

# **Responses to the Friends of the Earth**

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

27 September 2004  
Registered Mail

Red River Valley Water Supply Project  
Bureau of Reclamation  
PO Box 1017  
Bismarck, North Dakota  
USA 58502-1017

Re: Public Review of *Draft Report on the Red River Valley Water Needs and Options* Prepared by Dakotas Area Office, Bureau of Reclamation, U.S. Department of the Interior (undated)

In response to the open letter from Dennis E. Breitzman, Area Manager, please be advised that Friends of the Earth Canada considers that none of the options put forward in the subject report are acceptable. More specifically, we do not consider that adequate information has been provided to permit selection among them, nor, more importantly, to justify the selection of any of them. If anything, their high cost suggests that a range of alternatives that do not depend on physical infrastructure be considered.

Our objections are summarized below under three categories: environmental, political, and economic.

#### Environmental Reasons for Concern

With one exception, the options put forward all involve greater or lesser diversions of water from one basin to another. Such inter-basin diversions have proven problematic in almost every case where they have been permitted because of greater than expected environmental effects or, in some instances, totally unexpected environmental effects. The passage of pathogens, alien species, and other forms of biota are almost inevitable despite the presence of filters or other efforts to block them. The relatively minor (in volume) diversion of water via the Devil's Lake outlet to the Sheyenne and then the Red River and into Canada is a case in point. Chemical testing seems likely to indicate the presence of at least some pathogens in the water from the initial three-day test, and direct observation indicates that some fish species were also able to evade the blocks and move toward if not yet into the Sheyenne.

Even when inter-basin transfer is not an issue, and even more so when it is, the need for adjusting riverbed channels to ensure their ability to carry the enhanced quantities of water is of great concern. Again looking at experience with the Devil's Lake drain into the Sheyenne, the options will likely require straightening and smoothing the river courses, a process that is almost surely

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## Response to Comment 1

The purpose of the action is to meet the “comprehensive water quality and quantity needs of the Red River Valley” [DWRA (Dakota Water Resources Act) Section 8(c) (2) (A)] through year 2050. The needs are defined per Congressional direction in the DWRA as MR&I (municipal, rural, and industrial) water supplies, water quality, aquatic environment, recreation, and water conservation measures [DWRA Section 8(b)(2)].

Reclamation evaluated these needs in the Final Needs and Options Report (*Final Report on Red River Valley Water Needs and Options*), which is a needs assessment and engineering study. A multi-step process was used to identify alternatives for further study in the DEIS (Draft Environmental Impact Statement). Alternatives were formulated through a systematic process using public involvement, technical information, interdisciplinary and interagency discussions, and professional judgment. NEPA (National Environmental Policy Act) and Council on Environmental Quality regulations require agencies to evaluate a range of reasonable alternatives. To be considered reasonable, an alternative must: 1) meet the identified purpose and need for action, to a large degree and 2) be practical and feasible from a technical and economic standpoint. Reclamation has met the appropriate standards.

## Response to Comment 2

The selection of alternatives or the justification for those alternatives was not the purpose of the Needs and Options Report. The Needs and Options Report is a needs assessment and engineering study that was appended to the DEIS. The purpose of the DEIS is to evaluate alternatives to meet the long-term water supply needs of the Red River Valley. The Needs and Options Report combined with the draft and the final environmental impact statements will provide information for selection of the preferred alternative.

## Response to Comment 3

Water treatment plants to address the import of Missouri River water are described in the Final Needs and Options Report, chapter four, pages 4-6 through 4-9 of the report. Reclamation also produced a study titled *Water Treatment Plant for Biota Removal and Inactivation Preliminary Design & Cost Estimates, Red River Valley Water Supply Project*, which describes these plants in more detail.

All of the alternatives considered in the DEIS that would use Missouri River water include treatment and control systems that would minimize the risk of biota transfer. The U.S. Geological Survey and the National Park Service, under an interagency agreement with Reclamation, have evaluated the risks and potential consequences of interbasin biota transfer for the DEIS. These analyses indicate that the risk of biota transfer through project-related pathways would be very low with the control systems proposed for the Missouri River import alternatives.

Reclamation has no responsibility for the Devils Lake Outlet, which is a project of the state of North Dakota. The cumulative effects of the outlet and the proposed Red River Valley Water Supply Project are evaluated in the DEIS.

## Response to Comment 4

The Needs and Options Report is not the appropriate place to address riverbed channel concerns. That concern has been addressed in the Surface Water Quantity and Natural Resources Lands sections of the DEIS.

## Response to Comment 4a

The Devils Lake federal outlet projected and evaluated much higher flows than are proposed in alternatives for this Project (Red River Valley Water Supply Project). However, Reclamation evaluated the original Corps (Corps of Engineers) studies for the analyses made for the DEIS. This is discussed in the Surface Water Quantity and Natural Resources Lands sections of the DEIS. No features in the Project incorporate straightening and smoothing of the Sheyenne River channel. Similarly, at no time would Project water releases equal or exceed the natural channel capacity in the affected reaches of the Sheyenne or Red Rivers.

going to promote erosion and lead to higher sediment loads down stream. Armouring the banks of the river can, if done properly, reduce the erosion, but, with each such step, the watercourse becomes less a river and more a canal, less a natural feature and more an artificial conduit. As a result, wetlands and other features that, ironically, serve to store flood waters and replenish aquifers so that the water becomes available more slowly to counter the effects of low-rainfall seasons and even drought years, will, in all likelihood, be adversely affected.

#### Political Reasons for Concern

Because the final destination of all of the options proposed is the Red River, which is a trans-boundary river, they raise a number of issues of international concern. Most importantly, in addition to ecological and biological effects downstream, water flows would be altered with concerns for flooding north of the border. Further, to the best of our knowledge, there is as yet no formal agreement between Canada and the United States on the allocation of trans-boundary waters that flow from south to north across the border in the Prairie Provinces.

We also note that one option proposes to take water from Lake of the Woods, which is a boundary water and which would therefore trigger an automatic reference to the International Joint Commission. However, even prior to that reference, objections to this option are likely to be heard from the thousands of people on both sides of the border who use this lake for recreation. Beyond this option, there is already on record a decisive negative decision on the original Garrison Diversion project. It is therefore difficult for us to understand why similar options for diverting water from the Missouri River are being contemplated at this time.

Finally, we are unaware of negotiations with the First Nations groups on either side of the border that would permit these major land-use activities affecting reserve lands to go forward.

#### Economic Reasons for Concern

Friends of the Earth Canada takes no formal position on the cost analyses put forward by the Bureau of Reclamation. Not only are we unable to invest the time or money necessary to verify or challenge the costs in general, but, more important, in the absence of any indication of the value of the water in its uses over time, it is impossible to rank the options proposed. As you are aware, water for drinking and selected other purposes (mainly within households) has a high value, but water for most other purposes is distinctly less valuable, particularly if its absence is periodic, as it would be during all but the most prolonged droughts. In the draft report, all "needs" seem to be considered equally valuable, except perhaps for summer lawn and garden watering.

Further to that point, we are surprised by the absence of what amounts to a "null" hypothesis. That is, no information has been provided of the costs to the people of the Red River Valley should no new construction be undertaken and, at some point in the future, the region faces a drought of several years duration. (We recognize that data are provided in Table 5.3.3 on "no action" scenarios, but at no point do we find the information converted from the model of hydrologic flows to estimates of economic

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## Response to Comment 4b

The Needs and Options Report is not the appropriate document to address concerns about wetlands. That has been addressed in the Natural Resources Lands section of the DEIS.

## Response to Comment 5

The Needs and Options Report is an assessment of needs and an engineering study to develop potential options for the Project. The DEIS evaluates and discloses potential impacts of the proposed Project. We note that the statutory provisions of NEPA (and the Council on Environmental Quality's regulations implementing NEPA) do not require assessment of environmental impacts within the territory of a foreign country. However, as a voluntary measure, the DEIS this document includes information on impacts of the proposed action that may affect areas within Canada solely because of the unique aspects of the Project (including, for example, an alternative that involves a lake straddling the international border).

## Response to Comment 6

See response to comment 5 above. We are aware that diversions from the Lake of the Woods must be approved by the United States or Canada within their respective territories and by the International Joint Commission.

## Response to Comment 7

See response to comment 5 above.

## Response to Comment 8

The water needs identified in the Needs and Options Report were specified in the Dakota Water Resources Act of 2000 (DWRA). They are MR&I supplies, aquatic environment, water quality, recreation, and water conservation measure [DWRA Section 8(b)(2)]. The objective of the Red River Valley Water Supply Project is to meet municipal, rural, and industrial water needs with water conservation through the year 2050, while managing water resources to meet water quality, aquatic environment, and recreation needs. The economic impacts of all alternatives are addressed in the DEIS.

## Response to Comment 8a

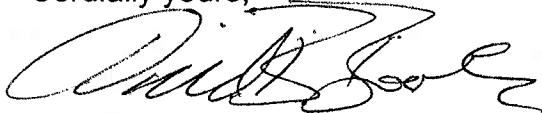
The purpose of the Needs and Options Report is to assess water needs and to develop potential options to meet those needs in an engineering report. The DEIS evaluates and discloses the environmental impacts of the proposed Project, including the impacts of not taking this federal action. The DEIS documents the impacts and costs of the future without the Project in the Red River Valley. This alternative is referred to as the No Action Alternative.

effects.) Given the need for discounting of future costs of damage and of temporary mitigation measures (for example, insurance for crop or industrial losses in times of prolonged drought and trucking of water to smaller communities), it is not obvious that current expenditures for investments in physical infrastructure are a better choice.

Finally, in the one area where we can at least offer comparable analyses, we were very surprised to note the low levels of anticipated savings from greater water efficiency and further conservation measures – 6 to 9%. It would be a rare community that could not gain that much alone from measures aimed at reducing leaks of water in trunk and distribution lines, and even more if coupled with a system of reducing leaks within houses, buildings and factories. The list of conservation measures is quite modest in scope and in detail. For example, Table 2.5.1 labels a 1.6 gallon-per-flush toilet as ULF. The term itself is not defined but presumably means Ultra-Low Flow. Toilets designed for 1.6 gallons per flush may represent an improvement over models conventionally in use in the region, but they are far from ULF standards, which now offer two-position flushing with 1.5 and 3.0 litre flushes (0.4 and 0.8 gallons per flush). Obviously, it would require a matter of years and no doubt financial incentives to induce conversion of all or even a substantial proportion of existing toilets to true ULF models. (Retrofit is typically more expensive than installation in new homes and buildings.) Nevertheless, simply on the basis of these few points, we conclude that the *Draft Report* grossly understates the potential for water conservation.

For all of these reasons, Friends of the Earth Canada suggests that the options proposed are totally inadequate to move forward to a selection process. Additional infrastructure construction of the scale envisaged by this report, particularly when it involves inter-basin transfer of water, is a highly questionable option for protecting the Red River Valley from the periodic droughts that, we agree, will occur in the future. We therefore urge consideration of options that do not involve the construction of extensive masses of physical infrastructure.

Cordially yours,



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# Responses to the Friends of the Earth

## Response to Comment 8b

The Needs and Options Report is not the appropriate document to estimate economic effects. That has been addressed in the Social and Economic Issues Section of the DEIS.

## Response to Comment 9

A water conservation report, called *Water Conservation Potential Assessment*, was developed as part of the Needs and Options Report. That report evaluates existing water conservation measures employed in the Red River Valley and identifies realistic and sustainable measures that could be used as part of the Project to reduce water demands.



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