for the water from a given well. The anticipated trend lines for each well should however show anticipated pumpage schedules based on when treatment systems would be installed if the diversion is not approved.
- Assuming that additional well(s) may be needed if the diversion is not approved, include an additional graph(s) representing an additional yet-to-be-sited well(s) and the anticipated pumpage over time from that well(s).
- The above should be based on predicted changes in population.

2. It is unclear what the requested diversion volume is (MGD), both maximum and average, and potential changes over time. Ideally, we'd like to see a graph that represents this.

Please call if you have any questions. For questions related to Volume 1 of the Application, please call Larry Lynch (608) 267-7553; for questions related to the Water Supply Service Area Plan, please call George Mickelson (608) 267-7652.

Sincerely,



Eric K. Ebersberger
Water Use Section Chief
Bureau of Drinking Water and Groundwater

Cc: Mayor Jack Chiovatero
Todd Ambs