

RED RIVER VALLEY WATER NEEDS

HEARING
BEFORE THE
SUBCOMMITTEE ON WATER AND POWER
OF THE
COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE
ONE HUNDRED SEVENTH CONGRESS

SECOND SESSION

TO RECEIVE TESTIMONY ON RED RIVER VALLEY WATER NEEDS

DECEMBER 9, 2002

FARGO, ND



Printed for the use of the
Committee on Energy and Natural Resources

U.S. GOVERNMENT PRINTING OFFICE

85-416 PDF

WASHINGTON : 2003

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RED RIVER VALLEY WATER NEEDS

MONDAY, DECEMBER 9, 2002

U.S. SENATE,
SUBCOMMITTEE ON WATER AND POWER,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Fargo, ND.

The subcommittee met, pursuant to notice, at 7 p.m. at the American Legion Hall, 505 Third Avenue North, Fargo, North Dakota, Hon. Byron L. Dorgan presiding.

OPENING STATEMENT OF HON. BYRON L. DORGAN, U.S. SENATOR FROM NORTH DAKOTA

Senator DORGAN. I will introduce Patty Beneke, professional staff member of the Senate Energy Committee, who has joined us this evening in Fargo. Jonathan Black has also joined us. Jonathan is right over here. And I'm going to mention to you the witness list this evening as we proceed.

We are going to hear first from the Bureau of Reclamation, Dr. Maryanne Bach. Then we are going to hear from the State Water Engineer for North Dakota, Mr. Dale Frink. Then the Honorable Mike Brown, mayor of the city of Grand Forks. The Honorable Bruce Furness, the mayor of Fargo.

The second panel will be Mr. Warren Jamison, manager of the Garrison Conservancy District. Then Genevieve Thompson, vice president and executive director of the Audubon Society. And then Mike Dwyer, executive director of the North Dakota Water Users Association.

I would also ask anyone else who is present who wishes to submit statements, but not appear as a witness tonight, if you wish to submit statements, we will keep the record of this hearing open and will accept statements as part of the permanent hearing record for two weeks following this hearing.

Let me begin. I will give a very brief statement because I want to get on with the discussion of what's happening on this issue. There aren't many subjects more important to our State than water. You can't have opportunity, development, economic growth without water policy that assures a supply of water. We have plenty of water issues in our State, and plenty of problems. On the other side of our State, we have a problem with the Missouri River and the master manual of how the Missouri River is managed. The Corps of Engineers manages the Missouri River in a way that, in my judgment, unduly benefits downstream States and cheats the upstream States.

For 12 years the Corps of Engineers has been rewriting a master manual. For 12 years. Now, you know, we can be patient, but patience ought not have to extend to 12 years.

I met with the general just last week from the Corps of Engineers on this subject once again. It's not clear to me when they're going to release the preferred alternative on the Missouri River master manual. But this State has every right to be completely out of patience. They are supporting a minnow of a barge industry down south. We've got a whale of recreation and fishing and tourism industry up north. And the fact is we are shortchanged in a way that's terribly unfair as they manage this river. We are going to keep putting pressure on them, dealing with that problem on the Missouri side of this State. But the Missouri River side is important to the Red River as well because in the Dakota Water Resources Act we included a provision that calls for a \$200 million authorization, and a process by which water could be delivered to eastern North Dakota if a study determines that's what is necessary in order to assure water supply to eastern North Dakota. First and foremost, there should be studies to determine how much water is needed in eastern North Dakota, and, second, how you satisfy that need. That's the two-step process.

This is not idle thinking about our water issues. Some in this room, I suspect, have seen the Red River run dry. Anybody here seen the Red River dry? Yes. And I've seen pictures. I wasn't here then, but those of you who have seen it understand that we can't be guaranteed there is always going to be water in that Red River. And if we don't have water in that Red River, economic growth and opportunity is gone. You cannot support the kind of cities we are building along the Red River without an assured supply of water.

There is a two-step process in this piece of legislation we passed a couple years ago. One, identify the needs for water in the Red River Valley, and then, two, identify how we satisfy those needs.

Now the first step was to have been done by the Bureau of Reclamation in December 2001. That was to have been a draft environmental impact statement. December 2001. We are now told by the Bureau of Reclamation that it will be done in December 2005. It's been delayed 4 years. It's not acceptable to me, nor should it be acceptable to anybody in eastern North Dakota.

And what I want to do tonight is find out why. Why the delays. What is happening is the people at the Federal level say, well, sure, we have had some problems that have resulted in some delays, but fact is, the State of North Dakota and the Conservancy District, it's taken them some while to reach agreement on various things. I don't know where all this stands. All I know is this: This State shouldn't have to wait year after year after year after year to get its water problems solved. It's not fair. It's not fair when the Corp of Engineers does it, it's not fair when the Bureau of Reclamation does it. We need to find people to get together and make decisions and move ahead. So that's the purpose of this hearing, and I very much appreciate all of your interest. As I said when I started, water is very important. You can't do the things we want to do in this State today and for its future if you don't have assured and adequate supply of water. That's what this hearing is about.

Let me, with that statement, invite the first witness panel to come forward. Dr. Maryanne Bach from the U.S. Bureau of Reclamation. Dr. Dale—Mr. Dale Frink, excuse me, State Engineer. Dale, I keep making you a doctor here.

Mr. FRINK. That would be fine.

Senator DORGAN. Be an easy way to get one, if somebody would say it, right?

Mr. FRINK. That's right.

Senator DORGAN. The Honorable Michael Brown, mayor of the city of Grand Forks. The Honorable Bruce Furness, mayor of the city of Fargo.

I have also been told that State Agriculture Commissioner Roger Johnson is with us, who works on the Industrial Commission and has his hand deep in water policy in North Dakota. Roger, thank you for being with us as well.

Maryanne Bach, thank you for joining us tonight. You are presenting testimony on behalf of the Bureau of Reclamation. Why don't you pull the microphone as close to you as is possible and then why don't you proceed with what I have asked everyone to summarize. And we will put the entire statement in the record.

**STATEMENT OF MARYANNE BACH, GREAT PLAINS
REGIONAL DIRECTOR, U.S. BUREAU OF RECLAMATION**

Dr. BACH. Mr. Chairman, I ask that my complete testimony as presented to the committee could be entered into the record and, I will abbreviate from that.

I appreciate the opportunity to be here this evening to testify on behalf of the implementation of the Dakotas' Water Resources Act, and particularly our activities with regard to the Red River Valley Water Needs study and CIS.

I would like to reflect back on the relationship and the activity of the Bureau of Reclamation and the State of North Dakota prior to the passage of the Dakotas Water Resources Act.

We did enter into a memorandum of agreement in good faith without anticipation as to whether the statute would pass Congress or not. And we did use the authority that we believe existed under the 1986 Reformulation Act and began our activities 6 months prior to the passage of the Dakota Water Resources Act.

When the act did pass, Mr. Chairman, we continued our activity under that original MOU. We were confronted, particularly the Bureau was confronted with several allegations of illegally interpreting the Dakotas Water Resources Act and we took a pause. We discussed it with the State and looked at the provision of the DWRA as it was passed and felt there was a need in order to protect the process and integrity of the process that we didn't have to renegotiate the MOU.

I appreciate the effort of Dale Frink on behalf of State and the district in negotiating a new MOU, and I believe we all went forward and did that on the behalf of the citizens of the State of North Dakota.

In that same time frame, Mr. Chairman, the Bureau did continue with a plan of studies. We did also write all of the necessary contracts that would be necessary to get the study underway.

The study that is instructive for the Secretary of the Interior to produce under the DWRA will be 60 percent contracted out. The 40 percent that will be handled by the Bureau of Reclamation will be also handled by multiple offices in order to reach the utmost efficiency.

The schedule that you raise, and your concern with the schedule, frankly, we share a similar concern for the time it takes to analyze these issues.

I am pleased to say that we did have a notice of intent for the EIS which was issued in October, and there were public meetings that were held throughout the State, six different public meetings that were held at the end of October and early November that did raise a number of additional issues. And under the NEPA—National Environmental Protection Act—we are required to consider those pieces of information that come out in public scoping.

We are using all available information from prior studies. You are familiar with Phase I and Phase II of prior studies that were conducted under the 1986 act, and that all that information that was given is essential and is quite relevant.

I know there are some other communities that are raising the question as to why anything more would need to be studied, and yet there are others in basin who do feel that they need more information and a better level of details and the costs that are associated with it.

So, what Reclamation is faced with is taking a set of studies that are what is called at the appraisal level, and taking it to what is called the feasibility study. Feasibility level studies provide enough detail that any engineering firm who is going to bid for that construction is able to do so, and that we have sufficient levels at both the State—sufficient information at both the State and Federal levels so that all communities know the costs that are involved.

There were some additional needs that were identified in DWRA that were not covered in the Phase I and II reports. Specifically, we were instructed under DWRA to identify aquatic needs, recreation needs and water conservation measures.

So, there was a need for a series of meetings for supplemental information in regard. It has been raised, and I appreciate the points that are brought forward by the mayor of Fargo. Bruce and I have talked. I've been working with Mayor Furness, for some time. We sit together on the International Joint Commission, Red River Valley which—Red River Basin, which I co-chair on behalf of the United States. You have spoken with me, your staff has spoken to me on numerous occasions about the schedule.

I would like to close my comments, Mr. Chairman, by saying that this particular region, Great Plains Region, I operate in nine different States, and the severity of water problems are not in any way to be minimized. They are of the magnitude that require the attention and diligence of every Federal employee in our agency. Therefore, I'm committed to sit down with the parties and to look at the schedule as we previously agreed to, and any and all opportunities that we have to cut back on the schedule, I am pleased to do so. I want to do that in an informed environment so that those communities who are planning for a certain amount of detail. If,

in fact, they can operate with a different level of detail, then we can make the accommodations in the report.

I want to make sure whoever had expectations, whatever communities did have expectations that we can properly meet them, but find a way to balance it with the schedule involved.

I appreciate the opportunity to testify.

[The prepared statement of Dr. Bach follows:]

PREPARED STATEMENT OF MARYANNE BACH, GREAT PLAINS REGIONAL DIRECTOR,
U.S. BUREAU OF RECLAMATION

I am Maryanne Bach, Bureau of Reclamation Regional Director for the Great Plains Region headquartered in Billings, Montana. I appreciate the opportunity to participate in this field hearing on Red River Valley water needs.

The Dakota Water Resources Act of 2000 (DWRA) was signed into law on December 21, 2000 as Public Law 106-554. DWRA amended the 1965 authorization of the Garrison Diversion Unit (Public Law 89-108), the 1986 Garrison Diversion Unit Reformulation Act (Public Law 99-294), and the Reclamation Projects Authorization and Adjustment Act of 1992 (Public Law 102-575).

DWRA requires the Secretary of the Interior to conduct a comprehensive study of the water quality and quantity needs of the Red River Valley in North Dakota and possible options for meeting those needs. DWRA further requires that not later than 1 year after the date of enactment the Secretary and the State of North Dakota shall jointly prepare a draft environmental impact statement concerning all feasible options to meet the comprehensive water quality and quantity needs of the Red River Valley and the options for meeting those needs, including the delivery of Missouri River water to the Red River Valley. Should the draft EIS not be completed within 1 year following enactment, DWRA requires that the Secretary report to Congress on the status of the EIS including an estimated date of completion.

Reclamation's involvement with a water supply for the Red River Valley began with the passage of the Garrison Diversion Unit Reformulation Act of 1986. The Reformulation Act authorized a Sheyenne River water supply and release feature (including a water treatment plant) capable of delivering 100 cubic feet per second of water for the cities of Fargo and Grand Forks and surrounding communities.

In 1993, the North Dakota Water Management Collaborative Process was initiated. This process was an effort by a number of stakeholders to examine the contemporary water needs of North Dakota, including needs in the Red River Valley. Reclamation was assigned the task of doing an appraisal level study of both long-term needs in the valley and options for meeting those needs. Although the collaborative process was terminated in 1994, Reclamation completed the appraisal-level Red River Valley studies in 2000.

As a follow-up to the appraisal studies, in June 2000, Reclamation, the North Dakota State Water Commission, and the Garrison Diversion Conservancy District signed a Memorandum of Understanding to organize and complete more detailed feasibility level studies. While study tasks were not undertaken, a management team and two stakeholder teams (Technical Team and Study Review Team) were organized and study planning was initiated.

Following passage of DWRA, significant concerns about the decision-making process, public involvement, and the existing Memorandum of Understanding signed in June of 2000 and based on the authority provided by the 1986 Reformulation Act, were brought to our attention—primarily by national environmental organizations. In response to these concerns and the new direction provided by DWRA, the decision was made to terminate the original MOU and replace it with an agreement which would establish North Dakota as a joint lead for preparation of the EIS, as required by DWRA.

The Bureau of Reclamation is diligently working to implement all aspects of DWRA in as timely a manner as possible. We are making progress on the Red River Valley studies and EIS, although admittedly not within the 1-year of enactment time frame established by DWRA. During the time that has passed since DWRA was enacted, much of the work related to the Red River Valley studies and EIS has been focused on defining and negotiating the roles and responsibilities of Reclamation and the State of North Dakota in the joint preparation of the EIS. This process was further complicated by the necessity of having to resolve differences in interpretation of DWRA.

Since DWRA requires the draft EIS to be prepared jointly with the State of North Dakota some deliberation was required on the part of the State to determine which

agency would act as the lead for the State. The State subsequently decided that agency would be the Garrison Diversion Conservancy District.

That decision process was followed by a significant effort to negotiate a memorandum of understanding which defined the scope of the partnership and the general roles and responsibilities of each party. The negotiation centered on differing interpretations of portions of the DWRA. The respective roles and responsibilities and overall scope of the partnership have now been agreed to and are contained in a revised Memorandum of Understanding which was signed on November 6, 2002, a copy of which is attached to this testimony for the record.*

In addition to the MOU, operating principles have been negotiated and documented. These operating principles define the roles and responsibilities of each party, as well as the organization and process for completing the EIS. Two cooperative agreements are also being negotiated with the State, one for general implementation of DWRA, and one specifically for the Red River Valley studies and EIS. The cooperative agreements will allow Reclamation to transfer funds to the State for their participation. These agreements should be ready for signature in the very near future.

Since the draft EIS was not completed within 1 year following passage of DWRA, a status report was submitted to Congress by the Commissioner of Reclamation on November 22, 2002. The report projects a completion date of December 2005.

The time line for completion of the draft EIS is based in large part on requirements in DWRA relating to the comprehensive study of water quality and quantity needs of the Red River Valley and options for meeting those needs including diverting water from the Missouri River to the Red River Valley Basin. That study is to be documented in a Needs and Options Report. Since the options developed in the study will likely be the alternatives analyzed in the draft EIS, it is necessary that the studies be done in advance of, or at least on a parallel time frame, with the EIS. Reclamation has prepared detailed plans of study and Needs and Options Report operating principles which describe the study process, organization, and public involvement required by DWRA, including 120-day review of the draft Needs and Options report by potentially affected states and federal agencies.

The plans of study, which were developed with input from the State and other stakeholders, are the basis for the timeline. The timeline is based upon a number of critical activities that must be completed. These are:

- update water needs assessment due to unexpected population increases in key municipalities such as Fargo and develop a range of future industrial water needs scenarios;
- refine surface water hydrology model to include tributaries to the Red River;
- evaluate all reasonable water supply options including additional aquifers in North Dakota and in-basin water sources in Minnesota that were not previously investigated at an appraisal level;
- design feasibility-level alternatives to be analyzed in the EIS;
- consult with the U.S. Fish and Wildlife Service on the Endangered Species Act;
- analyze impacts from the potential transfer of biota, including parasites and pathogens, between the Missouri River Basin and the Hudson Bay Basin and assessment of risks;
- study potential cumulative environmental impacts to the Missouri River from past, present, and foreseeable future withdrawals;
- conduct the Needs and Options studies in an open and public process that solicits input from gubernatorial designees from states that may be affected and from federal agencies; and
- prepare the draft EIS with the State of North Dakota in an open, public process.

As directed by DWRA, the options for providing a water supply to the Red River Valley of North Dakota include many complex and controversial analyses and consultations. The issues will involve concerns about biota transfer between the Missouri River and Hudson Bay basins requiring consultation with the Secretary of State and the Administrator of the Environmental Protection Agency; consideration of cumulative impacts on the future water supplies in the Missouri River Basin; and feasibility level studies for the alternatives considered requiring field data collection in an environment with a limited field season.

While the time consuming negotiation and documentation processes that I have described may appear to be a lack of progress, we believe the clear definition of the partnerships and roles and responsibilities that has taken place will ultimately save time in the overall effort and result in a better product.

* The MOU has been retained in subcommittee files.

That concludes my statement. I would be pleased to answer any questions you may have.

Senator DORGAN. Thank you very much. I'm going to continue to take the statements of the panel before I ask questions.

Dale Frink.

**STATEMENT OF DALE FRINK, STATE ENGINEER,
NORTH DAKOTA WATER COMMISSION**

Mr. FRINK. Thank you, Mr. Chairman, and members. My name is Dale Frink. I'm the North Dakota State Engineer, and I would certainly like to thank you for the opportunity to testify on this very important issue.

The Red River Valley study is one of the most important aspects of the Dakota Water Resources Act and I think water to eastern North Dakota—if eastern North Dakota is going to continue to grow and prosper, adequate water supplies are a must.

There is a clear long-term need for improved water supplies in the Red River Valley. The Red River has been dry many times in the past and experienced very low levels essentially every decade this century. This has occurred while its cities have grown in their needs, along with their needs for water.

It has become more and more difficult to find new and supplemental water supplies in eastern North Dakota. In 1995, the State Water Commission worked very hard to find a water supply for the ProGold corn processing plant near Wahpeton. A single source of water was not available and, therefore, a plan was developed whereby the plant would draw its water from the Red River until the flow dropped to a certain level, and at that point, you switch to ground water with the hope that the Red River returns before we run out of water. While we believe this plan works for even the 1930's, what about the future plants? And I might add, I do not know if there is—I don't think there is adequate water for another ProGold-type plant in the southern part of the Red River Valley. I hope we do not have to restrict the development through a lack of water, but this is a real possibility. This is especially disheartening when considering North Dakota ranks last in population growth among all States.

We are also basing most of our current studies on the 1930's. The period from 1931 to 1936 is unprecedented in the last 150 years, where we actually have some written records. However, there are many studies available for the Devils Lake and other parts of the western United States that suggest significantly more severe droughts have occurred. Even the current drought that is occurring parts of South Dakota and Nebraska is equal or worse than the 1930's.

Obviously, the Red River Valley study has not started as fast as originally envisioned. It has been nearly 2 years since DWRA was passed and we are still signing agreements. I understand it takes a long time to work through the Federal system, but I urge diligence in the future in having agreements executed in a timely manner.

One reason the Red River Valley study is taking longer is that it is being closely followed by many organizations and entities. It is, therefore, very important the study be conducted in an impartial

manner and be based on sound, scientific analysis. Governor Hoeven also supports this fair and open process. The Governor and State Water Commission will continue to be involved, and will have regular updates and input on the study process.

In closing, in October, just 2 months ago, we had a series of excellent meetings in eastern North Dakota. The need for water was evident everywhere. In the end, I am confident that this tremendous need will prevail and our dream for adequate water supplies for the Red River Valley will become a reality.

Thank you.

Senator DORGAN. Mr. Frink, thank you very much.

Next we'll hear from Mayor Michael Brown, mayor of Grand Forks, North Dakota.

**STATEMENT OF MICHAEL R. BROWN, MAYOR,
CITY OF GRAND FORKS, ND**

Mr. BROWN. Thank you. Chairman Dorgan and members of the subcommittee, I am Grand Forks Mayor Michael R. Brown and on behalf of the city of Grand Forks, I want to thank you for the opportunity to provide written testimony to the Subcommittee on Water and Power regarding Red River Valley water needs. A consistent, reliable and affordable water supply is critical to the city of Grand Forks and other communities of the Red River Valley. Without an adequate supply of water, communities such as Grand Forks would not be able to provide required amounts of water to its residents, businesses, mainstay institutions and agricultural industries that support the livelihood of the region.

I would now like to give a brief oral summation of my written testimony. Two things are important to Grand Forks, our future. One is the possibility of drought and the other is the planning of our water treatment facility.

Although the memories of Grand Forks residents are marked by a drastic flooding event in the midst of what many are calling a wet cycle, the Red River Valley is equally susceptible to drought conditions. As a result, the city of Grand Forks becomes increasingly concerned each year because the odds get greater and greater that we will experience an extended period of drought without reliable backup or a new primary water supply.

In planning, recognizing these significant water quality and quantity challenges, the city of Grand Forks is closely monitoring the progress of the study efforts of the Red River Valley water supply projects in hopes that the Dakota Water Resources Act of 2000 will be able to address our needs. The city of Grand Forks stresses that a timely and accelerated completion of the schedule of the study for the project would greatly assist us in maintaining our time line for planning and making important decisions about the future of water supply and treatment systems. Therefore, this is critical in our planning process.

Thank you.

[The prepared statement of Mr. Brown follows:]

PREPARED STATEMENT OF MICHAEL R. BROWN, MAYOR,
CITY OF GRAND FORKS, ND

Chairman Dorgan and members of the subcommittee, I am Grand Forks Mayor Michael R. Brown and on behalf of the City of Grand Forks, I want to thank you

for the opportunity to provide written testimony to the Subcommittee on Water and Power regarding Red River Valley Water Needs. A consistent, reliable and affordable water supply is critical to the City of Grand Forks and other communities of the Red River Valley. Without an adequate supply of water, communities such as Grand Forks would not be able to provide the required amounts of water to its residents, businesses, mainstay institutions, and agricultural industries that support the livelihood of the region.

Although the memories of Grand Forks residents are marked by a drastic flooding event in the midst of what many are calling a “wet cycle”, the Red River Valley is equally susceptible to drought conditions. The relatively flat terrain of the Red River Valley drainage basin prohibits the construction of large reservoirs that could provide significant amounts of water storage to span even moderate periods of drought. As a result, the City of Grand Forks becomes increasingly concerned each year because the odds get greater and greater that we will experience an extended period of drought without a reliable backup or new primary water supply.

In addition to water quantity issues, we are also concerned about water quality. Our existing water sources are difficult to treat due to seasonal variations in water quality. Future water quality objectives and the possibility of microbial contamination will likely require the City of Grand Forks to consider the implementation of advanced water treatment technologies. When coupled with the aging condition and limited expansion potential of our existing facilities, these factors have made it necessary for the City to plan for the construction of an entirely new water treatment facility within the upcoming decade.

Recognizing these significant water quantity and quality challenges, the City of Grand Forks is closely monitoring the progress of the study efforts for the Red River Valley Water Supply (RRVWS) project in hopes that the Dakota Water Resources Act of 2000 will be able to address our needs. To date, the study efforts appear to be behind schedule and progressing at a painstakingly slow rate. We understand this is primarily due to the immense study scope and the need to comply with public notification and environmental requirements. However, the City of Grand Forks stresses that a timely (i.e., accelerated) completion schedule of the study for the RRVWS project would greatly assist in maintaining our timeline for planning and making important decisions about the future of our water supply and treatment systems.

Additional comments regarding the ongoing study for the RRVWS project include:

- The study should incorporate a 50-year planning horizon from the date of anticipated study completion to adequately address the projected needs of the Red River Valley rather than a 50-year period from the start of the study (2000-2050). Based on a projected study completion date of 2005 coupled with necessary design, bidding and construction activities, the time required to proceed with the project could erode the 50-year planning period by as much as 20 to 30 percent.
- The study should comprehensively estimate peak day water demand projections rather than average day demand projections as the basis for the development of alternatives and estimation of total project costs. Careful consideration should be given to proposed water conservation methods as well, given the relatively low rates of water consumption of Red River Valley residents as compared to the national average. Otherwise, the RRVWS project could potentially fail to adequately address the City’s actual demands, which typically peak during dry conditions.
- The study should account for projected water demands/withdrawals for Minnesota communities (East Grand Forks, Moorhead, and Breckenridge) that were addressed in the Phase 1A, Phase 1B, and Phase 2 studies. Without including existing and future demands for our sister cities and other appropriate surface water users, the study would ultimately derive an inaccurate representation of actual demands and fall short of meeting its intended objectives.
- The quality of water provided to residents, businesses, institutions, and industries is extremely important to the City of Grand Forks. Therefore, an improvement in water quality from that of its existing supply would factor into the City’s decision to commit to a significant financial investment in the RRVWS project.
- The City of Grand Forks understands the potential environmental impacts of transferring water from one drainage basin to another. In order to meet our water quantity and quality desires, however, realistic risk assessments, combined with the prudent selection of water supply and treatment alternatives, should be able to satisfy reasonable concerns expressed by individuals involved in the study process.

- The study should include a thorough evaluation of alternatives via the utilization of justifiable screening criteria to ensure that the recommended alternative is feasible and practical.

Thank you, again, for this opportunity and for the opportunity to provide an oral summation of the written testimony included in this letter at the December 9, 2002 field hearing. We greatly appreciate your support and all your hard work in focusing on the water needs of the Red River Valley.

Senator DORGAN. Mayor, thank you very much.

Next we will hear from mayor Bruce Furness, mayor of Fargo.

STATEMENT OF BRUCE W. FURNESS, MAYOR, FARGO, ND

Mr. FURNESS. Mr. Chairman, thank you for this opportunity to testify once again on water issues in the Valley.

My remarks are about the same as I used when we testified before the Dakota Water Resources Act a couple years ago and ask for them to be included in the reports.

I will summarize as best I can those remarks.

My favorite quote about water is from Benjamin Franklin, "When the well is dry, we know the worth of water." Actually, that's my second-favorite quote. My favorite quote is from Mark Twain. He says, "Whiskey's for drinking, water is for fighting over." And what we need to do is do a little fighting over water, I think. But getting back to Ben Franklin, "When the well is dry, we know the worth of water." Well, we don't want to wait in North Dakota until the well is dry. We try to be proactive in the North Dakota. We've worked with the North Dakota Water Coalition, we've worked with the congressional delegation, we've worked with the State to try to get water to eastern North Dakota. Eastern North Dakota contains—the counties along eastern North Dakota contain 40 percent of the population of the entire State, so we view this as a high-growth area, high-density area of population.

Our concern about water is best summarized by an introductory paragraph of a report by Black & Veatch, who were the consultants on our new water purification plants. They said, "The city of Fargo has rights to two water sources for treatment and subsequent supply to its citizens for potable use, the Red River to the North and the Sheyenne River. Unfortunately, both sources are of poor quality and, even taken together, they do not offer a reliable quantity of water to meet Fargo's present and certainly future water needs. The diversion of Missouri River water to Fargo by way of Garrison Dam would provide a long-term lifeline for the community." So, poor quality and little quantity, we need a solution. 96 percent of the surface water in North Dakota is in the Missouri River, and if you were to look for a source of water, that would seem a logical place.

I have in my remarks a quote from former Governor William Guy. I will just take one sentence out of that. He was describing a drought situation back in the 1930's, and his one sentence that I'll use here is that, "There was talk of returning the Fargo Sewage Plant discharge to the river above the city water intake." In other words, taking the sewage and recycling it back and using it again. We are talking about that now as we plan for contingency in the case of a drought in our region.

The population growth in Fargo has been just under 2 percent per year for 20 years. It continues to grow at about that rate. The

population estimates used and all the studies I looked at so far consistently underestimate the population growth in Fargo. We think we need more quantity than has been suggested.

We are concerned with the downstream States as you indicated, Senator, that they have some concern. But the amount of water that has been suggested for removal from the Missouri River from—to transport over to eastern North Dakota, if you would put this in a graphic representation and a pail of water represented all the water of the Missouri passing through, say, Bismarck, the amount of water we would take out of that pail is one thimbleful.

I also mentioned the quality. If water from the Missouri River were to come to eastern North Dakota, it would cost us much less to process. The quality of Missouri River water is better than either the Red River or the Sheyenne.

We have attempted to undertake certain conservation methods and would continue that, and the time frame that I think that we need to be concerned about is, as you have indicated, Senator, is right now. But some have indicated that we have, perhaps, a 10- to 15-year time window if we do not have a drought. If we do have a drought, that time window could be as little as three to five years.

In summary, I have been mayor now for 8½ years. My knowledge about water when I started this job was you turn the tap on and water comes out. I've learned a lot about water in this time and I just would like to quote a man who's an expert in my opinion, Jim McLaughlin, who told me at the beginning of my career as mayor, we don't need any more studies about water. We know how much water we need. We know what to do with water. I guess I would just echo your phrase that we are tired of waiting, we are out of patience.

[The prepared statement of Mr. Furness follows:]

PREPARED STATEMENT OF BRUCE W. FURNESS, MAYOR, FARGO, ND

Mr. Chairman and Honorable Members of the Subcommittee on Water and Power of the Senate Committee on Energy and Natural Resources, I am Bruce Furness, Mayor of the City of Fargo, North Dakota. Thank you for this opportunity to testify before the Committee on Red River Valley water needs.

INTRODUCTION

Benjamin Franklin once said, "When the well is dry, we know the worth of water." North Dakotans want to be proactive in managing our "well"; we can't wait until it is dry. We have become unified behind this act through the North Dakota Water Coalition, a group of widely diverse interests which has come together to advance water development in our State. We have been unified in assuring passage of a State Water Plan in the 1999 North Dakota Legislature, a historic achievement. We are unified in developing a consensus piece of legislation through the U. S. Congress that will assure future water supply for all our citizens.

Fargo is located on the eastern edge of North Dakota, separated by the Red River of the North from Moorhead, Minnesota. Together the Fargo-Moorhead area is the largest US population center in the Red River Valley with approximately 165,000 people. Fargo has enjoyed an annual growth rate of about 2% for the last 20 years and is actually accelerating in growth at this time. The requirement for more water is a direct result of this growth. From a statewide perspective, nearly 40% of our population resides in the six border counties adjacent to the Red River.

Our area does not have an overabundance of water supply resources. Extended dry conditions and droughts have shown us that current resources alone cannot meet the water supply needs of this growing region. Development of a dependable water supply, along with careful management of the resources currently utilized, will allow the region to meet its changing and expanding water needs.

Our concern is best summarized by the introductory paragraph of a report by Black & Veatch, the design consultant for our new water purification plant:

The City of Fargo has rights to two water sources for treatment and subsequent supply to its citizens for potable use: the Red River of the North and the Sheyenne River. Unfortunately, both sources are of poor quality and, even taken together, they do not offer a reliable quantity of water to meet Fargo's present and certainly future water needs. The diversion of Missouri River water to Fargo by way of Garrison Dam would provide a long-term lifeline for the community.

QUANTITY

A good supply of water is key to our City's continued growth and development. Although record-setting floods have recently occurred, history shows that low water in this river has occurred more often and caused more problems for our residents than has flooding. For example, during the 1930's the Red River had stream flows at Fargo below 10 cubic feet per second (cfs) for seven straight years. This same phenomenon occurred in the late 1970's and once in the 1980's. A flow of ten cfs of water in the Red River represents less than one foot of water in the streambed at any given point.

Listen to a recollection by former Governor William Guy of Fargo.

If you were to look at the Red River near the water plant in the 1930's, you would wonder how they ever made the water fit to drink. The searing hot drought hung heavily over the Upper Midwest through the entire decade of the 1930's. The Geological Survey records say that the murky Red River ceased to flow at Fargo for a period in every year of that decade. The driest year was 1936 when the Red River stopped flowing for 166 continuous days. Cars were not washed. Lawns went unsprinkled. There was talk of returning the Fargo Sewage Plant discharge to the river above the city water intake. Moorhead was drawing all of its water from wells east of the city and their tap water tasted good. With a population of around 25,000, Fargo's water situation was desperate. . . . Today both Fargo and Moorhead draw their water from the Red River while their combined population has increased five fold from the dry 1930's. Industries not even dreamed of 65 years ago now use copious amounts of Red River water. It is easy to understand why the Garrison Diversion Project to bring Missouri River water east to the Red River Valley has been on the minds of thinking people for more than 50 years.

Though difficult to project, future regional water requirements will be determined by several factors:

- Population growth and economic expansion in Fargo will continue into the next century at the same 2% annual growth rate. The entire region is expected to grow correspondingly.
- Per capita usage is currently below national and regional averages but could increase without stringent use of conservation measures.
- In 1995, a large corn processing plant went on-line in the Red River Valley. It is projected that a minimum of three additional plants will be constructed in the basin over the next forty years. Water usage for each of these plants may well equal what the City of Fargo uses in an average day. Thus, any needs analysis must include future growth resulting from increased value-added agricultural processing.

Another consideration relating to water quantity is that of minimum stream flows. As indicated earlier, there have been times of extremely low flows. One analysis suggests that 7 cfs as a minimum flow in the Red River is sufficient. That is totally unacceptable.

An examination of historical seven-day-duration flows shows many periods of inadequate flows for our current usage and increasingly more severe problems as our usage grows to new plant capacities. 50 cfs is a bare minimum to be considered, 75 cfs is desirable.

The use of Missouri River water is an obvious solution to this availability problem. 96% of the usable surface water in North Dakota is in the Missouri River. It represents the best source of highly available water and has an extremely small impact on downstream sites. Analysis shows that the potential allocation of 100 cfs for Eastern North Dakota is less than 1/2 of 1% of Missouri water flowing through our state. A graphic description of this minimal impact is to think of the entire flow as a gallon of water. The proposed allocation is then represented by a thimbleful of water (1/2 fluid ounce).

Allow me to incorporate by reference the "Red River Valley Water Needs Assessment Report" documented by the Bureau of Reclamation, dated April 1998. A second study is the "Red River Basin Water Supply Report" prepared by the Red River Basin Board, dated April 2000.

QUALITY

When water is not available in adequate amounts, the quality of water also declines. This fact has a high impact on processing costs. Relying on the Red River as its main source of water requires cities from Fargo to Pembina to take extraordinary measures to treat raw water. Both Fargo and Moorhead have recently built new water treatment facilities which use ozone (an electrically charged liquid oxygen), the latest available technology to disinfect the water. Ozone is a treatment process which has become the favored disinfectant for raw water having high organic characteristics.

Ozone can do in 3 seconds what it takes chlorine 3 minutes and chloramine (chlorine and ammonia) 12 minutes to accomplish. However, this highly efficient treatment comes with a price—the cost of producing the ozone. To electrically charge liquid oxygen, the power costs for Fargo's treatment plant will double to \$600,000 per year.

Another advantage of treating better quality water can be shown by comparing the cost of treating Missouri River water at Bismarck with Red River water. Our staff analyzed the chemical costs to treat a gallon of water and discovered that Fargo's cost is about 22 cents per 1,000 gallons while Bismarck's costs are 9 cents per thousand. As water quantity and quality decrease, the cost of its treatment increases.

Each of these examples demonstrates the preference for treating higher quality water such as that found in the Missouri. As with quantity, water of better quality is a vital need for our community and region.

CONSERVATION

Water conservation strategies employed by the City of Fargo include the adoption of odd/even lawn watering restrictions beginning in 1989 and continuing through today. In 1997, a demonstration xeriscaping program was implemented with over 100 homes participating. We intend for this program to grow. A 15-year project to replace deteriorating water mains has begun. The result will be a significant reduction in water loss. Using all these tactics, water management will remain a high priority item in our City.

TIME-FRAME

Although impossible to predict with any certainty, it is believed the Red River Valley has adequate water supply for the next 10 to 15 years. Should drought conditions occur, however, that estimate may be reduced to 3–5 years. Consequently, little time remains to resolve these concerns. Activity must begin now to address the many issues relating to water quantity and quality. I urge your positive consideration of our needs.

I will be pleased to respond to any questions you may have. Thank you once again for the opportunity to testify before your subcommittee.

Senator DORGAN. Mayor, thank you very much.

Let me ask a series of questions. First of all I want to understand why we are at a point where the draft statement would now be available 4 years late. And Ms. Bach, you talked about some allegations of illegal interpretation of the Act, number one. You had to negotiate the memorandum of understanding, and as I read through some of the descriptions, in fact your statement says the EIS, draft EIS is to be prepared jointly with the State of North Dakota. Some deliberation was required on the part of the State to determine which agency would act as the lead for the State. The decision process was followed by a significant effort to negotiate a memorandum of understanding which defines the scope of the partnership and general roles and responsibilities. As I read through the lines, or between the lines, it seems to me like there is some assertion that the Bureau, the State, the Conservancy District

spent a lot of time trying to work this out to figure out who was supposed to do what, who's going to coordinate, who's going to manage this. Is that part, are you saying that's part of the reason this is delayed, and if so, describe that process to me.

Dr. BACH. Mr. Chairman, I think that the Conservancy District, the State of North Dakota and Reclamation worked quite constructively to lay out those responsibilities. The criticism that we were presented was that under Dakotas Water Resources Act and some of the late discussions in the process with DWRA's report, DWRA finally passed the floor of the Senate. There were some negotiations with the lower basin States, as you so well know, and there were specific authorities assigned to the Secretary of the Interior to do this study, and there resulted in language that was very specific that the State and the Bureau would do—or, actually would do the EIS together. We actually had those functions commingled. We were sharing those in the original MOU. We were not making a distinction between the study—the needs and options study—and the EIS. And so, we did go to lengths to make it very specific so that we were not subject to some of the same criticisms that we were previously subject to.

The correspondence that we received did have a tone of litigation threat to it, and we had very serious discussions with attorneys inside of the State as well as with the Federal Government as to how to assure we did get through this process and not be subject to litigation at the end of it which would be terribly disturbing to all who need water supply in the future.

Senator DORGAN. Well, it seems to me there isn't any way that you can move through this process without understanding you're probably going to be subject to litigation. Litigation is part of the process of—part and parcel of this process.

What I'm asking is was there just a lot of visiting going on for a long time here? It seems to me that trying to figure out who's going to assume what responsibilities ought to have taken a meeting or two, and then you move on. But the way I understand what has happened here is, you all have been meeting and meeting and meeting, trying to sort out who's responsible, the State, the Conservancy District, and the Bureau. How long does that take? I know you have got the MOU done now, but does that take 2 years?

Dr. BACH. That wasn't all what we were doing in that 2-year time frame. We continued with the plan of study for the needs and options. Reclamation was certainly at work with writing the necessary contracts that—where we could get the work contracted out to others to do. So the time was not consumed totally in discussions, although there were serious discussions about the interpretations of the Act. There are some that have suggested that the Act is unclear and, frankly, we did not take that position, but we did seek to make as clear as possible the interpretation of the Act.

Senator DORGAN. But if it took 2 years to get a memorandum of understanding, is it logical for me as legislator to assume that that 2-year period was a period you were negotiating with the State and the Conservancy District about whose role was going to be—or who was going to assume what role in this process, or could you have done the MOU earlier? And if not, why not?

Dr. BACH. Well, we make—as I noted when I gave my testimony, we signed an MOU in good faith, with our understanding of our authorities before the DWRA so we were very much at work and in progress trying to proceed with the studies that had been done and advancing them. And our discussions were with the State, and it did involve from time to time discussions with parties that the State brought to the table.

Senator DORGAN. I guess two questions. One, Mr. Frink, you don't seem very exasperated about this. You didn't seem to express great concern that it's taken 2 years for the MOU. If it's going to take 2 years to do something the law said should have been done in a year, why didn't somebody issue the report to Congress and say we're all visiting over here and there is no sense of urgency, but we're not going to submit the report? I don't understand all this. Mr. Frink, you don't seem very agitated about it. I'm agitated about it. Why aren't you?

Mr. FRINK. Well, I guess, first of all, right after DWRA was passed, I think we got off to a very good start. There were technical teams formed. We had study review teams formed. We had some meetings. Some of the environmental groups started to write letters to the Bureau of Reclamation and it's very easy to—these letters took a lot of time to answer and so forth. But I think it was in October that the Bureau of Reclamation came to us and said that these environmental groups are making some good points here and recommended that the State of North Dakota pick one single entity as the lead, and I think—

Senator DORGAN. When was that?

Mr. FRINK. I believe that was in, like, October 2001.

Senator DORGAN. That was over a year ago.

Mr. FRINK. Yes. And Governor Hoeven, within 1 or 2 months, did select the C District, and—

Senator DORGAN. So that was a year ago. My question is why did it take from then until now, another year, to get the MOU?

Mr. FRINK. It has taken a long time to go through the Federal system. It just took a lot longer. I certainly don't like the delay. I mean, we have a lot of discussions on this. But, I mean, we promised to do this study right. There's—quite frankly, there is a lack of trust between environmental groups yet. There are groups out there that believe this is just another front for the old Garrison Diversion Project, including irrigation, and we've said that many times that we need to do this right and see if we can gain some trust back, because it's—we do have a long way to go, but we are working very hard to do it right, and if it takes a little bit longer, I guess I'd rather do that rather than get caught up in 2 and 3 years down the road and have to go back and retrace our steps.

Senator DORGAN. That's a fair point. I want it done right as well, but I want it done within a century or so. And my great concern is that year after year after year, in every circumstance we see water projects delayed, delayed, delayed. And this was a part of the Dakota Water Resources Act that was a significant part that dealt with eastern North Dakota's interests. We've already been through Phase I and Phase II appraising the Red River Valley needs assessments. We have already had this discussion about underestimating what the population is going to be here in Fargo. We have already

raised the questions about will you have an adequate report if you don't consider the needs of Moorhead, East Grand Forks, Breckenridge. All of these things have been out there for a long, long time. I just think it's unreasonable for all of us to think about December 2005 as an end date for a process that we intended to have done in December 2002, this very month. Right now. It appears to me we've just finished the introductions, the preliminaries, the MOU's. So, I don't want you to misunderstand. I want this done right as well, but I also want there to be an end date and one that's reasonable.

Let me ask Ms. Bach. You mentioned the drought. And many of us are very concerned about that. A portion of our State was hard hit, not the entire State. But is it conceivable that spreading drought in this country could cause some very serious challenges to eastern North Dakota and its long-term water supply before we get to the solution that was authorized in the Dakota Water Resources Act? And if that's possible, what would you advise the mayors of the two largest cities on the river?

Dr. BACH. Mr. Chairman, before I took the position of Regional Director of Great Plains Region, I was the drought coordinator for the Bureau of Reclamation. One thing I learned to do with much caution was any attempt to predict Mother Nature, and there are several States, as I noted, within this region that are experiencing drought, and there are a number of indicators that people in the water management business watch very carefully in terms of water supply.

Insofar as your question with regard to what to advise, or how to interact with elected officials who are needing to meet—who are there to meet the needs of the community, I believe that our working relationship with the State Water Commission is quite positive and that we offer our assistance. There are a variety of technologies that we employ in times of drought, and I do believe that the relationship between the cities on the eastern side of the river and western side of the river are important insofar as how they are considering the water and how they manage it during the drought.

Senator DORGAN. Let's assume the worst for a moment. Let's assume that you meet your time table. By worst, I mean several years beyond when we expect it. But 2005, December 2005, the draft EIS is completed. Mr. Frink, you were probably describing a letter by our old friend Dan Beard that requires people to put on the emergency brake and study, and get frozen in fear. Let's assume that despite all of these things, a letter from Dan Beard and all the other complications that arise and cause people to stop what they're doing, and you get the draft EIS done, December 2005, under what circumstances and when can the Red River Valley expect a supply of water to come from that activity?

Dr. BACH. Again, it depends on what kind of construction needs to be done. In some cases, it can be small-scale. That can happen in the construction season, or otherwise. In other cases, it may be multiple-year construction.

Senator DORGAN. What if it is an interbasin transfer, and the decision—the water needs tell you and tell us that we must have a supply of water delivered to eastern North Dakota from the Missouri River, how long would that take?

Dr. BACH. Under the statute as I know you so well know, Mr. Chairman, if there is an out-of-basin solution, if there is a transbasin solution, we, the parties have to come back to you, the Congress, for the authorization, and I know you so well know the international consultation complications.

Senator DORGAN. I understand. In fact, I have not talked about the difficulties of that. There will be extraordinary difficulties in Congress because we'll have a big fight with other interests when and if that happens. But I'm talking now about the construction cycle. Assume for a moment that you meet a date of December 2005, and Congress further authorizes the construction of said facilities to deliver Missouri water to the Red River, what's the time line for something like that in your judgment?

Dr. BACH. Well, I think what was asked us because we would not—the authorization would not necessarily be in sync with the budget aspects, but with some gymnastics, it could be at the minimum a year or further before you could see any construction. I think we're talking beyond one year after Congress would authorize us to go forward.

Now, again, it's not that we couldn't all challenge ourselves to move money around and see what we could do to let contracts.

Senator DORGAN. You're talking about construction beginning. We're talking about a delivery system from Missouri to the Red River Valley. I'm asking what can the Red River Valley residents expect in terms of the time that might take. Are we talking 10 years, 5 years beyond 2005 optimum?

Dr. BACH. Depending on the complexity of the construction, you're talking multiple years, and it gets back to your concern of when we have the first product to react to.

Senator DORGAN. My concern is despite everybody's good intentions, you could very easily see a circumstance where a drought has devastating consequences for the Red River Valley long before anybody can move water here because all of this takes a much longer period of time than may well exist. I don't know whether you have seen, for example, the potential numbers about how much snow pack might exist in Montana, how much might come off of the Montana Rockies into the reservoir system and into the Missouri River system this coming spring, but the effects of the drought—widespread—could have significant consequences in the Red River Valley. My concern is that there is kind of a business-as-usual, not just with the Corps, but perhaps with almost everybody. Not just with the Bureau, I should say, but perhaps with almost everybody. Well, let's just have all these meetings and see if we can keep talking about who has what responsibility.

And Mayor Furness, have you been involved in any of these meetings regarding how you slice up the responsibility between the State, the Conservancy District, the Bureau, who's going to do what?

Mr. FURNESS. Only through telephone calls.

Senator DORGAN. Mayor Brown, have you?

Mr. BROWN. No, sir.

Senator DORGAN. I received, Ms. Bach, about 4 days ago, a letter from the Bureau of Reclamation, which I believe was intended to meet its responsibility to send a report to Congress when it missed

the December 2001 date. I received it one year late. And what that letter told me was that the Bureau of Reclamation still intended to meet the December 2005 date. What I indicated to the Bureau is that that's just not acceptable to me. I don't think it's acceptable to the Congress. The Congress passed the legislation after great angst and substantial effort, and in the legislation, we provided a 1-year and 2-year process. Now, I'm willing to accept that perhaps one year was optimistic. I'm willing to accept that. But I'm not willing to accept that additional 4 or 5 years is necessary to do that which the Congress intended the Bureau to do in a time frame. And my question tonight is what can we expect in eastern North Dakota to have the Bureau truncate this, not with respect to short-changing any part of this process, but to tell us they can do this earlier than December 2005. Are there ways that can happen and is the Bureau willing to commit to make it happen prior to December 2005?

Dr. BACH. I'm willing to commit to sit down with the parties and lay out options that we've identified for where the schedule can be curtailed. I want to be able to do that with the parties so that they understand what information we would not have, and what information we would have as some of the reasoning for the parts of the schedule reflect that we understood to be the convenience of the different communities. I will make every effort to see any opportunity we can to curtail the schedule for the final plans.

Senator DORGAN. One additional question. Is the process we are now involved in a process that's going to consider the water needs of Moorhead, East Grand and Breckenridge as well?

Dr. BACH. This statute does identify, the statute does identified the needs and options to meet the needs of North Dakota. In order to get that information, Mr. Chairman, we have to identify what is being utilized and what the plans are to be utilized in the future of water supply with the communities on the other side of the river.

Senator DORGAN. The answer to that is yes?

Dr. BACH. The answer to that is information will be in the documents. We will be strict to respond to the statutes, but we will do it in a complete way so all the information is laid out in a report.

Senator DORGAN. Are the population estimates being used to the extent you're aware of them Mayor Furness, Mayor Brown, population estimates you think are reasonable?

Mr. FURNESS. Mr. Chairman, I don't know what the population estimates are being used in this study. I'm not sure that has been addressed.

Senator DORGAN. Are the revised population estimates in the two previous studies, Phase I and Phase II study, as I understand, those population estimates have been revised, or proposed to be revised, are they satisfactory to you?

Mr. FURNESS. We had our version and the Bureau has their version. We were not in sync on those, no.

Mr. BROWN. I agree with Mayor Furness.

Senator DORGAN. So, Mr. Frink, what do we do about all this?

Mr. FRINK. Well, first of all, I guess we need to complete the EIS. It's an absolute necessity and if it's in the DWRA, all I can say is that, you know, we would like to follow something similar to what

we did on the Southwest Pipeline Project and the Northwest Water Supply Pipeline projects. And that is as soon as these documents are signed and we are told to go, we start. The Bureau of Reclamation on those projects last year gave us the approval to start that project in December, and as soon as the frost is out of the ground we had pipe in the ground and, but you have to go through the process and, you know, I think we have to do it right here. And to EIS process is clearly taking longer than we hoped.

Senator DORGAN. Let me just make a point. It will not be doing it right to delay this by years. Doing it right is, yes, doing it correctly, but doing it in a truncated time line. It's just not doing it right that we end up with a drought that devastates the Red River Valley's growth potential, and we don't have an opportunity to move the kind of water here that they need to move here. In fact, that's what the decision is. So in order to do this right means we have to move with some dispatch.

Now, Ms. Bach, I'd like to ask you to go back to Mr. Keys and work both at the Headquarters and also the Regional Office and submit to the Energy Committee a revised schedule telling me what kind of opportunity exists to truncate this time line because I think it's safe to say that my colleagues on the committee would not find it a favorable development to understand that we've seen this delayed now 4 years, and so I would like to have you submit to us a revised schedule based on your evaluation of where you can begin to truncate this process. Yes, do it right, but doing it right means doing it on time as well.

Can we expect a response to that, Ms. Bach?

Dr. BACH. Absolutely.

Senator DORGAN. And when might we get a response? How long will that take?

Dr. BACH. I will give you something to look at within 4 weeks, Mr. Chairman, if that's acceptable.

Senator DORGAN. All right. So within 4 weeks the Bureau will send to the committee your estimate of what a revised schedule would look like, and, Mr. Frink, you're going to get agitated about this, and when we get the new date we are all going to—assuming the new date truncates this some, we are all going to build a big fire and hold everybody's feet to the fire, is that a fair statement?

Mr. FRINK. Mr. Chairman, let me say on behalf of the State Water Commission, we are playing a very important role. If we can get this EIS done sooner, we will throw the resources at it to make it happen. It is an incredibly important study, but we'll do whatever we can to shorten that date to the extent possible.

Senator DORGAN. All right. Well, we will wait 4 weeks and wait to receive, Ms. Bach, your revised estimate. I hope you will scrub that with the headquarters very carefully, and we will share that, of course, with the folks of the Red River Valley and the folks at the Conservancy District, and the State of North Dakota as well.

Let me reemphasize, I can't reemphasize enough the point that I have seen everything slip forever on water policy and it is so frustrating. I understand there are a hundred people out there wanting to sue somebody. We're working right now on the NAWS project, which is a heck of a good project. And the minute we do the ground break, Canada throws us into court. They have a right to go into

court, certainly, but I hope it's thrown out. The suit doesn't have merit, and I hope it's thrown out. The point is at every step of the way on every conceivable approach on water we end up with all kinds of problems. But, you know, on the Missouri River master plan, nobody can get it done. You can't get answers on this. When I see the time lines slip, obviously it makes me angry. I want this done. I want us to meet our time line.

Ms. Bach, I have worked with you on other issues with the Jamestown Reservoir and other things. You're a dedicated public servant. You understand the angst that people have about water. The mayor used the quote, and there are plenty other quotes about water that aptly describe the passion about water. Because you can't—no economy, no region could exist without water. It is the engine of economic growth. You shut the water down running through this Red River, you will shut down the economy of this part of North Dakota. So, that's why it's important.

I appreciate your coming to Fargo this evening, Ms. Bach. And Mr. Frink, for you coming over from Bismarck. And Mayor Brown, Mayor Furness, thank you very much for being here as well.

Let me excuse you and if you have additional comments you wish to submit, the hearing record will remain open for 2 weeks.

We call Mr. Warren Jamison, the manager of the Garrison Diversion Conservancy District; Ms. Genevieve Thompson, vice president and executive director of the Audubon Society of North Dakota; Michael Dwyer, the executive director of North Dakota Water Users Association.

Let me, for the record, indicate that Chairman Tex Hall from the Mandan, Hidatsa and Arikara Nation was invited to testify. He was not able to be here, so he submitted testimony. We have also have submitted testimony on behalf of the Fargo-Moorhead Chamber of Commerce in the form of a letter from David Martin.*

I want to thank all of you for being here as well. You were able to hear the previous testimony.

Mr. Jamison, perhaps more than anyone in this room, you have worked year after year after year on a wide range of these problems and issues dealing with water, and we certainly appreciate that effort and those results. My guess is you probably share the same anxiety I do about time lines and all those added issues. But we appreciate very much your being willing to come to Fargo this evening and testify.

Why don't I begin with you and your entire statement will be made a part of the record.

**STATEMENT OF WARREN L. JAMISON, MANAGER,
GARRISON DIVERSION CONSERVANCY DISTRICT**

Mr. JAMISON. Thank you, Mr. Chairman, and thank you for allowing me to testify today on this important subject. My complete testimony will be in the record, as you indicated.

Last week, I was in Arizona at the National Water Resources Association Annual Meeting, and there was a lot of talk about drought down there. I spoke with Commissioner Keatings and Maryanne Bach from the Bureau of Reclamation as well.

*The testimony can be found in the appendix.

I want to emphasize the extent of the drought that is creeping toward us. States like Montana are in their fifth year of drought. Certainly they're heading towards drought of Biblical proportions. It's deeper than the drought of the 1930's. Its duration is going probably beyond what we would normally predict. Similar stories in Wyoming and Nebraska. I spoke with the State engineer of Nebraska, and they are into 3 years of very serious drought. 30 percent worse than the drought of the 1930's in Nebraska. The commissioner referred to an inflow of the reservoir in the Rio Grande area inflows were 2 percent of normal.

Senator DORGAN. Where was that again?

Mr. JAMISON. That was in the Rio Grande Valley. Two percent of normal. These are horrendous numbers. But they are just abstract thoughts unless you put economic dollars with them. And when you do put economics to these numbers, the worst kinds of natural disasters that occur in the country are not fires and floods, but droughts. Always.

We see economic study after study indicating that the worst impacts of natural disaster in this country are the result of droughts. The 1987 to 1989 time frame, where we had a severe drought in this part of the country, but it also was in other parts of the region, the total from that alone was \$39 billion. Well, if we have a drought that's 30 percent deeper, or 20 percent deeper than the ones we have on record, and of a longer duration, imagine, if you will, where these dollar impacts will go.

Dakota Water Resources Act attempted to, and I think wisely so, choose the high road in terms of trying to prevent these things from occurring by wise planning and wise use of the natural resources. If we can prevent drought from occurring, we can prevent the impacts of these droughts from occurring. We can't prevent droughts from occurring, but the impacts of them by managing our resources wisely.

Certainly, Dakota Water Resources Act is clear, and it can compel us, as it should, to look at all the alternatives, all reasonable alternatives in a full and fair, objective way to meet the water supply in the Red River Valley. We certainly intend to do that, and we intend to meet a criteria for water supply that I have used many times. Water supply isn't just dump the water. For us, there are three characteristics of water supply. First of all, it must be reliable. It's not good enough if you can get it seven out of 10 years. Three years can be the end of your economy.

It must be of high quality. What good is water if you can't drink it, if you can't use it for industrial purposes.

And lastly—and the act anticipated this as well—it must be affordable to the local citizens, consuming citizens.

So, with those three characteristics in mind, we are dedicated to working as closely as we can with the Conservancy, with the Bureau of Reclamation, with the State of North Dakota to make sure that a water supply is delivered to the Valley.

And in my opinion, the 2 years that we have spent trying to get organized is an undue delay, and there are causes that we can talk about, and perhaps you will ask about those, but I would like to indicate that I would rather focus on the future on a closer relationship with the Bureau, with the Audubon Society. I have had

the pleasure of looking at Ms. Thompson's testimony. She makes a number of very constructive suggestions that the Conservancy District, for one, at least, will take seriously. I think they're very helpful, and will take effort, but that's an effort we need to put forward and we will do that. I think there's lots of opportunities to do this constructively and do it well.

The Bureau has a job to do and we want very much to be helpful and working closely with them to make sure that we avert the horrible impacts of a drought. I'm hopeful that the outcome of these proceedings in the future will be a more closely coordinated effort to move forward, and to move forward with dispatch and a the full examination of all the alternatives and eventually delivers water to the valley.

I will answer questions.

[The prepared statement of Mr. Jamison follows:]

PREPARED STATEMENT OF WARREN L. JAMISON, MANAGER,
GARRISON DIVERSION CONSERVANCY DISTRICT

Chairman Dorgan and Members of the Subcommittee, I appreciate the opportunity to present the Garrison Diversion Conservancy District's (District) views on the Red River Valley Water Needs.

We are sitting on a time bomb! Droughts of greater magnitude than those of the 1930s are all around us. If they should spread to the Red River Valley, we will be in dire straits, and the delays on the Red River Valley Studies will be seen as deadly to the people and the economics of the Valley.

Drought is a normal, recurrent feature of the climate of virtually all portions of the United States. Because of the country's size and the wide range of climatic regions present, it is rare for drought not to exist somewhere in the country each year. As of October 2002, 47 states, including North Dakota, were experiencing a drought or drought warnings. Rainfall was significantly below average in 27 states. In parts of Nebraska, 2002 rainfall amounts through September were not only 80% below normal, but also 30% less than what fell during the worst of the 1930s drought years. Economic losses for the summer of 2002 could reach \$20 billion.

Drought is a natural hazard that cumulatively has affected more people in North America than any other natural hazard. The cost of losses due to drought in the United States averages \$6-8 billion every year, but range as high as \$39 billion for the three-year drought of 1987-1989, which was the most costly natural disaster documented in U.S. history.

The severe multi-year drought that plagued the western United States during the 1930s and 1950s is now a distant memory for most. A recurrence of these multi-year droughts today would result in substantially greater and more varied impacts because of the rapid expansion and urbanization of the region's population and increase in urban water demand during the past several decades. Also, there has been an associated increased pressure on water and other natural resources, even though there has been a significant increase in long-term and emergency water storage facilities and the understanding of the necessity for the application of water-conserving technologies.

The traditional mind set of some government entities has been to react to drought by providing relief or emergency assistance to the affected areas. By following this approach, drought only receives the attention of decision-makers when it is at peak levels of intensity and when water management options are quite limited. This approach is ineffective and untimely. Thus, the Dakota Water Resources Act (DWRA) is intended to take the wiser route by forestalling the impacts of drought through wise planning and management of our available water resources.

To fully appreciate what this scenario means to the Red River Valley, one only needs to look at the potential impacts to Fargo. Drought impacts would at the beginning, in progressive stage, go from restrictions on lawn watering, require impacting Ashtabula Reservoir, to cutting water supplies to industries, and, ultimately, to mandatory water rationing of residential drinking water. This would virtually shut down the economy of the Red River Valley and destroy their hopes for the future. We hope that never happens.

Unfortunately, the noble goals of the DWRA, as they relate to the needs and options for water supply in the Red River Valley, are not being realized. It has been

nearly two years since the passage of the DWRA, and the studies required by the DWRA are still not fully underway nor is the required Environmental Impact Statement (EIS).

Following is a list of relevant dates that illustrate the slow and cumbersome process that has occurred while trying to begin the required studies. I will not take up your valuable time reading all of the dates but submit them for the record (Appendix 1).^{*} I have excerpted a few dates which display the lengthy and poor track record on the MOU.

July 5, 2000—A Memorandum of Understanding (MOU) to study the needs and options at the feasibility level with the District and State Water Commission (SWC) is signed. (Appendix 2)

May 2001—The Bureau of Reclamation verbally indicates that the existing MOU should be redone to include provisions of the DWRA.

March 2002—The Bureau hands out, during a meeting, a draft MOU and Cooperative Agreement to the SWC and the District.

August 20, 2002—MOU workshop held in Fargo.

November 6, 2002—The MOU is signed by the Bureau of Reclamation.

From a perfectly valid MOU, to a decision to develop a new MOU and then to get a new one signed took over two years. This is unacceptable, even for a government agency.

At the time that this testimony was prepared, a Cooperative Agreement necessary to authorize work on the RRV studies by the District is yet to be signed.

These dates illustrate the unreasonable and unnecessary delays that have taken place in regard to the Red River Valley studies. As you can see, the Bureau of Reclamation's negotiation process is extremely inefficient. The person designated to negotiate does not really have the authority to negotiate. The Bureau representative provides language to District for comment, the District responds in good faith, another Bureau office changes their original language and then another round of comments ensue.

This management style is particularly cumbersome, making negotiation inefficient and progress on the actual studies and EIS, which is required by the DWRA, minimal. We in North Dakota are certainly lacking priority attention on the negotiation.

As we sit here today, the District has spent more than \$600,000 on the process trying to move things forward with little success. The District's desire is to work with the Reclamation office to complete the project as quickly as possible so the people of the Red River Valley can be assured they will not suffer the devastating impacts when an extended drought occurs.

Senator DORGAN. Mr. Jamison, thank you very much. I hope you will not mind if on a personal level I say I know you have been battling some health challenges, but you still—this evening and in recent months, even as you have done that—have been battling this water policy issue and we very much appreciate your dedication to this issue and I appreciate you being here this evening.

Next, let us hear from Genevieve Thompson representing Audubon. Thank you very much for being here. I know you had other commitments outside of the State, and made a change in your plans in order to be here to testify. We appreciate that.

**STATEMENT OF GENEVIEVE THOMPSON, VICE PRESIDENT
AND EXECUTIVE DIRECTOR, AUDUBON'S STATE OFFICE FOR
THE DAKOTAS**

Ms. THOMPSON. Thank you, Mr. Chairman. Before I begin I'd also like to thank you and the subcommittee for holding this important hearing. It's an example of the leadership you have given us on natural resource management in the State. So on behalf of all of the resource professionals in water, thanks again.

With your permission, I'd like to submit my formal testimony for the record and highlight the testimony with my remarks this evening.

^{*}Appendix 1-15 have been retained in subcommittee files.

For the record, my name is Genevieve Thompson. I'm the vice president and executive director of Audubon's State Office for the Dakotas.

My testimony today is predicated on a strong personal and professional commitment to the Red River Basin. My family and I reside in Red River Basin.

Audubon has a long-standing commitment to proactively solving problems in the Red River. At Audubon, we are currently leading an effort to establish a 600-mile greenway along the Red River. We serve on the executive committee on the Red River Basin Institute for Research and Watershed Education. We are working, as you know, to build a Audubon nature center for the Fargo-Moorhead community, and we are working on both the Technical and Study Review Teams for the Red River Valley Needs Assessment.

As the subcommittee is aware, 45,000 square miles of Red River Basin watershed has a host of competing demands: Water quality, water supply, agriculture, recreation, mitigation of flood damage, wildlife and habitat, natural resource enhancement and the interaction between those and economic strengthening of the region.

A large number of organizations are working to understand these challenges. I want us to remember that the subject of our hearing, the Red River Valley Water Supply Project isn't being undertaken in a vacuum. It coincides with several watershed-wide planning initiatives.

In my testimony, I provided a table of some of the activities and initiatives ongoing. There is the Red River Basin Commission, the Institute, the Greenway, the Red River Basin Decision Information Network, Riparian Project, the Corp's work, the Basinwide Flood/Waffle Initiative, the International Red River Board. Obviously, there is a host of efforts ongoing. And I think it's important that you hear United States, Canada, interstate, tribal representation, and you're doing so because the stakes are so important.

We have had a lot of damage in the past. This drought represents potential great damage in the future. So, we need to implement solutions and, I agree, as soon as possible. We hope the Bureau places a similar priority in conducting these studies. We also hope that the Bureau can take advantage of some of the aforementioned initiatives so that we can come up with a solution that works for everyone. The act has a clear timetable and a clear mandate. We do believe that it should be done with a fair and open process. If we can conduct it with an unbiased and scientifically credible procedure, it's an unbelievable opportunity to finally resolve some of the controversy to avert lawsuits, and to get an actual sustainable water supply established.

I hope, again, that the Bureau takes the study in an inclusive manner, public involvement, if facilitated and maximized, increases the likelihood of acceptance when something is finally put forward. It is slow and cumbersome. I have sat through many of these meetings and been privy to some of the negotiations. But I do think the time we spend now will hopefully limit the time in the longer term, when we come to an implementation phase. It's painful, but hopefully it will outcome, as you had mentioned, a faster implementation.

We certainly can't predict at this point what the preferred options are, but there are just a few challenges that I'd like to highlight as we move forward. We live in such an extreme climate and in uncertainty of growth, so we hope and support consideration of economic development that incorporates research that reduces water use. Crystal Sugar is a good example of a water user that has incorporated research to limit their amount of water that they do use and still have a profitable operation. Also, can we look at industries that are less reliant on water. Marvin Windows, Microsoft Great Plains, the Research and Technology Park at NDSU. Hopefully those will move or forward in areas that we can supply water that are not water-retentive.

Certainly, there is a long history of controversy about the Missouri River. We encourage a thorough evaluation that accomplishes an examination of those water demands.

I am mindful of the drought. I have monitored the drought. There is a drought index. I'm concerned that we don't head into a similar area as the Colorado River, the climate basin, that we come up with a sustainable water supply so that would be incorporated. That's why Minnesota has been leading the way in identifying potential water sources that might be available in the event of a drought. The Otter Tail River, some aquifers, and I hope that we can continue to incorporate that as part of the strategy, particularly in the short-term. It won't take potentially 10 years or 5 years to identify and hopefully share some of those resources.

Lastly, water conservation is certainly another area that we would urge. Might I respectfully suggest that a delegation from our work go to the American Water Works Association Water Conservation Workshop. Coincidentally, it is in February and it is in Florida. That might help recruitment.

Thank you again. We support an open and frank and credible challenge. We support collaborations for watershed-based planning and we wish that the health of our entire ecosystem be maintained, human and otherwise. Thanks for the opportunity.

[The prepared statement of Ms. Thompson follows:]

PREPARED STATEMENT OF GENEVIEVE THOMPSON, VICE PRESIDENT AND EXECUTIVE DIRECTOR, AUDUBON'S STATE OFFICE FOR THE DAKOTAS

Chairman Dorgan, Senators of the Subcommittee on Water and Power, colleagues and participants, I would like to thank you for this opportunity to provide requested testimony on the "Red River Valley Water Needs". My name is Genevieve Thompson; I am the Vice President and Executive Director of Audubon's state office for the Dakotas.

Before I begin my testimony, I would like to thank you, Senator Dorgan, for your support of our collaborative efforts to solve the challenges in the Red River Basin in a sustainable basis for the long term. We appreciate your leadership and interest. My testimony today is predicated on a strong personal and professional commitment to the Red River Basin. My family and I reside in the Red River Basin, and we therefore have a stake in our collective ability to provide for a sustainable water supply over the long term. Audubon/Dakota has a longstanding and demonstrated commitment to the Red River Basin. As a direct outcome of our participation in the FEMA funded *International Flood Mitigation Initiative*, Audubon/Dakota is leading the effort to establish an interstate and international 600-river-mile Greenway on the Red¹ along the Red River of the North. Audubon/Dakota also serves on the Ex-

¹The mission of the Greenway on the Red is to promote the development of a greenway system on the Red River and its tributaries that mitigates floods and protects people through edu-

ecutive Committee of the Red River Institute for Research and Watershed Education.² We are working concurrently to establish an Audubon Nature Center for the Fargo-Moorhead community, to promote an understanding of our natural world, and what it means to live responsibly within the Red River ecosystem. Finally, Audubon/Dakota serves on both the Technical Team and the Study Review Team for the Red River Valley Needs and Options Report being prepared by the Bureau of Reclamation.

As the Subcommittee may be aware, the interstate and international watershed of the Red River covers 45,000 square miles. Because the basin is the remnant of glacial Lake Agassiz, the north-flowing Red River mainstem and valley proper are very flat, with the outer edges of the old lakeshore at 400 feet higher than the river's edge. The Red River Basin is faced with competing demands for water quality; water supply; mitigation of flood damage; agriculture; recreation and wildlife habitat; and natural resource enhancement.

Although water resource protection/management in the Red River Basin is complex and challenging, the Red River Valley Water Supply Project (RRVWSP) coincides with several unprecedented basinwide water planning initiatives. Many of these efforts were encouraged by the International Joint Commission's report³ to the U.S. and Canadian federal governments, which recommends that governments "should develop and implement comprehensive, multi-faceted plans for concurrently reducing flood damage, protecting and enhancing the natural environment; and provide opportunities for multi jurisdictional problem solving and the exchange of best practices information." In the same year, Section 8 of the Dakota Water Resources Act called for "an open and public comprehensive study of the water quality and quantity needs of the Red River Valley in North Dakota and possible options for meeting those needs", which is the genesis for the RRVWSP.

Table 1 below summarizes many of the multi jurisdictional water resource initiatives and projects that are currently ongoing in the Red River Basin. These are in addition to the Red River Basin Commission, which has taken leadership in setting a basinwide vision and decisionmaking framework. These efforts can potentially contribute to and/or benefit from the RRVWSP. They provide a means to ascertain how water resources should be utilized and safeguarded over the long term with multiple stakeholders in the Red River Basin.

Ongoing initiative	Description/stakeholders
Red River Basin Institute for Research & Watershed Education.	The Research "Center" of the Institute is comprised of an international partnership of government agencies, private and public basin organizations, and university professionals to identify research needs in the Red River Basin, and to ensure research objectivity through sound science and peer review. The Watershed Education "Center" is working to provide seamless watershed education programs at K-12, post-secondary and community levels, with an emphasis on developing leadership throughout the basin. The Institute's Research arm serves as the technical committee for the Greenway on the Red.

cation and partnerships that enhance the economy, environment and communities of the Red River Basin.

²The Red River Institute for Research and Watershed Education is an international partnership of government agencies, basin organizations, private sector professionals, and universities that works to identify, prioritize and conduct flood damage reduction and natural resource research within the Red River Basin.

³*Living with the Red*, 2000

Ongoing initiative	Description/stakeholders
Greenway on the Red.	Audubon/Dakota is working to promote the development of a 600-river mile Greenway system on the Red River of the North and its tributaries from Lake Traverse in South Dakota to Lake Winnipeg in Manitoba, with partners in North and South Dakota, Minnesota and Manitoba. Anticipated benefits of this Greenway include flood damage reduction, enhanced water quality, improved riparian habitat for birds and other wildlife, riparian and wetland restoration, increased recreation and tourism, and economic benefits to agriculture and communities adjacent to the Red River.
Red River Basin Decision Information Network (RRBDIN).	Creates an internet-based data dissemination system for the Red River Basin, for monitoring and decision-making. Current and potential data includes base map; spatial data (i.e., imagery, topography), water quality, etc.
Red River Riparian Project.	Works with landowners, project sponsors and contributing agencies to protect water resources and improve water quality through land management planning and restoration in the riparian areas of the Red River Basin.
Red River Feasibility & Reconnaissance Study.	The basin-wide/main stem feasibility study being implemented through the USACE will provide a comprehensive perspective of the basin's water-related problems, issues, needs, and opportunities and a blueprint and analytical tools for future feasibility studies of tributary sub-basins and generate implementation strategies for projects to meet the subbasins' water resource needs and opportunities.
Basinwide Flood Control/Waffle Project.	The Energy and Environmental Research Center (EERC-UND) is working to determine the feasibility of developing a basinwide system for temporary storage of floodwaters utilizing low-relief (agricultural) fields bounded by roads as temporary micro-storage pools during major flood events.
International Red River Board Aquatic Ecosystem Health Committee.	The International Red River Board (IRRB) was formed to consider water related issues in the bi-national watershed and to monitor the health of the Red River transboundary aquatic ecosystem; this committee is working to develop an integrated biological and water quality monitoring network.

Ongoing initiative	Description/stakeholders
Minnesota Flood Damage Reduction (Workgroup) Initiative.	Also referenced as the “Minnesota Mediation” model, this effort focuses on water storage strategies and projects that reduce flood damage and also have natural resource benefits. Some of these projects involve flood plain and wetlands restoration. To date, the state of Minnesota has expended approximately \$10 million on this initiative. These land-based water storage strategies theoretically increase river base flows during droughts, in tributary streams and in the mainstem. These water storage activities also have the potential to augment groundwater recharge.
Investigation of potential sources of additional water in Minnesota for North Dakota cities.	The state of Minnesota (MN-DNR; MPCA) is seeking solutions within the Red River Basin to address periodic and rare droughts through the identification of: 1) potential water supply alternatives during droughts; 2) water conservation strategies; and 3) economic development that is less dependent on water consumption.
Red River Basin Watershed Initiative [<i>pending—USEPA</i>].	This watershed-based strategy addresses water resource issues across state, federal and international jurisdictional boundaries. It has been submitted to USEPA for funding by the Red River Basin Commission & the Red River Basin Institute. The goal of this Watershed Initiative is to protect the ecological integrity of the Red River. Components to be addressed by this goal include flooding, adequate and clean water, wildlife habitat, and recreational and natural aesthetic values.
Conservation Reserve Enhancement Program (CREP) [<i>pending—NRCS/FSA</i>].	The Proposal under development is for a multi-state CREP in the Red River Basin. In cooperation with multiple agencies and landowners, the CREP targets 200,000 acres for restoration and management to reduce flood damage, improve water quality, and enhance wildlife and fisheries habitat.

Mr. Chairman, as you can see from the table, there are a host of Federal, State and local entities both in the United States and in Canada who are devoting considerable attention to solving the problems of the Red River Basin. They are doing so because the stakes are great. We cannot afford to duplicate past damage we have sustained in the Basin from flooding and poor water resource protection. We need to implement solutions. The table demonstrates a diversity of participants who are dedicated to sustainable, justifiable, and affordable solutions to problems. In addition, these participants feel this is a high priority issue worthy of their participation.

Audubon/Dakota hopes that the Bureau of Reclamation places the same high priority on their approach to conducting the Red River Valley Water Supply Project. The Dakota Water Resources Act established a clear mandate and timetables. Audubon agrees that this study is critical and should be undertaken. In addition, we be-

lieve it should be undertaken using a fair and open process, and conducted with unbiased and scientifically sound procedures. This effort provides an unprecedented opportunity to resolve the longstanding issue of Red River Basin water supply. It is essential for the Bureau to undertake an impartial, peer reviewed study. The study design should be comprehensive and integrate the needs and alternatives with all of the other Red River Basin efforts being undertaken. The Bureau can obtain essential objectivity by utilizing existing research capability within the Valley such as the Red River Basin Institute, or through an external science review panel.

It is unclear whether the Bureau has undertaken this study in a consistently fair and inclusive manner. The Specific Plans of Study as proposed by the Bureau of Reclamation for the Needs and Options Report and EIS requires the assessment of multiple variables of water need (i.e., existing and future MR&I; rural, aquatic environmental; recreation; etc.), as well as the identification of options to meet those needs. It is imperative that these studies, subsequent recommendations, and the analysis of the positive and negative impacts of those recommendations are conducted in an open and "transparent" process that is fair, open, and maintains scientific credibility. Public involvement should be facilitated and maximized, to increase the likelihood of subsequent acceptance and implementation. Initially, this is likely to be a cumbersome and slow process. However, adherence to sound science and stakeholder participation will save time in the long term, because it will help to ensure that the option(s) selected to meet the credible water needs of the Red River Basin are economically feasible, ecologically sound, and can be implemented.

While it is premature to dictate what the preferred option(s) will be prior to the implementation of the Plans of Study and analysis of alternatives, both individually and in a range of combinations, several challenges exist at the outset to the effective implementation of the Bureau's Red River Valley Water Supply Project Needs and Options study. These include:

- The region experiences temporal and spatial extremes in precipitation patterns that range from severe flooding as a result of spring runoff and/or heavy summer rainfall events, to prolonged droughts as seen in the period between 1988-1992. This exacerbates the difficulty of accurately projecting water needs from both a population demand standpoint and from an industrial needs perspective. The suggestion by stakeholders within the Basin that some of the uncertainty associated with projecting industrial needs might be ameliorated by encouraging economic development that is less reliant upon water consumption is worthy of consideration. Examples include Microsoft Great Plains, Marvin Windows and the NDSU Research & Technology Park. Audubon/Dakota also encourages and supports research that helps industries find ways to reduce water use such as American Crystal Sugar.
- There is a long history of controversy and opposition surrounding the alternative of transferring water from the Missouri to the Red River Basin. An unbiased evaluation of all available alternatives as assessed in the Plans of Studies will help to evaluate and ameliorate this controversy. With regard to alternatives that involve the delivery of Missouri River water to the Red River Valley, the evaluation process should address:
 - the impact of water removed for the Red River Valley singularly, and in combination with all of the other current and projected demands and withdrawals from the Missouri River;
 - the likelihood that if drought conditions create water shortages in the Red River Basin, is the Missouri River Basin similarly stressed and in a low-water condition;
 - if the Red River Basin is dependent upon a water supply that is outside the hydrologic basin and that supply becomes impeded, do demands within the Missouri River Basin (i.e., Montana, South Dakota, etc.) take precedence;
 - the assessment of interbasin transfer of water from the Missouri River to the Red River Basin should include an analysis of the potential risks that may result from invasive species and/or foreign biota transfers, and from potential habitat or wetland loss.
- Minnesota has provided leadership through the Technical Team/Study Review Team in the identification of potential solutions within the Red River Basin to address both periodic and extreme drought conditions. They are working on a more in-depth assessment of water sources that include groundwater and base flow in rivers such as the Otter Tail, which could be a potential source of water to the Red River Basin during drought conditions.
- The evaluation of sustainable strategies to meet Red River Basin water needs should address options that may require accompanying changes in current

water policy. For example, the Red River Valley MR&I Water Needs Assessment documented regions within the Basin where 82-97% of the current permitted use was in irrigation, for aquifers where rural water systems use groundwater sources. In the future it may be judicious to have a strategy in place that enables the transfer of these "allocations" from irrigation to rural water systems when it is necessary to meet rural water system shortages.

- This process represents an excellent opportunity to identify and implement basinwide water conservation and reuse strategies that could contribute significantly to reducing water supply demands in the Red River Basin. There are proven models both nationally and internationally, that include incentive programs for water-efficient appliances; leak and system loss detection; use of "gray water" where appropriate; xeriscape landscaping practices; and education/outreach programs. A good first step may be for a delegation of city and state representatives working on Red River Valley water needs to attend the American Water Works Association's upcoming, "*Water Conservation Workshop*", February 20-22, 2003 in Fort Lauderdale, Florida.
- Basinwide hydrologic modeling is not yet complete, yet the information is essential to realistically estimate Red River flows during drought cycles (i.e., when tributaries on the southeast and east in Minnesota are believed to contribute most of the water). It is hoped that the Bureau will take advantage of ongoing hydrologic modeling efforts in the Basin, such as the Digital Elevation Modeling and Floodplain Mapping Summit being coordinated by the Red River Basin Institute.
- There are a very large number of essential stakeholders involved, across state and national borders. Stakeholder coordination is time consuming and challenging, but it is crucial if the outputs of the RRVWSP are to obtain both scientific credibility and widespread public acceptance. The current composition of the Technical Team and the Study Review Team for the Red River Studies represents a broad cross-section of stakeholders. The diversity of stakeholder representation and professional expertise across state and national boundaries should be maintained.

The process before us, as lined out in the Draft Master Plan of Study for the Red River Valley Water Supply Project and the EIS, is daunting. There are a number of complex and interrelated variables and unknowns, compounded by an overarching mandate to consider the comprehensive water quality and quantity needs of the Red River Basin, in the context of MR&I, aquatic environment, recreation, and water conservation. In addition to the needs, there are multiple potential and interactive alternatives to meet those needs, with a diversity of users and stakeholders. Water is a precious resource, and the strategies that evolve from the Red River Valley Water Supply Project to meet the needs of the Red River Basin must also be sustainable, and environmentally sound. Audubon/Dakota supports an open and scientifically credible process to ascertain needs and strategies. We believe that the Bureau needs to exert strong leadership to move this important issue forward in an open, proactive, and scientifically credible process. We strongly support collaboration with ongoing efforts at watershed-based planning to ensure that the health of the Red River Basin ecosystem is maintained over the long-term.

Senator DORGAN. Ms. Thompson, thank you very much. I must say, when you asked that there be a comprehensive evaluation of the Missouri River, you certainly are getting your wish. Twelve years is about as comprehensive as this country can possibly provide.

Ms. THOMPSON. We appreciate that, Mr. Chairman.

Senator DORGAN. Let me call next on Michael Dwyer, North Dakota Water Users.

**STATEMENT OF MICHAEL DWYER, EXECUTIVE VICE
PRESIDENT, NORTH DAKOTA WATER USERS ASSOCIATION**

Mr. DWYER. Mr. Chairman, Senator Dorgan, I also thank you for the opportunity to testify, and thank you for the subcommittee holding this hearing. Much of what can be said has been said already here tonight, but I'd just like to add a few things.

First of all, I'd like the committee to know that there is Statewide support—strong Statewide support for this issue of a water

supply for the Red River Valley. If you look at the testimony that—the written testimony that I have, you will see that the North Dakota Water Users Association is part of the North Dakota Water Coalition which consists of over 30 organizations that have come together in a united manner to support the Dakota Water Resources Act, and are now supporting this effort to address and solve the problems of a lack of adequate water for the Red River Valley. You'll see that all the cities are involved, that the rural electrics are involved, the business community, the agriculture community, the education community, the Indian community and, of course, the water community all participate in the Water Coalition, and we strongly support and are deeply concerned about this current effort to provide a water supply to the Red River Valley.

Now, Warren has adequately addressed the issue of drought and the fact in many areas of the country, the drought that is being experienced is greater than the droughts that were experienced in the 1930's. We know that the Red River went dry for a continuous period in each year of the 1930's and so, if we experienced a drought that exceeded that benchmark, we would indeed have a catastrophe on our hands.

I'd also like to mention that the Bureau does need to be complimented for the work that it did in the NAWS project. It provided meticulous attention to detail and was very thorough, and its work should help us withstand the litigation that is being filed there. But at the same time, I think the Bureau sometimes pays too much attention to the naysayers—the people that would have us do nothing in the valley—that would have us not provide adequate water supply. I think we need to look at the NAWS project as an example of, if you think that you're going to avert litigation by doing everything possible, look at the NAWS project. The Bureau, the State had done everything possible. I don't think there could be an organism that possibly could be moved in that project, yet we are being subject to litigation assault. Sometimes we need to move forward, as Genevieve said, we need to be careful. We need to be inclusive. But at the same time, we can't not move forward because there are naysayers that say there might be a problem or two.

I think we also need to look at the Corps of Engineers on the Missouri River as an example of long-term delay. We cannot afford to have another government example of that kind of delay.

In conclusion, I would say that the Red River Valley needs a dependable water supply for the cities of Fargo, Grand Forks, smaller communities, rural water systems, industries, ag processing, manufacturing and other purposes to protect and enhance the economic stability and the quantity of life for the exploding population in the Red River Basin. The failure to address the water supply needs of the Red River Basin would jeopardize our economic stability, including industry, ag processing, manufacturing, and municipal growth, and will adversely affect the lives of people who are suffering from both poor quality or inadequate quantities of water and that also will also have a negative impact on the entire State of North Dakota.

Thank you very much.

[The prepared statement of Mr. Dwyer follows:]

PREPARED STATEMENT OF MICHAEL DWYER, EXECUTIVE VICE PRESIDENT,
NORTH DAKOTA WATER USERS ASSOCIATION

I. INTRODUCTION

Senator Dorgan, thank you for the opportunity to talk to you today about the critical water needs of the Red River Valley. My name is Michael Dwyer and I am the Executive Vice President of the North Dakota Water Users Association. I am speaking today on behalf of grassroots water users and members across North Dakota. We currently have more than 1,000 members representing individuals, businesses, water districts, irrigators and companies across our great state of North Dakota.

The North Dakota Water Users has joined together with other statewide and regional organizations to form the North Dakota Water Coalition, which is a coalition of regional and statewide organizations in North Dakota that have come together for the purpose of completing North Dakota's water infrastructure for economic growth and quality of life. We are especially concerned about the water supply needs of the Red River Valley.

The North Dakota Water Coalition considers the water supply needs of the Red River Valley to be a critical priority for all of North Dakota. The Water Coalition includes the following groups:

Associated General Contractors of North Dakota	North Dakota Atmospheric Resource Board
BOMMM Joint Water Resource Board	North Dakota Education Association
Cass County Joint Water Resource Board	North Dakota Farm Bureau
City of Bismarck	North Dakota Farmers Union
City of Devils Lake	North Dakota Irrigation Caucus
City of Dickinson	North Dakota League of Cities
City of Fargo	North Dakota Municipal Bond Bank
City of Grand Forks	North Dakota Rural Water Systems Association
City of Minot	North Dakota State Water Commission
City of Williston/Upper Lake Sakakawea Planning Co.	North Dakota Water Resource Districts Association
Devils Lake Basin Joint Board	North Dakota Water Users Association
Eastern Dakota Water Users	North Dakota Weather Modification Association
Economic Development Association of ND	Red River Joint Water Board
Garrison Diversion Conservancy District	Souris River Joint Water Resource Board
Greater North Dakota Association	Southwest Water Authority
ND County Commissioners Association	Three Affiliated Tribes
North Dakota Association of Rural Electric Coop.	West River Joint Water Board

Government does a better job of responding to disasters than it does in preparing for those situations in advance. Those of us involved in water in North Dakota can easily see that we are facing potential critical water shortages in the Red River Valley in the future. We also can see those areas in the Red River Valley where the water quality is not fit to drink. It is for these reasons that there is such strong and broad-based support in North Dakota for the Dakota Water Resources Act, and the Red River Valley water supply component of that Act.

II. DROUGHT READINESS

Unless you have chosen to put your head in the sand, one cannot help recognize that many areas of our country have suffered drought conditions over the past few years far greater than the drought conditions of the 1930's. During the 1930's, the Red River itself, which is the source of water for many of the water supply needs of the Red River Valley, was completely dry for several extended periods of time. Not a single drop of water was flowing.

Listen to a recollection of former North Dakota Governor William Guy: If you were to look at the Red River near the water plant in the 1930's, you would wonder how they ever made the water fit to drink. The searing hot drought hung heavily over the Upper Midwest through the entire decade of the 1930's. The Geological Survey records say that the murky Red River ceased to flow at Fargo for a period in every year of that decade. The driest year was 1936 when the Red River stopped flowing for 166 continuous days. Cars were not washed. Lawns were unsprinkled. There was talk of returning the Fargo Sewage Plant discharge to the river above the city water intake. Moorhead was drawing all of its water from wells east of the city and their tap water tasted good. With a population of around 25,000, Fargo's

water situation was desperate. . . . Today both Fargo and Moorhead draw their water from the Red River while their combined population has increased five fold from the dry 1930's. Industries not even dreamed of 65 years ago now use copious amounts of Red River water. It is easy to understand why the Garrison Diversion Project to bring Missouri River water east to the Red River Valley has been on the minds of thinking people for more than 50 years.

When you consider that some areas are experiencing drought conditions worse than the 1930's, and you look at the drought conditions in the Red River Valley in the 1930's, it is not a question of whether we are going to face those conditions in the future, but it is only a matter of when. To not be prepared to address such conditions when we know they will occur is extremely poor government. Rather than responding to a disaster, we should prepare for a certain future, and leave the legacy for our children, grandchildren, and great-grandchildren, that we looked into that past, and learning from the past, satisfied the water supply needs of the future. That is why we have so strongly supported the Dakota Water Resources Act, and the provisions of that Act that address the water supply needs of the Red River Valley.

III. RED RIVER VALLEY STUDIES AND ENVIRONMENTAL IMPACT STATEMENT

It has been two years since the passage of the Dakota Water Resources Act, and little of the work called for under that Act to address the water supply needs of the Red River Valley has been completed. We applaud the Bureau of Reclamation's thoroughness and meticulous attention to details in its work related to the Northwest Area Water Supply Project (NAWS), particularly as it relates to the environmental assessment and the Finding Of No Significant Impact (FONSI) on that project. That project will likely be able to withstand the legal challenges that it is facing because of the careful approach utilized by the Bureau of Reclamation. We understand that thoroughness and carefulness must also be applied by the Bureau of Reclamation to the Dakota Water Resources Act, and the studies for the water supply needs of the Red River Valley called for under that Act. Yet, we must also not shirk our duty due to the threats of nay sayers that would prefer us to do nothing. We must move forward in a vigorous and aggressive matter, recognizing that the water supply needs of the Red River Valley are North Dakota's most critical long-term water supply need.

If you review the demographics of our state, it is easy to see that the Red River Valley will continue to grow in population. It is estimated that the city of Fargo itself will be a city of over 20,000 within the next 20 years. Whatever the exact population turns out to be, we do know that the population of the valley, and particularly the city of Fargo, is expanding by leaps and bounds.

We cannot afford to have another government example of long-term delay and inaction. The Corps of Engineers is entering its fourteenth (14th) year of studying the Missouri River mainstem dam operations master manual. The Bureau of Reclamation must not impose a similar travesty on the people of North Dakota or the Congress, which authorized the Dakota Water Resources Act. A management system must be developed which allows these important studies to move forward and be completed, so that the Congress and the state of North Dakota can take the next step of implementing measures to address the long-term water supply needs of the Red River Valley.

IV. CONCLUSION

Benjamin Franklin once said "When the well is dry, we know the worth of water". North Dakotans cannot afford to wait until the well is dry before we address the water supply needs of the Red River Valley. As I said at the beginning of my testimony, government does a better job of responding to disasters than preparing for the future, but we know the worth of water, and we must prepare for the future.

On behalf of the North Dakota Water Coalition, and all of the members and organizations participating in that Water Coalition, we do not want to put undue focus on the delays of the last two years. However, we would like to focus on the critical nature of this issue, and urge the committee in partnership with the Bureau of Reclamation and the state of North Dakota, to assist in making sure that the next two years are fruitful in terms of effort in completing the studies that are necessary before long-term measures to address the water supply needs of the Red River Valley can be implemented.

The Red River Valley needs a dependable water supply for the cities of Fargo, Grand Forks, smaller communities, rural water systems, industry, ag processing, manufacturing, and other purposes, to protect and enhance the economic stability and quality of life for the exploding population in the Red River Basin. Failure to

address the water supply needs of the Red River Basin will jeopardize our economic stability, including industry, ag processing, manufacturing, and municipal growth, and will adversely affect the lives of people who are suffering from both poor quality or inadequate quantities of water, as well as the entire state of North Dakota.

Thank you very much.

Senator DORGAN. Mr. Dwyer, thank you very much.

I should say that while I have great angst about the time line here, I indicated Ms. Bach is a dedicated public servant. The Bureau was very helpful on NAWS, no question about that, and I think the suit that's been filed by Canada has no merit.

So if anybody is within listening distance that can dismiss that, feel free to do it, but I think it has no merit because the Bureau did what it should have done at the front end of this process. I perhaps should have said that at the start.

But coming back to this issue of the Red River Valley, my great concern is this potential spreading of the drought could be, as—you used the word catastrophe, Mr. Dwyer—I think it could be catastrophic for the Red River Valley. This is the one area of the State that is growing, growing very rapidly. I will just give you a couple statistics. The demographer for the State says that in 1980, we had 652,000 citizens. He says in the year 2020, we're going to have 651,000 citizens. In other words, what he's saying in 40 years, we'll have about the same number of people, except Fargo will have 60,000 more people, and Bismarck will have 20,000 more people. Grand Forks and Minot will have about the same population. So, the State will have about the State population. The four largest cities, two of them will be unchanged, two of them will be up a combined 80,000, which means the remaining 300,000 people which live in the 95 percent of the State, there will be a 25 to 30 percent reduction in population in the next 30 to 40 years. Pretty ominous. So facing all these challenges, and understanding that the one portion of the State that has really grown is particularly Cass County, particularly in the Red River Valley, but that growth is dependent on assured long-term supply of water and the potential of a drought spreading over a period of years causing catastrophic economic consequences here in the Red River Valley. I think is appropriate for us to say wait a second, we better get moving, we better get something done. This ought not be business as usual. And that's the point I'm making this evening.

Mr. Jamison, you've heard the discussion about missed deadlines. I ask the question, was there kind of a fan dance here between the State, the Bureau and the Conservancy District trying to figure out who was supposed to do what and does that take too long, or was this just being extra careful?

Mr. JAMISON. Mr. Chairman, thank you for the question. It took too long, obviously. Who's to blame? That would be an easy game to get into.

Let me discuss the process a little bit that has frustrated me. In negotiating contracts, somebody usually starts the process by putting a piece of paper on the table. Normally, we would assume that that piece of paper has been cleared, and is ready to negotiate on it. In too many cases, we have responded to the piece of paper, or an initial draft of an agreement, commented on it, or comments have been accepted or largely accepted only to find out that the basic piece of paper that we started negotiating on has been

changed again, or—changed by some other office. And I think, and maybe I'm a part of the problem because I had so many years of Federal service. As you know, I was a Federal official, and I was sued by environmental organizations, many lawsuits, so I'm very familiar with this process. Maybe too familiar. But one of things that tends to happen, not just from the Bureau of Reclamation and lot of Federal agencies, I have worked for several, is you're negotiating with a back bench that you can't see. It's not the person you're sitting across the table with, but the person—we've sat across the table. People we sat across from table from are honorable and worked very well with us. What happens to them is that somebody on the back bench someplace in another office then pulls the paper back, changes it and leaves the untoward situation of the person your negotiating with have to come back and start the process all over again.

I'm a firm believer that to make an efficient organization people to have to be personally accountable. Personally impassioned about something, and government is another big organization, but it's not limited to government. It can happen to any of us. But until you designate somebody, that person feels it's personally his or her responsibility to make it happen in a reasonable time frame, the system will take over, and you will just get eaten up slowly but surely by review after review after review. And what I think is needed is a passionate person to be dedicated to this job, and to have the authority and the chutzpa, if you will, to go back to the back bench and say look, we're already through that.

Senator DORGAN. Mr. Jamison, you have been at this a long time. Tell me what you think the time estimate is going to be—what is the real time estimate of when folks here in the Red River Valley might expect a needs assessment to be completed, and then expect action to take to respond to the needs assessment?

Mr. JAMISON. In my judgment, 2 years would be the time frame for a study. Now, there are considerable challenges. Ms. Thompson has indicated a number of interesting things that we should look at and we should, but I still think that the engineering work can be done in 2 years. Now it will require close cooperation. It will require multitasking. We'll have to do several things at once. We can't stop because somebody writes us a nasty letter, and we go focus on that for a while. We have to keep on going on a lot of different fronts at one time. But from an engineering perspective we should be able to get the needs and options study and an analysis of alternative studies in 2 years. Certainly the environmental impact statement that accompanies that should follow closely behind that.

Senator DORGAN. Mr. Dwyer, I want to ask you and Ms. Thompson both about the subject of conservation because in Ms. Thompson's testimony, she talked about conservation a fair amount and it is the case, is it not, that there are several ways to develop new supplies of water. One is to find a new supply of water and, second is to conserve water that would otherwise have been used, provided that you don't conserve it at the expense of your economy. Tell me about conservation and your view of conservation as part of this process.

Mr. DWYER. Senator Dorgan, I do disagree with Ms. Thompson's statement that we have to look for industry that is less dependent on water. I think we ought to look for all industry, and there are some industries that are less dependent on water, and there is some industry is water-intensive and we ought not to say well, we are not going to try to develop and solicit those industries that use a lot of water because that's only taking half of the whole. I think we need to develop every possible opportunity that we can in our economy because we need that. Now, certainly we shouldn't encourage any wasteful use of water. Certainly we ought to encourage conservation that involves not wasting water, but it does not, it does not include limiting our opportunities.

Senator DORGAN. Ms. Thompson, would you agree that getting it right—we have heard that phrase several times—getting right has several different meanings? One is doing it the right way, crossing all the t's, dotting all the i's, making sure you covered it all. But, second, getting it right would also mean getting these things done in time that Fargo and Grand Forks and the Red River Valley not be hung out to dry with the encroaching drought that could very well be catastrophic to their economies, having the opportunity to put in place some kind of mechanism to assure a water supply before that would happen. Is that also part of getting it right in your assessment?

Ms. THOMPSON. I think they're both certainly elements of getting it right. I think on the former, the idea is if the plans of study and the overlap between them are undertaken so they're peer-reviewable, then no one can come back later and say in a letter or a dart or what have you that was done under cloak of darkness, that was a relationship that was inappropriate. If those studies are peer-reviewable, i.e., you know, through an institute, or we have a great university system in the Basin—if the studies themselves stand alone, then that part of the crossing of the t's and the i's obviates subsequent lawsuits because they've already taken all of those variables.

The other part of getting it right, I think, does tie into at least my interest in looking at conservation as one avenue. North Carolina was faced until quite recently with a very significant drought, and they experienced a 20 percent reduction in demand just based on, you know, conservation measures that the communities could implement. So, as we look at some of the options, you know, can we do different lawn kinds of care, a whole host of different things.

My interest, I think, is in getting those conservation strategies that can address the short-term. Even, no matter what option is taken, we're looking at the implementation time frame that you were asking about. So can we have a first tier? It's my understanding when you look at ground water based irrigation in the Basin. Maybe, I think there is precedence for farmers to have a drought insurance program in areas of severe drought that ensure irrigation allotment can go to municipalities in payment of a drought insurance payment. It's my wish that through this process we can identify not just one avenue, but a whole host of complementary avenues that are either greater or lesser. That might be one.

Again, the interest, my understanding that east of the Red, rather than west of the Red, that's where a lot of the water stays when

we start to dry out on the North Dakota side, so I think it's identifying, and maybe prioritizing in a temporal way the things that can be implemented sooner, the things that can be, or should be implemented on a longer scale.

Senator DORGAN. Let me describe why I wanted to hold this hearing now. I think the Bureau has some very dedicated employees. I have seen a lot of the good work they've done. I think the Conservancy District has good leadership. I have worked with Mr. Jamison for a long time. I have admiration for Mr. Frink and the folks at the State Water Commission. So we have a number of different entities involved in this process, and I have respect for all of them. But it seems to me that you have to have some markers here in this process, and what I want to do is set the marks here to figure out where we are going and how we are going to get there and when we are going to get there. And I held a hearing on trade about 10 months ago on international trade issues and had Ambassador Johnson in front of me. He told me what he was going to do. I said I tell you what, I'm going to hold another hearing 6 to 8 months from now, and you're going to come up here and sit at this table and we are going to find out what you've done. Well, I called him 2 weeks ago and said you don't have to do that hearing because you did exactly what you told me you were going to do. But that happened, I'm convinced, not because he was spending a lot of time trying to figure out how he should do it, but because he knew he was going to have to be called to a hearing and answer to it. And so he got it done.

I want the same thing to happen with this project. The Congress with great angst passed an authorization bill. It's not perfect, and there are people who wish it had never passed. But in that authorization bill, a significant piece, \$200 million, and a process which involved the partnerships determined how we were going to assess the needs of the Red River Valley and then go about meeting those needs. That process is not an open-ended process. It's not out in Never-Never Land. And the encroaching drought, I think, ought to persuade all us there is some urgency here.

So, what I'm going to do with this hearing is set some markers. I know there are many people here from water commissions and boards throughout the region. I'm going to ask any of you who wish, you want to have a statement from your particular water board or commission as a part of this permanent record, feel free to submit that statement to my office or the Senate Energy Committee within 2 weeks. We'll make that part of this hearing, and my hope is that this hearing can establish a record that we can measure against next year, the year after and the year after that as we move down this road because this problem is one that begs for a solution, and it, too, has been going on for some long, long while. We have a Phase I study, a Phase II study, and now we are going to duplicate part of that. I understand why all this is going on. But, still and all, in the end we need to address the proposition that some day in some way this vibrant part of the State's economy could find itself short of water or out of water. If that happens, it will be ruinous to the economy in this part of North Dakota, and we should not let that happen. So I want to thank the folks who have presented testimony this evening, and we will use the results

of this hearing and all that you submit between now and the final two weeks from various parts of our State as the marker by which we will try to measure next year and the year after that what is happening here to satisfy the needs—the water needs of the Red River Valley that's contemplated in the authorization bill that Congress passed two years ago.

Thank you all for attending. This hearing is adjourned.

[Whereupon, at 8:35 p.m. the hearing was adjourned.]

APPENDIX

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

CHAMBER OF COMMERCE OF FARGO MOORHEAD,
Fargo, ND, December 7, 2002.

Senator BYRON DORGAN,
U.S. Senate, Hart Office Building, Washington, DC.

DEAR SENATOR DORGAN: As you know, the Chamber of Commerce of Fargo Moorhead is a bi-state, regional chamber of commerce with more than 1,600 member firms that collectively employ more than 66,000 people in our region. Our mission is unifying and advancing business and community interests in our region.

This letter is written to thank you for conducting a field hearing on Monday, December 9th in Fargo to examine the Red River Valley's water needs and the U.S. Bureau of Reclamation's lack of progress on a series of water projects authorized by the Dakota Water Resources Act, which you sponsored and which our Chamber has strongly encouraged and supported in the past.

As you know, adequate, available and carefully managed water resources are important to citizens, commerce and communities throughout our region and in fact across our entire nation. Periods of both drought and deluge have negatively impacted our community and region in the past, adversely affecting our economy, community infrastructure and daily life. They have also had a negative impact on federal, state and local government operations and budgets.

We appreciate your using your position as Chairman of the U.S. Senate Energy and Natural Resources Subcommittee on Water and Power to conduct this field hearing and receive testimony from a variety of entities that are concerned about water resources and water resource issues in the Red River Basin. We also appreciate your efforts to work with the U.S. Bureau of Reclamation to encourage the Bureau to improve the Red River Valley's water supply in the future.

Warm regards always,

DAVID K. MARTIN,
Public Affairs Director.

MOORHEAD PUBLIC SERVICE,
Moorhead, MN, December 20, 2002.

Hon. BYRON DORGAN,
U.S. Senate, Hart Office Building, Washington, DC.

DEAR SENATOR DORGAN: Thank you for conducting the field hearing on Monday, December 9, 2002, in Fargo, to examine the Red River Valley's water needs and the U.S. Bureau of Reclamation's lack of progress on a series of water projects authorized by the Dakota Water Resources Act. The City of Moorhead believes that addressing the water resource needs of the Red River Valley is extremely important for the future economy of this region.

You mentioned at the December 9 hearing that you were accepting statements for the record for the Red River Valley water needs. Attached is the presentation from Mayor Mark Voxland of the City of Moorhead, along with a resolution from the Moorhead City Council which address the U.S. Bureau of Reclamation's Red River Valley Supply Project. Moorhead supports having Minnesota communities in the Red River Valley included in future studies and projects for water resource needs addressed in the Dakota Water Resources Act.

Moorhead is working very hard to ensure a sufficient supply of water for its economy well into the future. Please enter Mayor Mark Voxland's presentation and the Moorhead City Council's resolution into the record. We appreciate your work as chairman of the U.S. Senate Energy and Natural Resources Subcommittee on Water

and Power. We also appreciate that you conducted the field hearing and received testimonies on the issue of water resources in the Red River Valley.

Thank you for all you do for this region.

Sincerely,

BILL SCHWANDT, PE MBA,
General Manager.

PRESENTATION FOR THE RED RIVER VALLEY WATER SUPPLY PROJECT ENVIRONMENT
IMPACT STATEMENT SCOPING MEETING

October 28, 2002

To participants of the U.S. Bureau of Reclamation's Red River Valley Water Supply Project. My name is Mayor Mark Voxland. I am the Mayor of Moorhead, Minnesota. I would like to thank you for the opportunity to speak to you this evening on an issue that is very important to the city of Moorhead. We would like to have the comments and the resolution that I will provide submitted for your consideration as you work on this Environmental Impact Statement of the Red River Valley Water Supply Project.

I read on the front cover of the Red River Valley Water Needs Assessment, Phase II, the mission of the U.S. Bureau of Reclamation. That mission is to, "manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public." It disturbs me when I read through the Volume 1, Issue 1, *Red River Valley Water Supply Project Environmental Impact Statement Newsletter*, November 2002, and find that any reference to the previously included communities in Minnesota are absent.

It is my understanding that Minnesota communities of Moorhead, Breckenridge, and East Grand Forks were included in the U.S. Bureau of Reclamation, *Red River Valley Water Needs Assessment, Phase II, Appraisal of Alternatives to Meet Project Shortages* report. On Page 2-10, in Table 2.6, "Shortages for Cities, Industries and Rural Systems in the Red River Valley," included Moorhead with the reference to a 1934 shortage and a cumulative 54-year shortage during the study period of 24,870 acre-feet.

Moorhead is working very hard to supply water for its economy well into the future. In 1995, Moorhead completed a new water treatment facility that strategically shifted its resources away from taking water from our Buffalo Aquifer in order to reserve that water for periods of long-term drought. Therefore, Moorhead takes approximately 80 percent of its water from the Red River of the North. Moorhead has worked extremely hard to develop measures to protect the sensitive Buffalo Aquifer. Moorhead, like the U.S. Bureau of Reclamation, is looking 10 years into the future when Moorhead has grown and there is more demand for its water supply resources.

The Phase II report shows significant shortages under either the U.S. Bureau of Reclamation's or Moorhead's and other participants' year 2050 projections. This is the concern of Moorhead.

The significant concern of Moorhead, at this time, is the fact that Moorhead and other Minnesota communities could be eliminated from further studies of the Garrison Diversion Project. Moorhead believes that it would be very unfortunate when the Missouri River project is finally completed and Moorhead may not be able to receive water from that project for future economic growth of all Red River Valley communities on both sides of the Red River.

As I mentioned previously, at the present time Moorhead has enough water for normal growth, even in a drought situation because of the strategic efforts that will continue into the future. Moorhead, however, does believe that future economic development efforts to attract business and industry into our community will require water supplies that are greater than what we currently have. The Missouri River water is a water supply necessity for Moorhead.

Finally, Moorhead shares the Red River of the North as a water supply resource with other Minnesota and North Dakota communities. The city of Moorhead is very concerned about water resources for the existing and future municipal and industrial water uses. We have plans in place to use water in the most efficient manner. Moorhead is part of the Red River Valley. Moorhead believes that it, and other Minnesota Red River Valley communities, should be included in the Red River Valley Water Supply Project and other studies subsequent to studies that are being proposed.

Therefore, as the Mayor of Moorhead and along with the Moorhead City Council, we request that the U.S. Bureau of Reclamation, once again, include the Minnesota communities in the Red River Valley Water Supply Project. I have a resolution from the Moorhead City Council and me, which I would like to submit to you.

Once again, thank you for the opportunity to speak to you about this issue. We ask that you will take our comments very seriously. If there are any questions or concerns, I encourage you to please contact me.

RESOLUTION

WHEREAS, the development of a reliable water supply for the Red River Valley has been a subject of great interest to Red River Valley residents of both eastern North Dakota and western Minnesota, government agencies, and entities concerned with water management and development; and

WHEREAS, although rivers in the Red River Valley are prone to flooding and excessive runoff, there are also periods of low flow and drought conditions; and

WHEREAS, Moorhead and other Minnesota communities in the Red River Valley are vital to the success of the region and provide resources for the regional economy; and

WHEREAS, in 1994, the U.S. Bureau of Reclamation began a planning study called the Red River Valley Water Needs Assessment to investigate and evaluate existing and future municipal, rural, and industrial water use in the Red River Valley communities; and

WHEREAS, from 1994 to 2000, Moorhead, East Grand Forks, and Breckenridge were included in the study; and

WHEREAS, Phase II of the Red River Valley Water Needs Assessment included water needs and several alternatives to meet the needs of both eastern North Dakota and western Minnesota communities in the Red River Valley; and

WHEREAS, the Dakota Water Resources Act of 2000 (DWRA) was signed into law on December 21, 2000, which authorizes the Red River Valley Water Supply Project; and

WHEREAS, Section 8 (b)(1) of Public Law 106 554 states "The Secretary of the Interior shall conduct a comprehensive study of the water quality and quantity needs of the Red River Valley *in North Dakota* (emphasis added) and possible options for meeting those needs"; and

WHEREAS, a 2002 Memorandum of Understanding was developed between the U.S. Bureau of Reclamation and the State of North Dakota for implementation of the DWRA; and

WHEREAS, Minnesota cities in the Red River Valley were removed from the Red River Valley Water Supply Project in both the DWRA and in the 2002 Memorandum of Understanding; and

WHEREAS, Moorhead and other communities have been asked to provide comments at the Public Scoping meeting in Fargo, North Dakota, on October 28, 2002, to discuss the Red River Valley Water Supply Project Environmental Impact Statement; and

WHEREAS, Moorhead shares the Red River as a water supply resource with other Minnesota and North Dakota communities; and

WHEREAS, the City of Moorhead is very concerned about water resources for the existing and future municipal and industrial water use in the city; and

WHEREAS, the City of Moorhead believes it and other Minnesota Red River Valley communities should be included in the Red River Valley Water Supply Project; and

WHEREAS, the Eastern Dakota Water Users Group has similar concerns regarding Minnesota being removed from the Red River Valley Water Supply Project.

NOW, THEREFORE, BE IT RESOLVED that the Mayor and City Council of the City of Moorhead request the U.S. Bureau of Reclamation to, once again, include the Minnesota communities in the Red River Valley Water Supply Project.

PASSED by the City Council of the City of Moorhead this 21st day of October, 2002.

APPROVED BY:

/s/ Mark Voxland

MARK VOXLAND, Mayor

ATTEST:

/s/ Kaye E. Buchholz

KAYE E. BUCHHOLZ, City Clerk

(SEAL)

STATEMENT OF GARY L. PEARSON, D.V.M., JAMESTOWN, ND

According to the December 4, 2002, news release regarding the Senate Committee on Energy and Natural Resources Subcommittee on Water and Power's December 9, 2002, hearing on "Red River Valley Water Needs," the stated purpose of the hearing was:

"To examine the Red River Valley's water needs and the U.S. Bureau of Reclamation's lack of progress on a series of water projects authorized by the Dakota Water Resources Act."

Subcommittee Chairman Senator Byron Dorgan of North Dakota was quoted in the release as stating that:

"The Bureau of Reclamation is failing to meet its obligation to improve the Red River Valley's water supply. Today, the Bureau is a full four years behind schedule on the Red River Valley studies it is required to complete.

The delays by the Bureau will not go unchallenged. In this hearing, I want to hold the Bureau's feet to the fire and get action on these Red River Valley water studies."

It may be appropriate, therefore, to review the history of the Red River Valley water studies to which Subcommittee Chairman Dorgan refers in order to understand better some of the factors contributing to their delay.

MISINFORMATION REGARDING RED RIVER VALLEY WATER NEEDS

One of the principal factors contributing to delays in the identification of Red River Valley water needs and alternatives for meeting those needs has been the frequent dissemination of misinformation regarding those needs and alternatives by proponents of the Garrison Diversion Unit and other North Dakota water development interests.

The Promise of Water for the Red River Valley

After the Dakota Water Resources Act of 2000 was passed in the closing minutes of the 106th Congress as a rider on the \$450 billion Fiscal Year 2001 Labor and Health and Human Services Appropriations bill, North Dakota Senator Kent Conrad declared that:

"The DWRA was the first Garrison plan written by North Dakotans for North Dakotans and is a realistic plan to complete this project." (Conrad, 2001)

Six months later, a story in *The Jamestown Sun* reported:

"Fargo and the rest of the Red River Valley have been waiting 50 years for Garrison Diversion to bring Missouri River water east." (Cole, 2001)

It should be noted, however, that the Garrison Diversion Unit authorized in 1965 included, in addition to 250,000 acres of federal irrigation development, municipal water supplies for 14 towns in eastern North Dakota, but the only one in the Red River Basin was Pekin, with a 1970 population of 120, located near the Sheyenne River in northeastern North Dakota. The original Garrison Diversion Unit did not include water supplies for Fargo or any other cities in the Red River Valley. In fact, it was only after a lawsuit by the National Audubon Society forced a reevaluation of the project in 1977 that Fargo (but not Grand Forks) was eventually identified as a "potential municipal water user" from the project.

The Garrison Diversion Unit Reformulation Act of 1986 authorized a "Sheyenne River water supply and release facility . . . capable of delivering 100 cubic feet per second of water for the cities of Fargo and Grand Forks and surrounding communities," but the authorization was not based on a comprehensive study of municipal water needs and options for meeting those needs, or the feasibility of such a facility.

It was not until 1993 when, at the request and with the agreement of the Governor of North Dakota and the North Dakota Congressional Delegation (Schafer et al., 1993), the Commissioner of the Bureau of Reclamation established a North Dakota Water Management Collaborative Process involving all stakeholders to identify the contemporary water needs of the State that a comprehensive study of the future water needs of the Red River Valley was initiated. However, when it became evident that the Collaborative Process would not endorse the completion of the Garrison Diversion project to deliver Missouri River water to the Red River Valley, the North Dakota Congressional Delegation withdrew from the process, stating that:

"We need to agree on proposed changes to the current authorized Garrison Diversion Project in North Dakota . . .

. . . we intend to make a fresh start to collaborate in a way that produces concurrence among all of the interests in North Dakota. We intend to produce

consensus legislation that we will introduce in Congress to modify the Garrison Diversion Unit Reformulation Act.” (Dorgan et al., 1994)

Although the North Dakota Water Management Collaborative Process collapsed when the North Dakota Congressional Delegation withdrew in 1994, the Bureau of Reclamation, with the active participation of a representative of the National Wildlife Federation representing other stakeholders on the study’s Technical Steering Team, continued the appraisal level Red River Valley Water Needs Assessment study that had been initiated under the Collaborative Process.

The Debt Owed to North Dakota

North Dakota’s political leaders frequently dismiss the absence of a demonstrated need for additional water supplies for cities in the Red River Valley by claiming that, in equity, the State is owed a Red River Valley water supply project in payment for lands flooded by the Oahe and Garrison dams on the Missouri River, e.g.:

“When the Garrison Dam and Reservoir were built to provide downstream protection and to safeguard navigation, the state lost 500,000 acres of prime farm land, a major part of its economic base.” (Dorgan, 1998)

However, of the 462,000 acres of land in North Dakota actually inundated by the Oahe and Garrison reservoirs, only 108,300 acres were cropland (Fish and Wildlife Service, 1952; Bureau of Sport Fisheries and Wildlife, 1960). The impact on North Dakota’s economic base can be appreciated by considering that the entire 551,706 acres acquired for the reservoirs is only 1.2 percent of the total land base of the State. Moreover, North Dakota already receives \$130,200,000 annually in flood control (\$1,400,000), hydropower (\$80,300,000), water supply (\$28,500,000) and recreation (\$20,000,000) benefits from the Pick-Sloan Missouri Basin Program under which the Garrison and Oahe dams and the Garrison Diversion Unit were authorized (Bureau of Reclamation, 1996). This is equivalent to an average of over \$1,200 per acre per year for the 108,300 acres of cropland inundated in North Dakota by the Garrison and Oahe reservoirs. These annual benefits are 30 percent more than the 1997 market value of the State’s best agricultural land in the Red River Valley (MacDonald, 1998).

The Imminent Threat of Drought

The Subcommittee has been told that a drought even more severe than the 1930s “Dust Bowl” is imminent and that any delay in completing studies of Red River Valley water needs will be seen as deadly to the people and would shut down the economy of the Valley and destroy their hopes for the future. Such dire predictions certainly warrant careful examination.

First, it should be noted that the Governor of North Dakota, the North Dakota Congressional Delegation, the State Water Commission, the Garrison Diversion Conservancy District, the North Dakota Water Users Association and other water development interests who are calling for acceleration of the Red River Valley Water Supply Study and Red River Valley Water Supply Project Environmental Impact Statement because of the urgency of protecting cities in the Valley from the impacts of drought are the same ones who are promoting the construction of an outlet from Devils Lake to the Sheyenne River, a tributary of the Red River, on the assumption that the record levels of precipitation that occurred from 1993 to 1999 will continue until at least 2014 (U.S. Army Corps of Engineers, 2002; Schmidt, 2002). Obviously, it is not credible to promote a Red River Valley Water Supply Project on the urgency of impending drought while at the same time promoting a Devils Lake outlet on the urgency of on-going flooding.

Second, Fargo has an allocation of 56.1 percent, and Grand Forks has an allocation of 31.3 percent, of the water in Lake Ashtabula, which was constructed on the Sheyenne River in 1951 (Bureau of Reclamation, 1998). The reservoir has a total storage capacity of 68,000 acre-feet at a pool elevation of 1266.0 feet above mean sea level, with 38,000 acre-feet of storage between a minimum pool elevation of 1257 feet and 1266 feet (Bureau of Reclamation, 1998). Therefore, Fargo has an allocation of at least 21,000 acre-feet and up to 38,000 acre-feet of water from Lake Ashtabula. This would meet Fargo’s current water demands for 1.5-2.5 years if there were no additional flows in either the Red or Sheyenne rivers—something that did not occur even in the 1930s. However, in the 50 years since the reservoir was constructed, Fargo has tapped its Lake Ashtabula supply only a few times to meet brief minor shortages, such as occurred occasionally during the 1988-1992 drought, and Grand Forks has never used its allocation.

Third, information from the Bureau of Reclamation’s appraisal level Red River Valley Water Needs Assessment shows that, even if Fargo’s population should double to 192,000 (which is not expected to occur until 2050) and four new hypothetical

high water use agricultural processing industries were to locate in the Red River Valley, significant municipal water shortages would not develop unless another 1930s style drought were to occur (Bureau of Reclamation, 2000). Moreover, implementation of drought contingency measures could reduce the projected 115,000 acre-feet year 2050 Red River Valley total municipal and industrial water demand by at least 30 percent, or 38,000 acre-feet, which would be more than sufficient to eliminate the 32,650 acre-feet greatest annual municipal shortages even in another 1930s style drought (Bureau of Reclamation, 2000).

Fourth, if a severe drought is, in fact, imminent, even if construction of a Red River Valley Water Supply Project were begun immediately, it would not be completed in time to avoid the need to implement water conservation and drought contingency measures. And, as information from the Bureau's Red River Valley Water Needs Assessment shows, implementation of those measures would eliminate the need for a Red River Valley Water Supply Project.

Consequently, not only is there no credible evidence that a severe drought is imminent in the Red River Valley, but the available evidence shows that the implementation of water conservation and drought contingency measures would be sufficient to eliminate any significant impacts on the people or the economy of the Red River Valley.

UNDUE INFLUENCE OF GARRISON DIVERSION UNIT PROPONENTS

The second major factor that has contributed to delays in the Red River Valley Water Supply Study and Environmental Impact Statement has been the repeated and continuing attempts by proponents of the Garrison Diversion Unit and diversion of Missouri River water to the Red River Valley to exert undue influence over the studies.

The Red River Valley Water Needs Assessment that was initiated under the 1993 North Dakota Water Management Collaborative Process included participation by various stakeholder groups. However, before the study had been completed in August 2000, the Bureau of Reclamation's Area Manager, the North Dakota State Engineer and the Manager of the Garrison Diversion Conservancy District had, without informing other stakeholders, negotiated and signed a Memorandum of Understanding that established a three-member Study Management Team composed of representatives of those agencies to direct and supervise a feasibility level study of alternatives to meet future municipal, rural and industrial water needs in eastern North Dakota.

The Dakota Water Resources Act of 2000, which was not passed until six months later, specifies, however, that:

"The Secretary of the Interior shall conduct a comprehensive study of the water quality and quantity needs of the Red River Valley in North Dakota and possible options for meeting those needs." (Emphasis added) (DWRA Section 8[b][1]).

and that:

"In conducting the study, the Secretary, through an open and public process shall solicit input from gubernatorial designees from the states that may be affected by possible options to meet such needs as well as designees from other federal agencies with relevant expertise." (DWRA Section 8[b][3])

The Act also specifies that:

". . . the Secretary and the State of North Dakota shall jointly prepare and complete a draft environmental impact statement concerning all feasible options to meet the comprehensive water quality and quantity needs of the Red River Valley and options for meeting those needs, including the delivery of Missouri River water to the Red River Valley." (DWRA Section 8[c][2])

Despite the fact that Senator Dorgan, in congressional debate on the Dakota Water Resources Act, had noted that the bill lays out a process for meeting the water needs of the Red River Valley and pointed out specifically that:

"First, the Secretary of the Interior will identify these needs and evaluate options for meeting them." (Congressional Record, Senate S10534, October 13, 2000)

The Red River Valley Water Supply Study and Environmental Impact Statement were initiated immediately after the Dakota Water Resources Act was passed under the direction and control of the same Study Management Team consisting of the Bureau's Area Manager, the State Engineer and the Manager of the Garrison Diversion Conservancy District that had been established by the July 2000 Memorandum

of Understanding. Both the Garrison Diversion Conservancy District (North Dakota Century Code §61-24-01) and the North Dakota State Water Commission (North Dakota Century Code §61-01-26.1) are mandated by statute to promote the completion of the Garrison Diversion Unit and the delivery of Missouri River water to the Red River Valley.

On April 20, 2001, Daniel P. Beard, Chief Operating Officer of the National Audubon Society, sent a letter to the Great Plains Regional Director of the Bureau (Attachment No. 1) pointing out that:

“To the best of our knowledge, the MOU, which predates DWRA by more than 5 months, involved neither disclosure nor public participation prior to or during its development. As far as we know, this document never saw the ‘light of day’ until after the DWRA was enacted . . .

The MOU presumes to create a Study Management Team (SMT) comprised of one official each appointed from the GDCD, SWC, and BOR. The SMT is then referred to as a ‘partnership’ implying that the traditional project proponents have two out of three votes on matters deliberated by SMT. The Framework [February 15, 2001, *Framework for Red River Valley Water Supply Study*] is replete with unwarranted and excessive assignments of the responsibilities of the Secretary to the SMT. Among other things, the Framework states that the ‘MOU created a partnership among the three parties to direct completion of necessary studies and to *oversee* the preparation of reports to Congress’ (emphasis added). Even worse, the signors have assigned themselves decision-making responsibilities. For example, ‘The Study Management Team will be responsible for overall guidance, scheduling, report concurrence (sic), financial issues, and major decision-making activities on difficult issues’ (Framework, page 4).” . . .

We urge that you carefully review all the documents that have been entered into with respect to this work and make an independent determination that they comply with all applicable laws and policies, and that they will help promote impartiality for all the studies to be undertaken . . .

If there is to be an SMT, it should be clarified that the responsibility for decision-making remains with the Secretary not with outside parties. If there is to be an SMT, it should be advisory only . . .”

Although Mr. Beard addressed his letter to the Regional Director, the initial response came, not from the Bureau of Reclamation, but from the Manager of the Garrison Diversion Conservancy District (Attachment No. 2), thus further confirming the preponderant role assumed by Conservancy District in the Red River Valley water supply studies authorized by the Dakota Water Resources Act of 2000. However, Mr. Jamison’s response did not address the fundamental issue raised by Mr. Beard regarding the assignment of responsibilities reserved to the Secretary to a Study Management Team dominated by those having a statutory mandate to promote completion of the Garrison Diversion Unit and the diversion of water from the Missouri River to the Red River Valley.

In her July 23, 2001, response to Mr. Beard (Attachment No. 3), the Regional Director said:

“Some of the issues you raised are legitimate, especially because the MOU was developed under the authority of the 1986 Garrison Diversion Unit Reformulation Act. However, as the DWRA is very specific in certain provisions, the MOU may not accurately reflect the intent of the Congress. Therefore, I am revisiting the MOU and Framework with respect to the DWRA. Ultimately, I assure you that we are committed to a full and open process which invites the meaningful participation of all stakeholders. I further assure you that the decision making authority will remain solely with the Secretary of the Interior as provided in the DWRA or other relevant statutes such as the National Environmental Policy Act (NEPA). This includes both process decisions, such as the appropriate application of NEPA, as well as final decisions such as selecting a preferred alternative for the FEIS.”

In her August 15, 2002, letter to Mr. Beard (Attachment No. 4), the Regional Director reported that the Study Water Management Team for the Red River Valley Water Supply Study and Environmental Impact Statement had been abolished and the July 2000 Memorandum of Understanding was being replaced. She indicated that the Red River Valley Water Supply Study would instead be conducted by the Bureau, and that the Environmental Impact Statement would be prepared jointly by the Secretary and the State of North Dakota, as specified by the Dakota Water Resources Act.

The revised Memorandum of Understanding (Attachment No. 5) deals only with the joint preparation by the Secretary and the State of North Dakota of the Envi-

ronmental Impact Statement for the Red River Valley Water Supply Project. The revised Memorandum of Understanding states in Section VI. Primary Contacts that:

“The Governor of the State of North Dakota has authorized the GDCD [Garrison Diversion Conservancy District] to be the State’s primary contact to serve as co-lead for North Dakota on the EIS.”

However, as is pointed out in the attached October 7, 2002, letter to the Bureau of Reclamation (Attachment No. 6), the Constitution of the State of North Dakota specifies that:

“The governor shall transact and supervise all necessary business of the state with the United States, the other states, and the officers and officials of the state.”

As the letter notes, there is no statutory provision for the Garrison Diversion Conservancy District to represent the State of North Dakota, or for the Governor to “transact and supervise” business with the United States through the Conservancy District. The letter goes on to point out that State Water Commission has statutory authority to represent the interests of the State in dealing with the Federal Government, but North Dakota Century Code § 23-01-01-02 explicitly provides that:

“The state department of health is the primary state environmental agency.”

On October 18, 2002, the Regional Director forwarded the letter to the Office of the Governor of North Dakota for a response, but the revised Memorandum of Understanding was signed on November 6, 2002, without a response having been received from the Governor addressing the ineligibility of the Garrison Diversion Conservancy District to represent the State in jointly preparing the Environmental Impact Statement for the Red River Valley Water Supply Project. Six weeks later, a response still has not been received.

Not only does the designation of the Garrison Diversion Conservancy District to represent the State of North Dakota in jointly preparing the Environmental Impact Statement for the Red River Valley Water Supply Project reflect continued undue influence by proponents of the Garrison Diversion Unit, but the designation of an ineligible agency to represent the State leaves the process open to question and the Environmental Impact Statement it produces open to challenge, thus potentially resulting in further delays in completing the Red River Valley water studies.

CONCLUSION

The dissemination of misleading information regarding Red River Valley water needs by proponents of the diversion of Missouri River water to the Red River Valley and their persistent attempts to exert undue influence over studies of Red River Valley water needs not only undermine their credibility and raise significant questions about their motive, but these activities also create serious impediments to the completion of an objective, scientifically sound evaluation of Red River Valley water needs and options for meeting those needs. It is important, therefore, for the Subcommittee on Water and Power to exercise its oversight authority to assure that the Bureau of Reclamation conducts its studies of Red River Valley water needs in an open and professional manner that will assure the thorough and unbiased products that the Congress expects and the citizens of the Red River Valley deserve.

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STATEMENT OF TEX G. HALL, CHAIRMAN, MANDAN, HIDATSA AND ARIKARA NATION
(THREE AFFILIATED TRIBES)

Dosha! (Hello). Thank you for the opportunity to present testimony today concerning "Red River Water Needs". As you know, I am the Chairman of the Three Affiliated Tribes, located in northwest North Dakota. I apologize to the Committee and to everyone present that I am unable to be here today due to prior commitments.

INTRODUCTION

One may ask what interest the Mandan, Hidatsa and Arikara Nation has in the water needs of the Red River Valley. However, anyone familiar with the history of North Dakota, and in particular, the history of the Pick-Sloan project and later, the Garrison Diversion project, and its relationship to the Indian tribes along the Missouri River, may understand our interest in this matter. Nevertheless, a bit of background would be helpful.

The original goals of the Pick-Sloan project, conceived in the 1930's, were to control flooding along the Missouri, provide for electricity generation, provide for irrigation and later, provide for additional recreational opportunities for North Dakotans. Our Tribe understands those goals. There are seven principal reservoirs behind the seven dams that make up the principal features of this project.

Each of those reservoirs greatly affected the Indian tribes whose reservations and ancient homelands were along the Missouri River. As one of our former Chairman has put it, Carl Whitman, the dams seemed placed so that the maximum impact of the permanent flooding caused by the dams would be on the Indian reservations.

At no other place was a Tribe more greatly affected than behind the Garrison Dam, which created a reservoir ironically known as Lake Sakakawea, in honor of the famous Lewis and Clark guide who originated from our Tribe. That Tribe was the Mandan, Hidatsa and Ankara Nation, the homeland of my people.

Prior to the Garrison Dam being built, we still had a small part of what had been our homelands, along the Missouri River, our "holy grandfather" as it was known to us. The rich bottom lands along the river provided us wood for fuel, let us tend our animals and raise our crops. We were generally self sufficient.

But that all changed forever with the Garrison Dam, which submerged 156,000 acres of our most important asset, our land, under water. Our once close-knit communities, separated only by a river, which was then connected near Elbowwoods by a bridge, were now split apart and separated by as much as 120 miles. Our rich farmland and self-sufficient lifestyle were gone forever.

Despite how we have been affected by, and despite how much we have suffered from the Garrison Dam, we also understand that a secondary goal of the Pick-Sloan project, and one that has been fundamentally important to North Dakota, has been the diversion of water from the Missouri, the water that makes up Lake Sakakawea, to the eastern part of North Dakota to satisfy long-standing water shortages there. We are well aware of the history of the "Garrison Diversion Project". as it generally is known" and will not repeat it here. Despite a recent opinion issued by the North Dakota Attorney General declaring that Lake Sakakawea is not within our reservation boundaries, an opinion which makes no sense given the history of our reservation, because we also depend on water from Lake Sakakawea in many ways, as will be discussed a bit more below, we remain vitally interested in this diversion effort.

It should be emphasized that in the past, we have supported the Garrison Diversion Project reformulation acts as they have been enacted by Congress; going back at least to the 1986 Act. This has been, in part, because within those statutes, the rural water needs of the Three Affiliated Tribes, as well as other Tribes in North Dakota, have been provided through the authorizations for appropriations provided in those Acts” most recently the Dakota Water Resources Act of 2000.

THE INTERESTS OF THE THREE AFFILIATED TRIBES IN WATER FROM THE MISSOURI

Our interests in the Garrison Diversion project are several:

1. We want to ensure that in any diversion of water to the eastern part of North Dakota, our “Winters doctrine” water rights are recognized;
2. We want to ensure that any diversion of water to the eastern part of North Dakota does not unduly affect water levels of Lake Sakakawea, because we depend on for our water source, and because we, too, have interests in recreational sites along the lake which depend, in part, on sufficient water levels for their success.
3. We are also sensitive to the needs of our Indian relatives to the north, in Manitoba, who have made it clear to myself and other Tribal leaders from North Dakota that they are concerned about the possible effects untreated water could have on their fishing, on which they rely in part for their subsistence.

With these concerns in mind, we have not changed our support of the overall goals of the Garrison Diversion project, to provide water during times of drought to the Red River Valley. I would like to discuss our concerns a bit more.

1. “Winters Doctrine” Water Rights

The “Winters Doctrine”, based on a famous case decided early in the past century, basically states that when a water course, or river, goes through or alongside a reservation that has historically used water from that river, that Indian Tribe has paramount, or first rights to the water in the river. Through various additional decisions and Congressional statutes, Tribes may quantify those water rights, and must show how they will use the water to which they claim “paramount rights”.

The Three Affiliated Tribes have not sought judicial action to quantify their rights to the Missouri River’s waters that flow through their reservation. But, simply because we have not quantified our Winters doctrine rights to the waters of the Missouri does not imply that those rights are not paramount when it comes to manipulation of the lake levels behind the dams that have so seriously impacted the Missouri River tribes. We have repeatedly asked that Congress recognize those rights as plans for the Garrison Diversion project go forward.

One argument seems to be that because the rivers flow is so large, our Mandan, Hidatsa and Ankara Nation cannot possibly claim enough of the water of the river to have an impact on water levels, or to have an impact on the amount of water that is proposed to be used in the Red River Valley. That is a tremendously uncertain assumption to make. The entire river flow has once been used by the tribes to sustain their way of life. There exists no reason now to suggest that the entire river flow is still not necessary for the tribes to regain some semblance of an economy which supports their needs.

2. Affect on Water Levels

A practical example of this is the recreational needs of the Mandan, Hidatsa and Arikara Nation. Maintaining the level of Lake Sakakawea at certain elevations is critical to improving recreational opportunities for the Tribe along the extensive part of the shoreline in which it has an interest. Keeping lake levels high enough for recreational interests to thrive is, for all intents and purposes, the exercise of a fundamental Winters doctrine right and becomes critically important during years of drought that we are now experiencing and, during the upcoming years of the Lewis and Clark Bicentennial Celebration during the years 2003-2006. Without adequate lake levels, the business ventures of the Tribe and its members will simply not realize their potential.

Recommendation

We recognize that we cannot control drought situations, which is certainly one of the things that the Garrison Diversion project is intended to remedy for the Red River Valley. But we also do not want our interests in this matter to be forgotten. Therefore, we urge that in all future planning efforts for the Garrison Diversion project that a representative of our Nation be included. Generally, we have had some representation as the legislation has gone forward through Congress. But now that leg-

isolation has in fact passed Congress, we believe we must continue to be a part of the planning effort for the completion of the long-awaited project, on a government-to-government basis.

3. Affect on Water Quality in Manitoba

As I mentioned, I visited several years ago with Tribes in Manitoba about their concerns regarding water quality and the affect that the introduction of biota that are unknown to the Red River of the North. The Red River empties in part into a very large wetlands and lake system in Manitoba, and many tribes depend on the fish and other wildlife of that system. While these issues are not generally within the control of the Three Affiliated Tribes, we simply express our interest in making sure that the concerns that have been raised are satisfied to the maximum extent practicable.

SUMMARY

We believe that all of the above concerns we have raised can be resolved satisfactorily for all parties. But to the extent that Red River Valley water needs will be met by diversion of water from the Missouri River basin, we request that we continue to be involved so that our interests in the protection the water in Lake Sakakawea can be met. We request that we be included in these continuing discussions, by both the State of North Dakota and the Federal government, on a government-to-government basis, and that we be notified when important meetings are held regarding how water will be diverted from Lake Sakakawea to the Red River Valley.

Thank you, Mr. Chairman, for the opportunity to testify. If you have questions, I would pleased to submit written answers to questions you may submit to me in writing after this hearing to be included in the record.

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