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# LAKE AGASSIZ



## WATER AUTHORITY

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March 20, 2007

Dennis Breitzman, Area Manager  
Dakotas Area Office  
Bureau of Reclamation  
PO Box 1017  
Bismarck, ND 58502-1017

Subject: Supplemental Draft Environmental Impact Statement (SDEIS)  
Red River Valley Water Supply Project

Dear Mr. Breitzman:

As Chairman of the Lake Agassiz Water Authority, which represents the affected water systems in the project service area, I am pleased to inform you that we have completed a comprehensive review of the Supplemental Draft Environmental Impact Statement for the Red River Valley Water Supply Project. We feel that the report represents a complete array of options to meet the water needs in the Valley. We encourage the Bureau of Reclamation and the Garrison Diversion Conservancy District to continue the timely completion of the process. We fully support moving forward with a solution such that our communities and natural environment can be protected from the devastating potential impacts in the no-action alternative. We concur that the preferred alternative selected in the SDEIS is the best solution for meeting the Red River Valley's water supply needs.

Our Technical Advisory Committee has reviewed the report and provided us with their assessment. A copy of their technical memorandum is enclosed, and we concur with the entire assessment. Please include the report as official comments from the Lake Agassiz Water Authority.

The LAWA appreciates this opportunity to comment on the SDEIS. If you need further clarification on any of these comments, feel free to contact Al Grasser, Chair, Technical Advisory Committee, at 701-787-3777.

Sincerely,

Bruce Furness  
Chair

BF/las

Enclosure

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## TECHNICAL MEMORANDUM

To: Bruce W. Furness, Chair  
Lake Agassiz Water Authority (LAWA)

From: Allen R. Grasser, PE, Chair  
LAWA Technical Advisory Committee (TAC) 

Date: March 13, 2007

Re: **Supplemental Draft Environmental Impact Statement (SDEIS) Comments  
Red River Valley Water Supply (RRVWS) Project**

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Pursuant to an objective review of the RRVWS Project SDEIS, this Technical Memorandum was prepared by the LAWA TAC for consideration by the LAWA Board of Directors. Since it is recognized that the SDEIS was prepared by the Bureau of Reclamation (Reclamation) and Garrison Diversion Conservancy District (Garrison Diversion) to address comments received on the DEIS, the technical review of the SDEIS and supporting documentation focused on whether previous concerns identified by LAWA were addressed. As would be appropriate, the review effort also considered new information presented in the SDEIS.

Please recall that the DEIS comment letter provided concerns of the TAC in a categorized format. Such categories consisted of the following:

- Operational Assumptions
- Future Water Demands
- Water Quality
- Alternatives

To remain consistent, the organization of this document adheres to a similar categorization strategy. The TAC respectfully requests that the attached documentation be forwarded to Reclamation and Garrison Diversion on behalf of LAWA.

### **Operational Assumptions**

Prior comments requested the disclosure of detailed descriptions regarding the operational assumptions contributing to the development of the alternatives. Identified issues specifically included supplemental water supply triggers, recommended aquatic needs flow targets, and Thompson-Acker appropriations. As requested, Chapter Two (Alternatives) of the SDEIS, in conjunction with supporting documentation, has been revised to include an adequate

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description of the aforementioned operational assumptions utilized to develop the alternatives. The TAC recognizes that water supply triggers and the ability to meet aquatic needs flow targets varied between the alternatives and agrees with honoring the Thompson-Acker appropriations associated with Lake Ashtabula for all alternatives.

The information provided in the SDEIS also provides adequate justification as to how the capacities of the alternatives were determined and the objectives each alternative is capable and not capable of achieving, which lends to the process of evaluating the benefits and potential inadequacies of the respective alternatives. Some operational concerns remain; however, the remaining concerns would probably be most appropriately addressed during the preliminary design, final design, and operational phases of project implementation. The description of the operational assumptions and the ability to draw important conclusions thereof is viewed as a significant enhancement of the DEIS and deemed acceptable by the TAC.

### **Future Water Demands**

A sensitivity analysis was authorized and completed to resolve issues pertaining to the development of population projections, future water demand calculation methodologies, and the application of water demand reduction strategies. Based on the results of the sensitivity analysis, it was concluded that the Scenario 1 water demand projections developed by Reclamation would adequately represent the overall future water demands of the Red River Valley. Therefore, the alternatives presented in the SDEIS do not reflect the consideration of two sets of water demand projections (i.e. the consideration of Scenario 2 demands is excluded). It should be noted, however, that the alternatives were modified to reflect revised operational assumptions, some of which were recommended by LAWA and its stakeholders. For evaluation purposes, the TAC accepts the use of Scenario 1 water demand projections as the basis for developing RRVWS Project alternatives, as it appears that capacity nominations on behalf of stakeholders will ultimately govern capacity.

Previous comments included concerns related to project features intended to meet peak day water demands. Such features consist of utilizing relatively large water storage facilities, employing aquifer storage and recovery (ASR), and the possibility of purchasing irrigation rights in the Elk Valley Aquifer. The concerns associated with large storage facilities and ASR are adequately noted in the SDEIS, and purchasing Elk Valley Aquifer irrigation rights has been eliminated as a viable project feature from all considered alternatives. As such, previous concerns expressed by the TAC have been adequately addressed.

### **Water Quality**

Water quality is a primary concern of LAWA and its stakeholders due to the relatively limited quantity of high quality water sources and poor existing surface water quality of the Red River Valley. The concerns pertaining to water quality are heightened with respect to the RRVWS Project because of the low flow conditions associated with drought and the dependence on return flows (wastewater discharge), the combination of which could impart elevated concentrations of undesirable water quality parameters. Per comments provided following the review of the DEIS, a considerable amount of effort was expended to provide an improved

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assessment of potential water quality degradation implications. Such analyses are very well explained and documented in the SDEIS and supporting reports. Although such efforts do not lessen the level of concern with respect to water quality, it is recognized that due diligence has been put forth to satisfy the demand for needed information. The current position of the TAC is predicated on the last statement provided on page 9 of the SDEIS Executive Summary in the first paragraph under the heading of Water Quality Need, which states the following: "Given the generally adequate historic and predicted future water quality in streams, the water quality need identified through the Needs and Options Report and other studies did not significantly influence the development of the Project alternatives."

**Alternatives**

For the reasons listed in the SDEIS, the TAC concurs with the elimination of the Lake of the Woods Alternative and the GDU Replacement Water Supply Pipeline Alternative. The TAC is aware that the remaining alternatives were revised since the completion of the DEIS per changes to the operational assumptions, the consideration of aquatic needs minimum flow requirements, and the elimination of unfeasible project features (purchase of irrigation rights in the Elk Valley Aquifer).

The TAC also recognizes that revisions were made to some of the alternatives in an attempt to reduce the cost of the alternative and improve the alternative with respect to cost competitiveness when compared to other alternatives. As a result, the capabilities and benefits of the alternatives vary. Consequently, it is important to identify both project costs and quantifiable benefits as well as non-cost benefits and technical feasibility when evaluating and comparing the alternatives. Upon review, it appears that adequate consideration was given to costs, quantifiable benefits, non-cost benefits, and technical feasibility, which led to the authors' justified selection of the GDU Import to the Sheyenne River Alternative over all of the other alternatives.

To that end and as a significant improvement to the document, the TAC commends the inclusion of lists of advantages and disadvantages for each alternative as a means for conducting an evaluation of the alternatives. First and foremost, the No Action Alternative is explicitly noted as not meeting the purpose and need of the RRVWS Project. Furthermore, many of the advantages and disadvantages reflect the observations presented in previous comment letters submitted by LAWA and its stakeholders. With the exception of the concern pertaining to potential concentrations of nitrate exceeding the maximum contaminant level of 10 milligrams per liter (mg/L) if a supplemental water supply is obtained from aquifers in Minnesota under the Red River Basin Alternative, each of the previous alternative concerns identified by LAWA are adequately noted or discussed in the SDEIS.

The SDEIS, in combination with the Final Needs and Options Report and supporting documentation for each, justifies the need for the RRVWS Project and the implementation of the most appropriate action alternative. The TAC applauds the selection of the GDU Import to the Sheyenne River by Reclamation and the State of North Dakota as the preferred alternative and concurs with the criteria and associated objective reasoning that contributed to this decision. Most notably, no significant environmental impacts are identified with the implementation of the

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GDU Import to the Sheyenne River. Instead, the GDU Import to the Sheyenne River is identified as providing positive environmental benefits. As important items of note, the following are reiterated from previous comments:

- The challenge associated with transporting water from the Red River to the City of Langdon and Langdon Rural Water District to meet projected shortages under GDU Import to Sheyenne River Alternative remains to be addressed. In fact, this needs to be addressed under all of the remaining considered action alternatives.
- The suggested use of the Wild Rice River or Rose Creek to divert project flows from the Sheyenne River to the Red River upstream of intake facilities utilized by Fargo and Moorhead does not appear to be addressed in the SDEIS.

Such options should be reviewed and evaluated in subsequent phases of project implementation.

### **Conclusion**

The TAC appreciates the significant amount of effort expended to address its comments and concerns expressed in regards to the DEIS. While addressing previously identified concerns noted above, the SDEIS also provides an extensively detailed discussion of the efforts put forth to alleviate concerns expressed by other entities. For instance, while noting that major existing water transfers presently occur between the Hudson Bay, Missouri River, Mississippi, and Great Lakes basins (some without biota transfer control mechanisms), the risks associated with biota transfer are addressed by identifying means and methods to minimize the risk of transferring invasive species. In addition, the extensive work to complete the depletion analysis of the Missouri River as a consequence of importing water to the Red River Valley reinforces the notion of harnessing the most prevalent water resource available in North Dakota to sustain an adequate quality of life for communities, rural water systems, and their respective water consumers comprising the RRVWS Project area.

In summary, the SDEIS: 1) defines the purpose and need for the RRVWS Project; 2) presents alternatives as potential candidates to meet the purposes and need; 3) discloses the potential effects (environmental impacts) associated with the implementation of each alternative as compared to the No Action Alternative; 4) provides justification as to the extent and applicability of each potential effect with respect to the individual alternatives; and 5) in compliance with the National Environmental Policy Act (NEPA), identifies the comprehensive process employed to select the GDU Import to Sheyenne River as the preferred alternative. Therefore, the TAC believes that the SDEIS and supporting documentation serve as a key landmark toward the timely implementation of the RRVWS Project.