Responses to North Dakota Department of Health

Comments on the Draft Report on the Red River Valley Water Supply Project Needs and Options



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September 20, 2005

Dennis E. Breitzman, Area Manager Bureau of Reclamation Dakota Areas Office PO Box 1017 Bismarck, ND 58502

Dear Mr. Breitzman:

This department has completed its review of the draft report on the Red River Valley water needs and options.

The North Dakota Department of Health has regulatory responsibility for water quality in waters of the state as well as enforcement on safe drinking water act requirements.

The Red River undergoes extreme variability in quality and quantity resulting in excursions from numeric and narrative criteria necessary for protection of designated beneficial uses. The need for improvement in water quality is validated by the department's list of impaired and threatened waters. Various reaches of the Red River and Sheyenne River are not achieving requirements for designated beneficial uses including protection of aquatic life and recreation.

The Dakota Water Resource Act provided for meeting the comprehensive water needs which include water quality. The alternatives in the Needs and Options do not necessarily address the water quality needs in the Red River Valley. It appears to us that they emphasize the quantity needs for the municipal, rural and industrial users. The department would recommend that these options be evaluated to identify ways to address the potential water quality problems that will occur under low flow conditions. The draft environmental impact statement must provide sufficient information on water quality for the department to make an informed decision on which option provides the greatest benefit for improving and/or maintaining criteria supporting designated uses.

Providing the best possible water to municipal and industrial uses under all hydrologic conditions is of very high importance to this department. A comparative analysis of the various options should include a thorough discussion on compliance with the Safe Drinking Water Act and anticipated disinfection byproducts regulations.

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Response to Comment 1

Reclamation expanded the discussion of water quality needs in the Final Needs and Options Report in chapter two, pages 2-74 through 2-83. Water quality under low flow conditions has been modeled for each alternative. The results of those analyses are presented in the draft environmental impact statement. Additional water quality modeling is being conducted and will be presented in the FEIS (final environmental impact statement).

Response to Comment 2

See the response to comment 1. The GDU Water Supply Replacement Alternative would supply potable water that would meet present and anticipated future Safe Drinking Water Act requirements. All other options would supply water that would meet Safe Drinking Water Act regulations with treatment by communities and rural water systems.

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In the executive summary of the "Quality of Streams in the Red River of the North Basin, Minnesota, North Dakota, and South Dakota" (USGS 2004) it summarizes the water quality as generally suitable for intended uses. It also goes on to say that the excedences in water quality standards are generally brief and occurred before present-day wastewater treatment methods were implemented. The department disagrees with the general concept that the water quality down stream of current wastewater plants will not impact water quality in low flow conditions.

We are concerned that when low flow conditions are encountered below Fargo Moorhead area, the Red River could become effluent dominated. Minimal instream flows must be provided to protect aquatic life and improve water quality. The Devils Lake outlet has recently begun operation. This new source of water should be considered in refining water quality and water quantity projections.

We welcome the opportunity to work closely with you in developing strategies for providing this information. Should you have any questions, I can be reached at 328-5237.

Sincerely,

Michael T. Sauer Senior Scientist

Division of Water Quality

MTS:dlp

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Response to Comment 3

Reclamation addressed wastewater treatment plant impacts on water quality in the Final Needs and Options Report, chapter two, page 2-84. In meetings with Reclamation, North Dakota Department of Health staff have stated that the Fargo wastewater treatment plant could release treated wastewater into the Red River under low flow conditions, so no water quality or release problems were assumed in flow analysis.

Additional water quality analysis to address wastewater treatment plant impacts on water quality will be conducted in the FEIS.