

**WATER PROBLEMS ON THE STANDING ROCK
SIOUX RESERVATION**

HEARING

BEFORE THE

**COMMITTEE ON INDIAN AFFAIRS
UNITED STATES SENATE**

ONE HUNDRED EIGHTH CONGRESS

SECOND SESSION

ON

OVERSIGHT HEARING TO RECEIVED TESTIMONY ON PROBLEMS THAT
HAVE BEEN EXPERIENCED BY THE STANDING ROCK SIOUX TRIBE
AND TRIBES SITUATED ALONG THE MISSOURI RIVER

NOVEMBER 18, 2004
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WATER PROBLEMS ON THE STANDING ROCK SIOUX RESERVATION

THURSDAY, NOVEMBER 18, 2004

U.S. SENATE,
COMMITTEE ON INDIAN AFFAIRS,
Washington, DC.

The committee met, pursuant to other business, at 10 a.m. in room 485, Russell Senate Building, Hon. Daniel K. Inouye (vice chairman of the committee) presiding.

Present: Senators Inouye, Johnson, Dorgan, and Conrad.

STATEMENT OF HON. DANIEL K. INOUE U.S. SENATOR FROM HAWAII, VICE CHAIRMAN, COMMITTEE ON INDIAN AFFAIRS

Senator INOUE. The Committee on Indian Affairs meets today to receive testimony on a series of problems that have been experienced by the Standing Rock Sioux Tribe, as well as other tribes whose reservations are situated along the Missouri River.

In order to effectively address these problems, it will require the coordinated efforts of several Federal agencies. So that we may better understand the nature of the problems and the impact they have had on the lives of the members of the Standing Rock Sioux Tribe, I would like to call upon our first witness today, Charles Murphy, chairman of the Standing Rock Sioux Tribe. Chairman Murphy will be accompanied by Mike Claymore, Tribal Councilman of the Standing Rock Sioux Tribe Council.

STATEMENT OF CHARLES W. MURPHY, CHAIRMAN, STANDING ROCK SIOUX TRIBE, ACCOMPANIED BY MIKE CLAYMORE, CHAIRMAN, ECONOMICS COMMITTEE, STANDING ROCK SIOUX TRIBE; MR. PERRY, ATTORNEY; AND JIM GLAZE, ATTORNEY

Mr. MURPHY. Senator, thank you very much. First of all, we want to congratulate you for the election that happened a few days ago. But first of all, we want to thank you from the Standing Rock Sioux Tribe, because there are 18,000 enrolled members, and they send their regards up here because you're the Senator that helps the tribes, the Standing Rock also. We appreciate that.

Also here to my left, Senator, I have Mr. Claymore, who is the chairman of the Economics Committee. I have two of our attorneys here, Mr. Perry and Jim Glaze.

Back in 1997, Senator, you visited our reservation. There are some pictures here that I would like to show you. We had water around the reservation here, such as this, when you flew in there.

We were talking about the erosion at that time. You were there, we looked at the taken area, which was 1620, it was eroding the highway and so forth. The Corps came in there and did some dike work.

Now today, Senator, it is very serious. We don't have the water to provide for our people. One year ago today, or 1 year ago, it will be 2 weeks, 5 days before Thanksgiving, we had approximately 10,000 people without water. These were Indian and non-Indian people within our reservation of 2.3 million acres.

Senator we are also scared that if it freezes, what we could have is like a delta. What's going to happen is that it will not go right into the intake. What's happening, Senator, is that we have people today that are scared because they don't know if they're going to have drinking water the next day. The two largest districts in our reservation will be without water if the water should shut off today.

Senator, we also had a number of people, at the time we had lost our water, we had to send people to Bismarck, ND, which is about 60 miles away, that were on dialysis. Those people did not have transportation. We helped them with transportation, we helped them with their rooms up in Bismarck. The tribe did all this. BOR did not help, Corps of Engineers did not help, IHS didn't help, the BIA didn't help. We footed the whole bill, Senator.

Senator, also we had tried to keep the IHS hospital open. They didn't even have water, they couldn't even buy a bottle of water for those people that were coming into the hospital. We had to provide that water for them. We had to buy porta-potties for all those districts that were out of water.

Also, we were scared that our sewer systems were going to freeze up also. Mr. Claymore will tell you a little bit more than I will get back on another part, Senator.

Senator INOUE. Mr. Claymore.

Mr. CLAYMORE. Thank you.

I am very humbled and privileged to speak in front of the Senate committee today. Senator, we have a major problem out there with the management of the Missouri River. Drought conditions have changed the river's status. Lake Oahe is to me no longer a lake, it's back to the Missouri River situation, which is very scary for us as a people, because we don't know what channel or where that water line is going to go, where the river is going to channel next.

We have the communities of Cannonball, Fort Yates, and Porcupine on the North Dakota side. If things would have all been as planned the Bureau of Reclamation would have had completed the projects in the future and every community in Standing Rock will be dependent upon this water source. That's a very scary thing, because with all our communities depending on the rural water system, if it goes down there are going to be a lot more people affected.

I do have to say that it's not just our issue, it's a region issue. The State of North Dakota, the State of South Dakota are facing the same issues. They continue to have communities that have intake issues and they're spending millions of dollars to address these issues within their own system, within their own grounds. Because there's no way that anybody can say that this river is not

going to be lower. There's no way to say that the lake is going to come up, rising levels.

Back in 1948 or so, I wasn't alive, but I can tell you, my grandma will tell you that the people of Standing Rock thought there would never be a water shortage. They couldn't even imagine how that water would disappear. And today we are in that situation to know whether or not we can have a water shortage, and we do.

Go ahead, Chairman. Thank you.

Mr. MURPHY. Senator, also we have people yet today that are filling up their bathtubs every night, our elderly people filling up their bathtubs every evening because they don't know if they are going to run out of water the next morning, because we don't have a way of knowing if the water is going to be shut off or whatever. At the time it happened, it just happened, it happened that Sunday night 5 days before Thanksgiving. We had people coming home, school kids coming back from college and so forth, our kids were without water. People without water.

The other thing was that we had people going around, we had an elderly man with a 55-gallon drum driving from house to house helping people. He was telling them that this water is only to be flushed with, we had those types of people. People were working together, we had come together. We had the Senators from North Dakota and the representatives calling people to donate water to us. We had that done, too, Senator. It's very sad right now that we don't know if we're going to have water next week or not.

[Prepared statement of Mr. Murphy appears in appendix.]

Senator INOUE. Mr. Chairman, do we know what the cause of the shortage is?

Mr. MURPHY. Senator, I think they're holding water upstream, they're letting too much water downstream. What we were told is that for them to keep those barges moving in the State of Missouri they had to have more water down there so they could move those barges up and down the river.

They are not worried about human consumption, but they are worried about some barges, three or four barges that they have to move up and down in the Kansas City area, and they're not worried about the people that are running out of water. Right now, we have another community, another Indian reservation, which you might know, Senator Conrad and Senator Dorgan also, and the representative from North Dakota also mentioned that Parshall, ND, the Indian reservation up there has no water. I mean, they have water now, but they run out of water because of the low water tables, too.

Senator INOUE. In your prepared testimony, you speak of the construction of an inland reservoir at Fort Yates. Do you have any estimate as to the construction costs?

Mr. MURPHY. The estimate was about \$30 million, Senator. What we're going to have to do is we're going to have to go further south to put that inlet in, where the main channel will provide that water, where it's more narrow and so forth.

But right now, Senator, our inlet is right about in here. It's probably about four-tenths of a mile out, maybe, or three-tenths of a mile out. The inlet right here, Senator, this is Fort Yates here and the inlet is right here. What's happening is, what we're scared of

is that this thing is going to change here, then we're going to have to change it clear out to here to chase that water.

The siltation, we had engineers out of the Minnesota area come out and tell us how the siltation is moving. That doesn't look very good, either.

Senator INOUE. Thank you very much.

Senator Johnson.

**STATEMENT OF HON. TIM JOHNSON, U.S. SENATOR FROM
SOUTH DAKOTA**

Senator JOHNSON. Thank you, Vice Chairman Inouye, for holding this hearing, and thank you also for all you have done for our great plains tribes and the people of North and South Dakota.

I understand that this is your last hearing as official leadership of the Committee on Indian Affairs, and I want you to know that your leadership will be missed. But knowing your passion for the issues, I'm confident that you will continue to provide important leadership for Indian country. I thank you for your great service.

I also congratulate my colleague, Senator Dorgan from North Dakota, on the leadership role that he is going to begin to play on this committee.

I want to welcome Chairman Murphy, Councilman Mike Claymore and other witnesses to the hearing. I also want to thank the representatives from Minnesosi and Chairman Frazier of the Cheyenne River Sioux Tribe for being here today. I'm glad that we have an opportunity to specifically address the water problem at Fort Yates. I share the concerns of my North Dakota colleagues regarding the issue.

I'd like to take just 1 moment to address a similar problem we are facing farther south along the Missouri River. It's probable that in the fall of 2005 the Cheyenne River Sioux Tribe could be experiencing similar acute water shortages now facing the Indian tribes and communities of North Dakota. The consequences, however, could be even more pronounced, negatively impacting 17 communities and 14,000 people.

The latest Corps of Engineers 2005 spring runoff forecast is predicted to be only 16.52 million acre feet compared to a normal spring runoff of 25 million acre feet. If the Missouri River reservoirs were not already at record low storage levels, such a paltry runoff forecast would not be a dangerous omen for 2005. However, the Missouri River reservoir system contains a total of only 37 million acre feet of water, a full 3 million acre feet less than the total reservoir impoundment in the fall of 2003.

The cumulative impact of successive drought years has left these giant reservoirs 21 million acre feet below average, a record. So I implore the Federal Government to take a serious look at the failures at Parshall, ND, Fort Yates, ND, and this potential crisis that would affect the Cheyenne River Sioux Tribe in South Dakota.

We need to look at a preventative fix rather than just focusing on the crisis of the moment. One can only imagine the outcry if the same number of people in large urban areas of America lost their water for 10 days. This is a situation we would not tolerate in major cities and cannot allow to happen again anywhere in the

country, whether here in Washington, DC or in Fort Yates, ND or White Horse, SD.

It's particularly disconcerting given the treaties that bind the Federal Government's responsibilities to our tribes in North and South Dakota. The particular water needs in North Dakota that is being described so ably by the chairman here today involves the municipal, rural and industrial water system that is operated pursuant to the Garrison Diversion Reformulation Act of 1986, and the Dakota Water Resources Act of 2000. Under the Dakota Water Resources Act, the Department of the Interior is mandated to construct, operate, and maintain an MR&I water supply system for the Standing Rock Sioux Reservation. Legal title to the water system is held by the Bureau of Reclamation.

To have this failure at this point and not to have a permanent fix underway is a cause of great concern. We need to end the crisis mentality and approach this from a permanent fix mind set. I am confident that this committee can play a key role in helping us to do that for both our friends in North and South Dakota.

Thank you, Mr. Chairman.

Senator INOUE. Thank you very much.

Senator Dorgan.

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

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

First of all, we appreciate your holding this hearing. I appreciate Chairman Murphy and Mr. Claymore, thank you for being here and thanks for your statements.

This is a vexing problem, difficult, wrenching for the people who are affected. We are talking today about the Standing Rock Reservation and the citizens of Fort Yates and the surrounding area. But this also affects Parshall, Fort Yates, ND, and Wakpala, SD, this is a significant issue. When the water was lost over Thanksgiving, the folks in Fort Yates canceled their Thanksgiving plans, they spent all their time trying to figure out how to get safe water for their families to drink.

Let me commend the chairman and the tribal council for the extraordinary work you did during a real crisis. Losing water is a real crisis. I have previously said to Dennis Breitzman, who we will hear testify in a few minutes, that the folks who work at the Bureau, they just picked up and over the whole Thanksgiving period they were down there working to try to put in a temporary line. And we owe them a debt of gratitude for the work they did. They worked through the holiday, day and night, and put in that line.

But I was down there 2 weeks ago. Mr. Chairman, I think you have this sheet, three graphs or three slides, rather, from the end. You will see where the old intake was, you will see where the new intake is. As of 2 weeks ago, it is quite clear, that they are going to be out of water, even the new intake is not going to provide water for those people.

So the question is, what is going to happen here? How is this going to be resolved? Because this river is shrinking and drying up. When you stand on the bank where the old intake used to be and just look out, this is a puddle. This river has become a puddle right

at Fort Yates where the intake is. And I am convinced that these folks are going to lose water again.

Now, there are a lot of reasons for all of this. Probably the most important is that we've had less snow pack and less water in the entire reservoir system. But that is not the only reason. I regret to say that the Corps of Engineers has been extraordinarily hard headed on the issues of dealing with the water in the entire Missouri River system. The upper reaches of that system have been systematically cheated in the manner in which that river has been managed. I use that word fully understanding what it means. We have been systematically cheated for a long period of time.

As you can see from these slides, we are going to need to find water to assure municipal water supply, not just for Fort Yates, especially for Fort Yates, however, and we need to do so quickly. That is why I am pleased that we have the Corps here to testify.

Let me also say that the tribe spent a great deal of money, of its own money, trying to respond to this crisis. Some of those resources, \$2.8 million, my colleague and I asked Commissioner Keyes to reprogram some money so we got some money back to the Tribe to recompense them for that expenditure. But they are still out a lot of money as a result of this crisis. We also need to work with the Bureau and the Corps to try to respond to that.

But let me conclude by saying this. Senator Conrad and Congressman Pomeroy and I have been fighting this battle for a long, long while. And it is one of the most frustrating fights that we have had. As all of you know, the water policies are very controversial. How the reservoir systems and the river, the Missouri River, are managed, is critical for a whole range of issues, for the minnow of a barge industry, the whale of the recreation, tourism, and fishing industry up north, and yes, it is a minnow to a whale and yet we manage the river for the benefit of the minnow.

It is just enormously frustrating for us. Somehow, some way, we need to resolve it. I do not intend to be partisan at all, but let me observe that this fight that we've had, especially dealing with the State of Missouri, is a fight that has not resulted in a fair use of water in this river system when we are short of water. And at least one part of that is because the President, campaigning in Missouri, said, I am with you on this water fight. So did the Vice President.

As a result, we have been systematically blocked here in Congress in resolving this issue. That's not partisanship, that is just the fact. My hope is that the President, the Congress, Republicans, and Democrats, and all of us, can understand that when you run out of water, that is a human crisis. We need finally to resolve and address this issue.

My colleagues, Senator Johnson and Senator Daschle, have worked enormously hard on this. I have worked with my colleagues Senator Conrad and Congressman Pomeroy. All of us are determined to fight this to the end so that we get a result that is fair to everybody who lives on that river.

Mr. Chairman, I am sorry I took as much time as I did. But I think this is a critically important issue.

Senator INOUE. Senator Conrad.

**STATEMENT OF HON. KENT CONRAD, U.S. SENATOR FROM
NORTH DAKOTA**

Senator CONRAD. Thank you, Mr. Chairman.

Before I address the issue at hand, I want to thank you, Senator Inouye, for your long leadership of this committee. I must say, I'm in my 18th year here. There is no better Senator than Senator Inouye. Your compassion and your courage and your really exceptional leadership of this committee is deeply appreciated. I don't know of anybody that made the extraordinary effort that you have made to go all over this country to understand better the needs of Native people.

Your record and your legacy will be written in the record books of the U.S. Senate and in the history books of this country. You will have a very proud position.

I also want to thank you very much for holding this hearing, as perhaps your last act as the vice chairman of this committee before you go to become the Ranking Member of the very powerful Commerce Committee. I know you will still be here as our member, but you will be passing the leadership torch to my colleague, Senator Dorgan. Again, I just want to say how deeply we appreciate the quality of your leadership.

I want to extend a welcome to Chairman Murphy and Councilman Mike Claymore from Standing Rock. I regret I was not here, I was doing the C-SPAN broadcast this morning. All of us are asked to do that from time to time, as you know, Members of Congress, so that people around the country can ask questions of us. And of course, the debt limit of the United States was extended yesterday, so I was asked in my role on the Budget Committee to visit with people around the country this morning.

Imagine if you can, what would happen if you got up in the morning and turned on the spigot and nothing comes out. You think of how disruptive it is just to not have hot water. Think of what it's like to have no water. That's what happened to the people in the communities of Fort Yates, Cannonball, and Porcupine just days before Thanksgiving last year.

This is the sign that greeted people that came to the hospital. This is the headline from our newspaper: Without Water. Schools, clinics, tribal offices, and hospital closed. This is the sign that was at the hospital, at the hospital: Hospital is closed, no water. That's a disaster. That is an absolute disaster.

The Standing Rock Tribe relies on an intake along the Oahe Reservoir to supply drinking water to their communities. The Oahe Reservoir now is down 32 feet, 32 feet. What's the reason? Well, obviously the biggest single reason is drought, a lack of water. That's the fundamental reason.

But mankind has contributed to the problem by the mismanagement of the reservoir. This reservoir is being managed under rules that were written 50 years ago. The world has changed. The running of the reservoirs up and down the river system in this part of the country has not changed.

This is all overwhelmingly managed for the benefit of the barge industry downstream. Because when they started this process they thought the barge industry was going to be a much more dominant economic player. That proved to be wrong. Things changed. Trans-

portation systems changed. The management of the reservoirs has not changed.

I believe this dire situation at Fort Yates underscores the strong need for change in the management of the Missouri River. We can't afford this any longer. People's lives are at risk without water. What could be more clear?

The dramatic drain of Lake Oahe has created a river that is constantly shifting and changing course. Therefore, I believe the Corps has a responsibility to help fix it. I am concerned, as I know the tribe is, about whether they will lose water again. We can't afford to wait until another disaster strikes before taking action.

I want to particularly commend the tribe, especially Chairman Murphy and the Bureau of Reclamation, for their quick response to this crisis. They worked around the clock and through the Thanksgiving holidays, overcoming tremendous odds, not to mention freezing conditions, to restore service.

Again, Senator Inouye, our very distinguished vice chairman, thank you so much for holding this hearing. It's just critical that we find a way to resolve this crisis.

Senator DORGAN. Mr. Chairman, I wanted to ask just one question, just to have something on the record from the chairman and the councilman. The Missouri is one of the great rivers in America. I was told when I was there 2 weeks ago, I believe by you, Chairman Murphy, that there is a spot north of Fort Yates where you can walk across the Missouri River and not get your hips wet.

Mr. MURPHY. Right.

Senator DORGAN. Can you describe that?

Mr. MURPHY. Sure, Senator. It's north of Fort Yates about 4 miles. They call it Battle Creek Bay. And there is a place where you can actually walk across and get on the other side of the river, it's probably no wider than from here to you.

And what we're scared of there, Senator, is that if that should freeze up in that area, what's going to happen? That's where that delta is going to happen, then the water will not flow into our intake. We're lucky right now that the weather has been holding up to like 60 degrees back home. Very unusual for this time of year, when it's supposed to be about 30 degrees.

Senator DORGAN. Again, this is one of the great rivers in America. And the chairman describes a location, I have not seen it, but I was in the area 2 weeks ago, just south of there. An area of 15, 20 feet wide where it is sufficiently shallow so that you can easily walk across it.

Mr. CLAYMORE. Senator, may I? At the time that Lewis and Clark came through there, they didn't even drop their boat in there because it was so sandy there that they couldn't even make it up, they had to clear to Bismarck to drop their boat in. They took it out at Mobridge and went around the whole reservation to get the boat up north.

Senator DORGAN. Mr. Chairman, thank you.

Senator INOUE. I thank you very much.

Chairman Murphy, I thank you. I can assure you that under the leadership of these gentlemen, something will be done. Thank you.

Mr. CLAYMORE. Thank you, Senator, and thank you, Senator Johnson, Senator Dorgan, and Senator Conrad. Thank you very much.

Senator INOUE. Our next panel consists of the commander of the Northwest Division of the Army Corps of Engineers, Brigadier General William T. Grisoli; the area manager of the Dakotas Area Office, Bureau of Reclamation, Department of the Interior, Dennis Breitzman; the director of the Division of Clinical and Community Services, Indian Health Service, Department of Health and Human Services, Richard Olson, accompanied by Ronald Ferguson, director of the Division of Sanitation Facilities Construction.

I now call upon General Grisoli. Welcome, sir.

**STATEMENT OF WILLIAM T. GRISOLI, BRIGADIER GENERAL,
COMMANDER AND DIVISION ENGINEER, NORTHWESTERN
DIVISION, ARMY CORPS OF ENGINEERS**

Mr. GRISOLI. Thank you, Mr. Chairman and members of the committee. My name is William T. Grisoli and I am the commander and the division engineer of the Northwestern Division of the Army Corps of Engineers.

I am pleased to be here today to testify on the matter of water supply issues at the Standing Rock Sioux Tribe Reservation and on the Corps' role and efforts on managing the Missouri River mainstem reservoir system in this time of severe drought throughout the basin.

As you know, the Missouri River basin is currently in its fifth consecutive year of drought. Since 2000, below normal snow pack, rainfall, and runoff have resulted in record low reservoir levels behind the three large upper dams. Fort Peck is currently drawn down over 34 feet, Garrison over 24 feet, and Oahe over 32 feet. All congressionally authorized purposes for which the system was built are presently being impacted, except of course for flood control.

We recognize that the continuing drought conditions have resulted in hardships for the Standing Rock Sioux Tribe and other tribes and to many of the other water users in the Missouri River basin. The drought has impacted water intakes all along the river, including intakes that serve the Standing Rock Sioux Tribe at Fort Yates, ND. Additionally, the drought has caused problems related to noxious weed control, boating and reservoir access, exposure of cultural resources and increased fire threat.

Last fall I testified before this committee about the Corps' efforts to improve the management of the Missouri River system during the times of extended drought and discussed the involvement and consideration of basin tribes in that process. I listened to the committee and I listened to the tribes' concern over the past management and actions in operating the mainstem project. Since then, we have improved our ability to serve the basin and I am pleased to provide you an update on our actions from last year.

In March 2004, we issued a revised Missouri River master water control manual, the guide used by the Corps to regulate the six dams on the mainstem of the Missouri River. This signing culminated a 14-year effort of analyzing numerous alternatives and effects on important economic uses and environmental resources in

the basin. The revised master manual includes more stringent drought conservation measures and provides greater reliability and predictability.

In addition, in April of this year, the Corps co-signed a programmatic agreement under the National Historic Preservation Act, along with 16 Indian tribes, State and tribal historic preservation officers, the National Trust for Historic Preservation and the Advisory Council on Historic Preservation. We are committed to work collaboratively to preserve cultural resources that are exposed due to the drought conditions and reservoir fluctuations, and to operate and manage the system in compliance with the NHPA.

The Corps also continues to work with Federal agencies and with State, local and tribal governments to mitigate the short term effects of the ongoing drought. When the Fort Yates raw water intake failed in November 2003, the Corps assisted Bureau of Reclamation by managing water releases and operations during intake construction activities and providing equipment and technical assistance during the emergency. We also granted emergency permits to place fill material in the Oahe reservoir in conjunction with the construction of access roads and the placement of water supply intake lines.

Over the past year we have proactively continued to provide technical assistance to the Bureau at their request by making design recommendations, providing surveys of the problem areas and evaluating contingency plans and technical reports. The Corps has also assisted other communities throughout the basin with water supply and other problems triggered by the drought, including Parshall, ND.

In closing, we recognize that the continuing drought conditions have resulted in hardships for the Standing Rock and other tribes along the basin, as well as other water users in the Missouri River basin. The Corps remains committed to working with our Missouri River basin partners to mitigate those impacts to the extent possible, meet our responsibilities to federally recognized tribes, serve the congressionally authorized project purposes, balance the competing needs of the basin and comply with environmental laws.

I appreciate the opportunity to be here today and I look forward to listening to the other testimony and to other ideas on how the Corps may improve their service to the public and to the Missouri River basin.

Mr. Chairman, that concludes my testimony. I would be happy to answer any questions you or any other members have.

[Prepared statement of General Grisoli appears in appendix.]

Senator INOUE. I thank you very much, General.

May I now call on Mr. Breitzman.

**STATEMENT OF DENNIS BREITZMAN, AREA MANAGER,
DAKOTAS AREA OFFICE, BUREAU OF RECLAMATION**

Mr. BREITZMAN. Good morning, Senator.

I'm Dennis Breitzman, I'm Reclamation's area manager for the Dakotas Area Office. I'm located in Bismarck, ND. I'd like to summarize the written testimony I submitted on Wednesday.

Senator INOUE. Without objection, the full statement will be made part of the record.

Mr. BREITZMAN. Reclamation has worked with the Standing Rock Sioux Tribe for almost 20 years on the development and operation of a rural water system to distribute water to about 16,000 residents throughout the reservation. The tribe has prepared a final engineering report, which is the tribe's plan for completing construction of the reservation-wide system.

We have also been working with the tribe to construct a water supply system to deliver Missouri River water for the irrigation of 2,380 acres of crop land. These projects are being designed and built, and in the case of the rural water system, operated and maintained by the tribe through contracts with Reclamation under Public Law 93-638.

Reclamation's work over the past year on the Standing Rock reservation focused on water supply intakes from the Missouri River. These include the Fort Yates intake, the Wakpala intake, and the Cannonball irrigation intake. The Fort Yates and Cannonball intakes are located on the Missouri River at the upper end of Lake Oahe, and the Wakpala intake is located in Lake Oahe near the mouth of the Grand River.

Fort Yates' raw water intake is an integral part of the Standing Rock rural water system, transmitting river water to the treatment plant located in Fort Yates. It is the primary source of drinking water for a population of over 3,400, including the communities of Fort Yates, Cannonball and Porcupine, as well as Prairie Knights Casino and Lodge.

On November 24, 2003, low water conditions and shifting water sediment combined to disable the Fort Yates intake. Normally this intake is safely submerged in 30 to 40 feet of reservoir water. With the continuing drought in the Missouri River watershed, the intake is now in a river channel in a delta at the upper end of Lake Oahe. Without a water supply, the tribe closed schools, hospitals and tribal offices. Working day and night in severe weather conditions, Reclamation and tribal crews, assisted by State agencies, restored water flow by the afternoon of November 26 by using temporary pumps and above-ground piping assembled across the mud flats of the river channel.

In consultation with the Environmental Protection Agency, a precautionary boil water advisory went out and remained in effect until December 2. This allowed for flushing of the distribution system and water quality sampling in the system. Reclamation secured supplementation operation and maintenance funding from within the agency to cover the immediate costs of restoring the water supply.

In December 2003, work focused on making the temporary pump system more reliable during the freezing water conditions. This included construction of an access road and installation of a pipeline below the frost line. The Army Corps of Engineers coordinated releases and operation of the reservoir during the construction activities. And by March 2004, a new interim intake sump structure with a submersible pump assembly was operational. That pump remains operational today.

Concerned about the continuously changing river conditions, the tribe requested that Reclamation prepare backup water supply plans. Reclamation is working with the Standing Rock rural water

office on finalizing emergency response plans to address potential problems caused by low water levels. If the intake fails or the river channel shifts and the water supply is cut off, a backup pumping plan has been developed. Recent field exercises held just the week before last proved that we can restore water supply to the treatment plant well before all system storage is fully depleted. This plan will hopefully avoid future interruptions.

Reclamation and the tribe are also planning a groundwater well to provide a backup water supply independent of the river. This groundwater source would only serve as an emergency backup water supply, because of poor water quality and limited quantity. This backup water source should also be completed before the end of the calendar year.

The Wakpala intake on the reservation also has been affected by low water levels in Lake Oahe. The Wakpala intake provides water for a population of about 1,600 people, including the community of Wakpala and the Grand River Casino. The Lake Oahe water forecast for the spring of 2004 indicated the Wakpala intake would likely become inoperable in the summer of 2004. Lowering the intake screen was a short term solution enabling the tribe to maintain a water supply throughout the summer.

Concerned about continuing reservoir decline, the tribe secured funding, including \$200,000 from Reclamation, to construct a replacement intake that will be approximately 9 feet lower than the existing intake. This new intake should be completed this fall.

Finally, to address potential intake problems in the event of long term low water conditions for both the Fort Yates and Wakpala service areas, Reclamation and the tribe are actively investigating a horizontal well system near Fort Yates. The Cannonball intake, constructed to provide a water supply to irrigate about 800 acres of crop land near the community of Cannonball, has also been impacted by low water levels. This area is upstream of Fort Yates and the receding water levels in Lake Oahe left this intake high and dry during the 2004 irrigation season. The tribe used project funds to install a portable pump to provide a temporary water supply during this period.

That concludes my comments, Senator. I thank you.

[Prepared statement of Mr. Breitzman appears in appendix.]

Senator INOUE. Mr. Breitzman, I thank you, sir.

May I now recognize Mr. Olson.

STATEMENT OF RICHARD OLSON, M.D., DIRECTOR, DIVISION OF CLINICAL AND COMMUNITY SERVICES, INDIAN HEALTH SERVICES, ACCOMPANIED BY RON FERGUSON, DIRECTOR, DIVISION OF SANITATION FACILITIES CONSTRUCTION, INDIAN HEALTH SERVICE

Mr. OLSON. Good morning, I'm Dr. Rick Olson. I'm the director of the Division of Clinical and Community Services for IHS at our Rockville office. I'm accompanied by Ron Ferguson, who is the director of the Division of Sanitation Facilities Construction at IHS headquarters.

We're here today to discuss the impact of the failure of the Fort Yates municipal water system on our IHS hospital located in Fort Yates, ND. Because the water system failed so quickly, local offi-

cials were unable to provide advanced warning to the public, and since then, as we have just heard, the Bureau of Reclamation has made certain improvements to the water intake system. In addition, the IHS has successfully drilled and installed a well on IHS hospital property grounds that could keep our boilers and furnaces in operation and provide water to bathroom facilities. However, this water is not of sufficient quantity or quality that would be suitable for medical use or human consumption.

I would like to provide to the committee background on the events of last year that left the Standing Rock community without water, and particularly its impact on our health care facility and our ability to provide health care services to the Standing Rock tribal community. Late on Sunday night, on November 23, service unit staff were informed that there were problems with the water system and that the water lines were losing pressure.

Quickly, steps were taken to deal with issues of patient safety at the Fort Yates hospital. Fortunately at that time there were no inpatients at the hospital. This is a low acuity hospital with around three to five patients normally. Also, since it was late at night, there were no emergency patients in the emergency department. So without potable running water, we made the decision to send the inpatient nursing staff home and then the service unit leadership met with the tribal ambulance officials and advised emergency medical technicians to take patients to Bismarck rather than bring them to the IHS facility.

Dialysis services, as we have heard already, had to be closed. Dialysis requires a large amount of very pure water in order to be provided. The emergency room staff was then sent home and the hospital was essentially closed other than the maintenance staff, who were kept there to keep the boilers and furnaces up and running. The furnaces were kept running by hauling water from a private well 4 to 5 miles away from the hospital.

The next morning, on Monday, November 24, after conferring with the tribe, the decision was made to keep the hospital closed. Public statements on radio stations were used to inform the public of the water supply problem, the closure of the hospital and advising them where to seek medical services. Arrangements were made to transport dialysis patients into Bismarck. Medical staff from the Fort Yates hospital were sent down to the McLaughlin, SD Indian Health Service clinic, which is located about 25 miles south of Fort Yates, to assist in seeing outpatients at that clinic, because it was anticipated that we'd see more patients down there because of the closure of the hospital.

By Wednesday, we were able to open up a general walk-in clinic at the Fort Yates hospital, but had limited services and restrooms were functional because of the use of hauled water to them. The Fort Yates Indian hospital returned to full operation the following week, the first week in December, after running water was restored by the tribe and the Bureau of Reclamation and the water was determined to be safe by the Environmental Protection Agency.

That concludes my remarks, and I would be happy to answer any questions.

[Prepared statement of Dr. Olson appears in appendix.]

Senator INOUE. I thank you very much, Dr. Olson.

Because of the nature of the problem being discussed in this hearing, I would like to begin the questioning with the members of the delegation from North Dakota, Senator Dorgan.

Senator DORGAN. Senator Inouye, thank you very much.

First, let me ask Brigadier General Grisoli about the priorities with respect to the use of water in the Missouri River system. In managing the dams and reservoirs along the mainstem of the Missouri River, the question is how does the Corps determine which water uses have the greatest priority? For example, under the current management plan, does the Corps consider the availability of drinking water to be the top priority in terms of water use?

Mr. GRISOLI. Senator, we look at all the congressionally authorized purposes, and we try to balance the requirements between those purposes that we've been given, plus comply with the environmental laws and meet our treaty and trust responsibilities.

Senator DORGAN. But as you assess the congressional mandates, tell me where does drinking water fit in? Is drinking water in your assessment of these mandates a higher or lower priority than other uses?

Mr. GRISOLI. We always look at, obviously, life and limb and those types of things as the highest priority when we look at our balancing. Drinking water, to make sure it's available, and we feel that the revised current master manual provides the availability. It is very difficult, as you know, when it's a river versus a reservoir, to draw water out of that. We recognize that.

Senator DORGAN. I am trying to get to something more specific. As you evaluate the management of the river under the current congressional mandate, is the assured supply of safe drinking water for citizens who receive that water from the river a higher priority than other priorities, or is it simply equivalent to others?

Mr. GRISOLI. All the purposes, except for flood control, we look at trying to balance those.

Senator DORGAN. Including safe drinking water?

Mr. GRISOLI. We provide adequate water supplies as it goes by, and it is all calculated as we move water through the system to ensure it is there and available.

Senator DORGAN. But the issue of whether someone has a water supply would not be necessarily balanced against whether someone else for 12 consecutive months had an opportunity to take water for irrigation, would it? I understand what you are saying, that there is a management plan, and I am trying to ask with respect to the specifics of how you get to that, the management of the mandate that comes from Congress with respect to the assured supply of water for human consumption. I assume when you talk about that that has to be the highest use.

Is that not right?

Mr. GRISOLI. It always has to be available.

Senator DORGAN. So availability of water for human consumption is the highest use?

Mr. GRISOLI. Which is, Senator, we need to balance all of them. We have several authorized purposes. That is one of the ones, just like all the others, that has to be available. Navigation has to be

available. Recreation, flood control, they have to be available to the users.

Senator DORGAN. Let me ask it in a different way. What if, in order to make available sufficient water available for navigation in the downstream reaches of a relatively small navigation industry, less than \$10 million a year, what if in order to make that water available, you understood and knew that it was jeopardizing the availability of water for human consumption upstream? What then would be the response of the Corps of Engineers?

Mr. GRISOLI. I think that, Senator, when you look at that, we've incorporated in our plan, a revised plan, stringent drought conservation measures to ensure that when you got to a certain level in the reservoirs. For example, we've raised the preclude to navigation to 31 from 21. That's 10 million acre feet. Therefore, we recognize the need to have that water supply. You have to have a basic amount of water in the system for those types of things you're saying.

So when you get down to a certain amount of water, you need to draw the line, and we've drawn that line. We were able to raise that and add more stringent capabilities above and beyond the preclude. So if we continue to go down, we stop navigation, we stop some congressionally authorized purposes. And we've coordinated that on serving that purpose. So you do have that water supply, that continues.

What we've tried to do in this new revised manual is cause any sort of drought to mitigate those impacts and reduce the draw-down. Unfortunately we are right in the middle of a drought. So when we started this plan, it wasn't in the beginning, which would cause us to come down a lot slower, we're in the middle of it. That was all recognized and considered within the plan itself.

Senator DORGAN. Is there roughly 37 or 38 million acre feet in the system at this point?

Mr. GRISOLI. Senator, I believe there's approximately 35.8.

Senator DORGAN. So close to 36 million acre feet in the system at this point, and we're in the middle of a drought, is that correct?

Mr. GRISOLI. Yes.

Senator DORGAN. And you drew the line at 31 million acre feet?

Mr. GRISOLI. Thirty-one.

Senator DORGAN. Why would you draw the line at 31 million acre feet if we're in the middle of a drought with 36 million acre feet in the reservoir system?

Mr. GRISOLI. Senator, as you know, that has been a challenge for over 14 years, as far as where that preclude line should be. Modeling was done, public discussions were done all up and down the basin to determine a 31.

I would offer that when I came on board and I spoke to both of you gentlemen about the different issues on the Missouri River basin, back in 1999, seven out of the eight States offered up a modified conservation plan that said 31 preclude is about the right answer. So one of the areas that I took on and wanted to provide for the basin was a 31 preclude. So we were able to get that 31 preclude.

Senator DORGAN. And the one State that did not agree with that was Missouri, as I understand, is that correct?

Mr. GRISOLI. That's correct.

Senator DORGAN. And the 31 at that point was 5 years ago. Since that time, of course, we have had even greater protracted drought. The reason I am asking this question is that I understood you to say there is a drought, I understood you to say that you drew a line at 31 million acre feet to respond to a drought, and because in a drought we now have 36 million acre feet in the system, the 31 million acre feet line that you have described as something that would relate to drought measures is largely irrelevant with respect to your day to day activities, is that not correct?

Mr. GRISOLI. Senator, I would not say that it's not relevant, in the fact that we're still able to provide water. The difficulty and the risk is higher, I agree. But the water is still available and passing by at this particular point. But it's more of a challenge to obtain, yes.

Senator DORGAN. Mr. Grisoli, I have laid eyes on this spot at Fort Yates where they have the intake just 2 weeks ago. I must say to you that when we talk about water, this mighty river is fast becoming a puddle where we're trying to get water for human consumption. I was heartened somewhat by Mr. Breitzman's description of the alternative, so that you might, when this line, not if but when this line plugs up or when this line does not have availability of water to deliver that you are going to have, in the storage system, sufficient time to go to this alternative.

But the fact is, we have a full scale drought in my judgment, a drought emergency. We asked Mr. Breitzman's organization to come in and work through the Thanksgiving period and cobble up some way to get some water out of part of this river. But with respect to the management of the river, I recognize there is less water in the system, therefore there are problems.

But I also believe that the Corps of Engineers has created a circumstance where you describe a drought and then describe a remedy for responding to the drought that will never be employed. Of what value is a remedy that will never be employed? Thirty-one million acre feet, as you know, is not going to require you to do anything, because we are at 36 million in a drought. Senator Burns and I have put in an appropriations bill a 40-million acre trigger which is much more realistic. We are in a drought. We ought to be employing triggers immediately, especially for the highest priority, which is water for human consumption.

This is a debate that will go on longer than this hearing, General. I respect the work of the Corps, but I profoundly disagree with what the Corps is doing and has done and likely will do unless we continue to light as big a fire as is possible under the Corps of Engineers to respond to the management of the river in the right way. In my judgment, the management of the river must understand that the first and most important priority is to make certain that we don't have people cutoff from an adequate supply of water. As Senator Conrad's chart illustrates, when you show up at a hospital and see a sign that says, no water, we are talking about a human crisis here.

So I appreciate your coming to the hearing, but the 31 million acre feet trigger means nothing to me, and it means nothing to the Fort Yates area, nothing to Parshall, nothing to Wakpala, nothing

to anybody upstream that I think has been cheated by the management of the river, General. You and I will, I was just reelected, and I am not boasting about that, I am just observing, I am probably going to be here for a while, and you are going to be around for a little while. So you and I are just at this point a fuse and a match.

So we will try to get closer together and see if we can find a way to explode this 31 number so that we have some realistic way of managing the river to deal with this issue of human consumption.

I have taken more time than I intended. But if I might make one final point. Mr. Breitzman, again, and Mr. Olson, and all the others who are unnamed at this hearing, thanks for the work that you have done. We still have significant reimbursement issues. I am going to submit questions to Mr. Keyes and to you, Mr. Breitzman, in the hope that on these reimbursement issues to the tribes that we will get some better answers.

Thanks for the cooperation so far. Thanks to your men and women for the work they have done. General, thank you for being here, but let's hope that we can find a way to begin creating solutions for these issues, and that this never happens again. Thank you very much.

Senator INOUE. Senator Conrad.

Senator CONRAD. Thank you, Mr. Chairman.

Mr. Grisoli, if I could, first of all, let me say, I think you are an excellent person. I think you are here, I think you've been sent here to represent a policy that really doesn't hold up much under the light of day. You and I have had intense discussions previously about this, you know we have very strong feelings. This does not reflect on you personally, let me start with that.

What was the reservoir level in the early 1990's when we had the previous dramatic drought?

Mr. GRISOLI. Could I check on that point before I answer that question? I think it was around 40.

In the drought of the 1980's and early 1990's, it was about 41 million acre feet.

Senator CONRAD. 41 million. Now we're at 36 million.

Mr. GRISOLI. Yes, Senator.

Senator CONRAD. How much was the navigation season reduced in that earlier period when the reservoir levels were higher?

Mr. GRISOLI. I'd like to come back officially on the record on that. But I know that they were reduced significantly.

Senator CONRAD. Five weeks.

Mr. GRISOLI. But it wasn't part of the master manual plan at that particular time.

Senator CONRAD. Well, let me just, would it surprise you to know that the navigation season was reduced by 5 weeks?

Mr. GRISOLI. That's approximately what I've heard.

Senator CONRAD. How much was the navigation season reduced this last year?

Mr. GRISOLI. This has been reduced 47 days.

Senator CONRAD. The previous year?

Mr. GRISOLI. Reduced 13 days.

Senator CONRAD. Reduced 13 days. And how about the year before that?

Mr. GRISOLI. I'd have to ask someone.

Senator CONRAD. Seven days?

Mr. GRISOLI. I'd have to come back on the record, Senator, on that.

Senator CONRAD. I'd like to get that. The point here is very simple. We've got less water in the reservoir now than we had in the late 1980's and early 1990's. And yet you reduced the navigation season far more than now. And it just, it so profoundly angers people that this reservoir is being managed for a barge industry that generates less than \$10 million a year of economic activity and part of the result is people are left without water.

Now, let me just—and I'm not talking about, the sign there says it all, without water, hospital is closed, no water. So we've got to get serious here about dealing with this situation.

Let's talk about what's to come. Based on your projections for next year, what's the Corps' forecast on the level of Lake Oahe?

Mr. GRISOLI. The level of Lake Oahe? I'll have that in 1 minute, Senator.

If I may offer one comment, reference the analogy of what happened last year and what happened this year, as you saw, there is a big difference. If we had not changed the master manual from last year, it would have only been 17 days this year. But because we revised it, it was 47 days.

Senator CONRAD. And that is a step in the right direction. Absolutely. The problem is, we're in the midst of this horrendous problem.

Mr. GRISOLI. Right.

Senator CONRAD. But let me, I really want to get to where we're headed. I think that's critically important. Can you give us what the forecast is?

Mr. GRISOLI. The challenge, Senator, is it would rise slightly in the spring, about a foot. Then it depends on the runoff and what we think the runoff would be, et cetera., as far as what it's going to end up around this time of the year, which is the worst time of the year, obviously, after the runoff is gone. It really does depend on, do we have 16.8 million acre feet runoff or do we have 25 million acre feet runoff on what it's going to be.

Senator CONRAD. And do you have a forecast?

Mr. GRISOLI. If we have a medium flow, it will be about 5 feet higher. If we have a low flow, we think it's going to be somewhere between the medium and the low, it's not going to be high, it will be 10 to 12 feet lower.

Senator CONRAD. Well, that's what I was afraid of. What would the impacts of that level be on the water and irrigation intakes at Standing Rock?

Mr. GRISOLI. Well, at Standing Rock, Senator, it's hard to determine what I think is the real problem, which is, it's on a river. There will still be adequate water passing through, but it's the ability to draw that water. Because it's a river and it's dynamic. So as we work these fixes and we work with the Bureau of Reclamation, it will be very key, just like in Bismarck, we have to draw out of the river. There's no reservoir there. We have to have a good system that we fall back on that can handle a river.

Senator CONRAD. Well, let's get to that question, because that really is the question.

What action steps have you taken to prepare for that projected water level to prevent their being a water interruption again?

Mr. GRISOLI. We continue to work with, I think the key is the Federal agencies work together with the State and tribe. I think that's number one. And we communicate.

Number two is that we offer and we pay attention to the water levels, the possibility of the shift, which is the greatest worry of the tribe. Obviously the next one is the icing issue. Work with the Bureau of Rec on any permits they might need, and equipment and engineering advice.

It's a team effort, really.

Senator CONRAD. Okay. Well, let's talk to the whole team. Mr. Breitzman and General Grisoli, can you assure this committee that you are prepared to take the steps necessary to prevent an interruption of the water supply again?

Mr. BREITZMAN. Senator, we share the concerns mentioned by the General. I think the concern we have is a shift in the channel near Fort Yates, or ice-up conditions.

Senator CONRAD. I know the concerns. That's not my question. My question is very clear and very specific.

Mr. BREITZMAN. I understand.

Senator CONRAD. Can you assure this committee that you are prepared to take the steps necessary, whatever the conditions are, to prevent an interruption of water again? That's the question. And that's what I'm going to insist on an answer to.

Mr. BREITZMAN. Senator, as I mentioned, we've worked with the tribe on an emergency response plan in the case of low water conditions worse than we had last year. And we've done two things. We have purchased the pipe and the pumping material on the trailer. We've put an agreement together with the Garrison Conservancy District to assist us to place that piping and pump if need be. We exercised that the week before last. We were very successful. We actually had water running to the treatment plant in less than 1 hour.

In addition to that, we are working with the tribe to drill a groundwater well, which would be independent of the river. And the bids closed on that well drilling, I believe it was this Monday, sir. And we're hopeful that will provide an adequate quantity of water for an emergency situation only. It's not great water quality, but we're putting a chlorination system in. It will be hooked up to the treatment plant and yes, sir, we believe that we can't think of anything else to do. We think that will address any situation we will encounter this coming water year.

Senator CONRAD. So, and let me ask General Grisoli, do you believe that you are prepared to meet any eventuality to assure that there is not a break in water supply?

Mr. GRISOLI. Senator, the Corps is committed to all these basin cities and tribes along the river to do everything within our authorization to assist.

Senator CONRAD. Wait 1 minute. That's not my question. I'm not asking about every—I'm asking a very specific question here.

Mr. GRISOLI. At Fort Yates, we are prepared and we are very well tied into Chairman Murphy and into the Bureau of Reclamation to fill our role and to help and do everything we can.

Senator CONRAD. Okay, but that's not the answer to my question. I want to know from you and from Mr. Breitzman whether you are testifying to this committee that you are prepared to prevent any breakdown in the delivery of water to the tribe. That's the question.

Have you taken the steps necessary to assure this committee there is not going to be an interruption in the water supply to the people of that tribe?

Mr. GRISOLI. I believe we have taken the steps necessary within our authority to try to make sure there is no interruption. We have got our folks watching very closely to support the efforts of the Bureau of Reclamation. It's very hard when your support, it's very hard to say it won't happen, because I rely on a team.

Senator CONRAD. Well, let's ask Mr. Breitzman.

Mr. GRISOLI. We are prepared to do whatever necessary.

Senator CONRAD. Okay. I'm taking you at your word, and I trust you. I think you are honest. I disagree very much with the position of the Corps on the management of this reservoir. I trust you personally. I think you're an honorable person and I'm taking your word.

Mr. Breitzman, I feel the same way about you. I've dealt with you for many years. You're an honorable person. I appreciate the extraordinary work that you did last time there was an interruption.

But it's important for us to know, have all steps necessary been taken to assure there is not an interruption again in the water supply?

Mr. BREITZMAN. Senator, without repeating, I think the steps we've taken, we believe we've taken the only steps we know to take to assure a water supply this winter. I can speak for myself and my staff, we're confident we can bring water to Fort Yates this winter.

Now, to qualify that statement, there is still a need to address the long term intake issue at Fort Yates. That is being addressed by the tribe in their final engineering report. Because of the emergency we encountered last year, I think that the intake options that the tribe is examining have changed. I mentioned earlier in my comments that they're looking at, and we're working with them looking at a horizontal well system which won't be as dependent on the flows in the river. That's an option.

Senator CONRAD. What's the cost of that option?

Mr. BREITZMAN. The only cost I've seen, and it's a rough estimate by the tribe's consultants, that's around \$30 million.

Senator CONRAD. \$30 million?

Mr. BREITZMAN. Yes, sir.

Senator CONRAD. What would be the source of that funding?

Mr. BREITZMAN. That would be, I believe it would be Dakota Water Resources Act. That would be a portion of the ceiling of that Act allocated to the Fort Yates water system.

Senator CONRAD. And do you recall what the ceiling is that was allocated to them?

Mr. BREITZMAN. \$80 million, sir, for Standing Rock.

Senator CONRAD. So \$30 million of the \$80 million would go just for that purpose?

Mr. BREITZMAN. That would be for a well system and for a new treatment plant. That would replace both the Fort Yates and Wakpala intakes.

Senator CONRAD. That is really sobering. I must say that \$30 million estimate, that's stunning to me.

Mr. BREITZMAN. Yes.

Senator CONRAD. That is truly stunning.

I have other questions, Mr. Chairman, but I don't want to prevail on your patience any further. I do have questions I would like to submit to the record with respect to Bureau of Reclamation reimbursement of the tribe, some \$400,000 to provide meal services to those individuals repairing the intake. Has that been reimbursed to the tribe?

Mr. BREITZMAN. Senator, I'm not sure about that specific cost. We have reimbursed some costs to the tribes, and in some cases I've been advised we don't have the authority to reimburse some costs.

Senator CONRAD. I'd like, and very specifically, I'll submit this question for the record, and if you could respond in writing as to whether or not they have been reimbursed, and if not, why not. I would also like to submit to the Corps in writing questions about the legal obligation to the tribe, what I think is an irrefutable right to water in the basin, under the Winters doctrine and the priority that is given within the plan to the tribe. I think very clearly the commitment is there. I want to find out if the Corps shares that view. Maybe you could just tell me, General Grisoli, if you do share that view under the Winters doctrine, that the tribe is assured right to water.

Mr. GRISOLI. We recognize the reserve water rights, Senator, yes.

Senator CONRAD. Where in the priority list does that fall?

Mr. GRISOLI. It's equal to the things we have to do. We look at, as I had mentioned, we have congressionally authorized purposes, we have to comply with ESA and we always look at meeting our trust and treaty responsibilities.

Senator CONRAD. Let me just say to you, when I hear you say this, it reminds me of what my grandmother used to say to me. She said, Kent, if everything is a priority, nothing's a priority. When I hear you say everything is equal, I don't see it that way. I don't see floating a barge as equal to the right of a tribe to have water for consumption that's necessary to preserve human life. I don't see how that's equal.

Mr. GRISOLI. Senator, let me clarify the point about when the water, if the water is quantified and ratified by Congress, and there is a certain amount of million acre feet, obviously that will be fulfilled directly. As it stands right now, that has not been done. We try to meet the trust and treaty responsibilities by providing access to water.

Senator CONRAD. Well, I'm not going to go further. I would just say to you, this is a very serious obligation. The Federal Government has made promises. We've entered into treaties. Those treaties have been ratified by Supreme Court determinations. It's just

as clear as a bell to me that we've got that obligation and that responsibility.

I thank the Chair.

Senator INOUE. I thank you very much.

I have a few questions, if I may ask. General, is there anything you would have done differently to avoid the problems experienced last November and December, if you had to do it again?

Mr. GRISOLI. Senator, I'm glad you asked that question. I will tell you that across the board, I think the team didn't anticipate well enough the issues along the reserve. I will tell you that this year, that's a little different. We've been more proactive, Federal agencies trying to work with State and tribe.

Last year, it wasn't that way. We were anticipating some problems, but I don't think it was proactive. I think that's a fair statement to say across the board to everyone. You see the changing of the reservoir system and yet, I'm not sure if we were as proactive as we should be.

Senator INOUE. In the statement of Chairman Murphy, he spoke of an inland reservoir, or a manmade lake, costing about \$30 million. Is there any construction plan for this project, or is it just an item of discussion?

Mr. GRISOLI. At this time, Senator, I have no information as far as it being a particular plan or study. That's just an initial idea or concept.

But I believe also, I offer that the Bureau of Reclamation would be authorized to work that project. It wouldn't be a Corps project. But I could be wrong.

Senator INOUE. Mr. Breitzman, is that or feasible idea? Is it practical?

Mr. BREITZMAN. Senator, I also don't know. I must admit this morning is the first time I've heard of the inland reservoir proposal. We'd have to look into that.

Senator INOUE. General and Mr. Breitzman, can you sit down with Chairman Murphy and his council and see if something can be done? As a member of the committee, I would like to see that. And if it is feasible and practical, I am on the Appropriations Committee, so maybe we can do something about it.

Mr. BREITZMAN. We will do that, Senator.

Mr. GRISOLI. We will do that, Mr. Chairman.

Senator INOUE. I realize that a problem of this nature cannot be fully and guaranteed controlled, because after all, there is such a thing as nature and the Good Lord. He has His own ideas.

But I would just like to note that when our troops entered Baghdad, the people there received us with cheers and with huzzahs, they tore down the statute of Saddam Hussein, there was much joy and merriment in that city. But we noted that within 1 week, these same faces became faces of anger. And in our hearings, we noted that there were many causes for this.

One of the major causes was that we did not have plans to repair the damaged water systems and the damaged sewer systems. We had the finest troops in the world, but they were war fighters.

They were not water system repairers and sewer system repairers.

And the Indians here, I think, have been very patient all these years, because they know that you're trying your best. So I hope that you will try a little harder. Let us come up with this plan, if it is feasible, if it is practical, maybe that is the solution.

But I think it might cost more than \$30 million. But we will see.

But before I adjourn the hearing, I would like to indicate that the record of this hearing will be kept open for 2 weeks. For all the witnesses, if you wish to supplement your testimony or clarify your testimony, please feel free to do so.

This will be my last meeting in which I will be presiding as vice chairman. I will continue to serve as a member of the committee, but I will be taking over another leadership role on the Commerce Committee.

Before I do, I would like to just note a few things. When I became a member of this committee 26 years ago, there were only 5 members. It was a select committee, it was not an important committee. Today there are 15 members. And I am happy to say that my colleagues in the Senate now seek membership on this committee.

Second, we have been given much praise and credit for what we have done. It is true that this committee has considered more legislation and passed more bills than any other committee in the Senate. It is hard to believe that, but this has been a very busy committee. But it would not have been done were it not for the staff, and I would like the record to show these are the staff people.

The Majority Staff Director and Chief Counsel, Paul Moorehead. The following are the counsel to Chairman Campbell; David Mullon, John Tahsuda, Perry Riggs, Rhonda Harjo, and Jim Hall. Professional Staff Member, Lee Frazier.

The Minority Staff Director and Chief Counsel is Patricia Zell. The following are the counsel to the Vice Chairman; Janet Erickson, Carl Christensen, Diana Kupchella, and Colin Kippen. The Chief Clerk of the Committee, Marilyn Bruce; Computer Systems Administrator, Dawson Ford; Office Manager, Tana Towney; Receptionist, Sarah Fluhart; and Printing Officer, John Mogavero.

I cite these names because there will be a major change in the leadership of this committee.

Chairman Campbell will now go into the private sector, and I will be on another committee. So many of these staff members may not be back with us, but I wanted to thank them for all the work they have done with us. I hope that the succeeding staff will continue the work that we have established over the years.

I am sorry to have taken up this time, but General, Mr. Breitzman, Mr. Olson, I thank you very much for your testimony. We look forward to a report coming in from what you have concluded.

One final question, Mr. Olson. Mr. Murphy said that as a result of this recent drought, you incurred an extra cost of \$300,000, is that correct?

Mr. OLSON. The information I have is that most of that relates to lost services. We had staff that had to be put on administrative leave and of course be paid, and services were not provided to tribal members during that period of time. So that was not extra expenses that the Indian Health Service had to pay, except for over-

time for maintenance staff and some additional contract health dollars and some lost revenue. But the bulk of it had to do with staff that was not able to provide services to the tribal members.

Senator INOUE. Have you applied for compensation for this loss?

Mr. OLSON. Sir?

Senator INOUE. Have you applied for reimbursement for this loss?

Mr. OLSON. Not that I'm aware of.

Senator INOUE. Why do you not?

Mr. OLSON. Yes, sir.

Senator INOUE. Once again, I thank you very much. And the hearing stands at recess.

[Whereupon, at 11:25 a.m., the hearing was adjourned.]

APPENDIX

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

PREPARED STATEMENT OF WILLIAM T. GRISOLI, BRIGADIER GENERAL, COMMANDER AND DIVISION ENGINEER, NORTHWESTERN DIVISION, U.S. ARMY CORPS OF ENGINEERS

Mr. Chairman and members of the committee, I am Brigadier General William T. Grisoli and I am Commander of the Northwestern Division of the U.S. Army Corps of Engineers [Corps]. I am pleased to be here today to discuss our roles, responsibilities, and efforts on managing the Missouri River Mainstem Reservoir System and on the matter of water supply issues at the Standing Rock Sioux Tribe Reservation.

The Missouri River basin is currently in its fifth consecutive year of drought. Since 2000, below normal mountain snowpack, rainfall and runoff have resulted in record low reservoir levels behind the large upper three dams: Fort Peck is currently drawn down over 34 feet; Garrison, over 24 feet; and, Oahe over 32 feet. Currently, all Congressionally authorized purposes for which the System was built are being negatively impacted except for flood control. We recognize that the continuing drought conditions have resulted in hardships for the Standing Rock Sioux, other tribes, and to many of the water users in the Missouri River Basin.

The drought has negatively affected many river and reservoir water intakes including the water intake that serves the Standing Rock Sioux Tribe at Fort Yates, ND. Lower pool levels at the upper three reservoirs have also caused problems related to noxious weed control, boating and reservoir access, exposure of cultural resources and increased fire threat.

The System is comprised of six dam and reservoir projects authorized by the Rivers and Harbors Act of 1935 and the Flood Control Act of 1944 to operate as an integrated system providing for flood control, navigation, irrigation, hydropower, water supply, water quality, recreation, and fish and wildlife. On this river system, the Corps of Engineers follows the Missouri River Master Water Control Manual [Master Manual], which guides how we regulate the flow of water at the six dams on the mainstem of the Missouri River: Fort Peck, Garrison, Oahe, Big Bend, Fort Randall, and Gavins Point. First developed in 1960, the Master Manual was first revised in 1975 and 1979, to make changes in flood control regulation criteria.

With input from affected interests and other agencies, the Corps formulates and publishes Annual Operating Plans, which inform the public of expected operations over the coming year. The Draft Annual Operating Plan for 2005, which presents our planned regulation of the Mainstem System under a wide range of water supply conditions, was recently released for public review. Seven public meetings were held throughout the basin in October to review the Draft, take comments and answer questions regarding the plan. The details of the plan were also presented at the Mni Sose Intertribal Water Rights Coalition meeting in late September. After taking into consideration comments received on the Draft, we expect to release the Final Annual Operating Plan in December.

It was 1 year ago I testified to this committee regarding our efforts to improve our management of the System during times of ongoing and extended drought. I discussed the involvement and consideration of tribes in this process. I listened to the

committees' and tribes' concerns over our management and actions in operating the Mainstem projects. Since that time, we've improved our ability to serve the Basin, and I am pleased to provide you with an update of our actions since that prior testimony.

On March 19, 2004, I signed a Record of Decision and issued a revised Master Manual that includes stronger drought conservation measures. This culminated a 14-year effort that included an analysis of alternatives and their effects on the economic uses and environmental resources in the basin. Our efforts involved extensive coordination with stakeholders, public input, workshops and hearings across the basin. We also consulted with the Missouri River Basin Tribes, and included tribal workshops, and meetings with tribal chairmen and tribal members. We received comments from tribes, States, and others on the alternatives. The revision increases reliability and predictability for the Basin. The revised Water Control Plan meets our Tribal Trust and Treaty responsibilities, complies with Federal law and achieves a balance among the interests on the river.

We are committed to working collaboratively to preserve cultural resources that are exposed due to the drought conditions and reservoir fluctuations. In April 2004, we co-signed a programmatic agreement with the 16 American Indian Tribes, two Tribal Historic Preservation Officers, four State Historic Preservation Officers, the National Trust for Historic Preservation, the Advisory Council on Historic Preservation and other parties, that commits to the operation and management of the Missouri River Mainstem System in compliance with the National Historic Preservation Act. The Omaha District is now spending approximately \$3 million dollars a year for cultural resources. In fiscal year 2004, we worked on projects to protect four high priority cultural sites, and we have plans to protect three additional sites in 2005. We will continue to seek additional opportunities to preserve cultural resources along the Missouri River.

We continue to work with the Bureau of Reclamation, the U.S. Fish and Wildlife Service, the Bureau of Indian Affairs, the U.S. Geological Survey, and the U.S. Department of Agriculture, American Indian Tribes, and State and local governments to address the effects of the current drought. We are taking actions to help relieve the drought's effects, including its effects on the water supply of the Standing Rock Sioux. When the Fort Yates raw water intake failed in November 2003, we assisted the Bureau of Reclamation by managing water releases and operations during intake construction activities, and providing equipment and technical assistance during the emergency. We also granted emergency authorization pursuant to section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act to place fill material into Oahe reservoir in conjunction with the construction of access roads and the placement of a water supply intake line. Over the past year we have proactively continued to provide technical assistance to the Bureau of Reclamation at their request, including making design recommendations, providing surveys of the problem area, and evaluating contingency plans and technical reports.

Further, the Corps has assisted other communities with water supply problems brought on by the drought. In anticipation of required regulatory permits associated with drought-related challenges to water supply intakes in Fort Yates and Mandan, ND and Wakpala, SD, the Corps coordinated with appropriate Federal and local agencies. In September 2004, we awarded a contract to extend and lower the municipal water intake for Parshall, ND using our authority under Public Law 84-99 to supply municipal water in emergency drought situations.

The Corps has also spent more than \$2 million over the past 2 years extending and relocating boat ramps on the upper three reservoirs. The Corps has also expanded its efforts to control noxious weeds at the upper three projects, which now involve expenditures of approximately \$500,000 per year.

The impacts of the current drought are not only being felt around the upper three System reservoirs. Water intakes for municipal and industrial water supply, including thermal powerplants, on the lower Missouri River Basin below the System from Yankton, SD to St. Louis, MO, have been negatively impacted in the river reach. Several intake owners have had to modify their facilities to deal with the lower river flows caused by the drought. More specifically, three intakes in the Kansas City vicinity owned by the Kansas Board of Utilities, Water One [Johnson County KS] and Kansas City, MO have added low water intakes to ensure continued operation at those intakes. Navigation and river recreation in the lower river has also been negatively impacted by lower releases and shortened navigation seasons.

We recognize that the continuing drought conditions have resulted in hardships for the Standing Rock Sioux and the other tribes, as well as for many other of the water users in the Missouri River Basin. We remain committed to address those impacts where possible, to meet our responsibilities to federally recognized tribes, to serve the authorized project purposes, to balance the competing needs of the Basin,

and to comply with environmental laws including the Endangered Species Act. We will continue to work closely with you and all the Missouri River Basin stakeholders in that effort.

We appreciate having the opportunity to be here today, and I look forward to hearing the testimony from Tribal Leaders, and any ideas they may have to improve our service to the public of the Missouri River Basin.

Mr. Chairman, this concludes my testimony. I would be pleased to answer any questions you or the members of the committee might have.

MISSOURI RIVER BASIN WATER MANAGEMENT DIVISION
January 14, 2005.

Hon. DANIEL K. INOUE,
Vice Chairman, Committee on Indian Affairs,
U.S. Senate, Washington, DC.

DEAR SENATOR INOUE: Thank you for your letter of November 22, 2004 as vice chairman of the Committee on Indian Affairs. In that letter you requested written responses to a number of questions regarding problems with a water supply intake at Fort Yates, ND on the Standing Rock Sioux Reservation. Please find responses to each of those questions in the attached document.

I appreciated the opportunity to testify before the committee on November 18, 2004 and to provide this additional clarification requested in your letter. If you have any further questions or comments, please feel free to contact me.

Sincerely,

WILLIAM T. GRISOLI, *Brigadier General,*
U.S. Army, Division Engineer.

Question 1. In 1908, the U.S. Supreme Court affirmed that when the Indian reservations were created and reserved, the right of the tribes to use the water was also reserved. The Court noted, “fundamentally, the United States as a trustee for the Indians, preserved . . . the title to the right to the use of water which the Indians had ‘reserved’ for themselves. . . .” This decision became known as the Winters Doctrine.

The Corps of Engineers cannot ignore the clear and indisputable fact that the tribe has an irrefutable right to water in the basin. It is a right that has existed for more than 100 years when the tribes signed treaties with the United States and it is a right that was reaffirmed by the Supreme Court 96 years ago. Those rights are never forfeited.

Based on this doctrine, does the Corps in its management of the dams and reservoirs afford the tribe’s use of water a higher priority than the other authorized purposes? If not, why not?

Answer 1. As indicated in our testimony before the committee, tribal water rights may be quantified through adjudication or by compact with the affected State, ratified by Congress. Most tribes within the Missouri River basin, however, have not yet sought to quantify their reserved water rights under the “Winters Doctrine,” although several tribes in Montana and Wyoming are at various stages of the quantification process. The Corps does not have the responsibility to define, regulate, or quantify water rights, or any other rights that the tribes are entitled to by law or treaty. Unless specifically provided for by Federal statute, quantification of water rights does not entail an allocation of storage at Corps reservoirs. The Corps recognizes, however, that the tribes have claims to reserved water rights, and will, to the extent possible, continue to operate the Mainstem Reservoir System [System] based on that recognition.

Question 2. In your testimony you indicate that the Corps is meeting its trust obligation to the tribe.

Please reconcile for me how the Corps can state that it is meeting its trust obligation if it fails to ensure that adequate water is maintained in the reservoir to ensure the tribe has access to water as was reserved in the treaties and confirmed by the Supreme Court?

Answer 2. The System was authorized by Congress to serve eight purposes, including water supply, over a wide range of runoff conditions. To accomplish this, a large portion of the storage in the upper three reservoirs is used to hold water that is used during extended drought, like the drought currently being experienced in the basin, to continue service to authorized purposes. Releases from Garrison Dam will continue to be adequate to serve the water supply needs of the community, and we will continue to work with the Bureau of Reclamation to ensure intake access. As

indicated above and in our testimony before the committee, most tribes within the Missouri River Basin have not yet sought to quantify their reserved water rights under the Winters Doctrine and allocations of System storage for their claims to reserved water rights have not been made.

Question 3. At what point did the Corps become aware of the potential threat to the tribe's water supply last year? When the Corps became aware, what specific action steps were taken to either avert the loss of water or respond to the loss?

Answer 3. The Corps first became aware of the problem at the Fort Yates intake on November 25, 2003 when a staff member from Senator Dorgan's Bismarck office contacted us. The U.S. Bureau of Reclamation [BOR] operates and maintains the Fort Yates intake, and has the authority to assist rural water systems in both an emergency repair and a permanent remedy of the problem. At the request of the BOR, releases from Garrison Dam were adjusted by the Corps to facilitate the repair of the intake. The Corps also issued emergency permits, loaned equipment and provided technical assistance as requested. Because the BOR has the lead role in regard to this rural water system intake, the Corps has, and will continue, to support their efforts through timely issuance of required permits, as well as equipment loans and technical assistance as requested. We will also continue to work with the BOR and others on the development of a contingency plan and a long-term solution. The Bureau of Reclamation's contingency plan for the Fort Yates intake includes installing a portable pump in the river and bringing it online within 9 hours, should a problem with the intake occur. Longer-term solutions are being studied by the BOR, but in the interim, the Corps will continue to work with the BOR to keep the existing intake functional.

Question 4. On Tuesday of this week, the Omaha District office issued a press release citing its work to extend the intake system at Parshall as an example of the Corps' efforts to offset the drought conditions.

What specific actions has the Corps taken at Standing Rock to offset the impacts of the low water levels? Has the Corps developed any action steps to help avert the loss of water again at Standing Rock?

Answer 4. The Corps initiated a multi-agency contingency planning effort with a meeting at Fort Yates on December 13, 2004. Meeting participants examined the authorities, roles and responsibilities of the various Federal, tribal, and State agencies that can help if another emergency arises. The meeting also helped to establish lines of communication between the various agencies and participants committed to work together on the Fort Yates intake problem and other drought issues. The Corps is currently assisting in the preparation of an Emergency Action Plan for the Fort Yates community. The plan will present a list of actions necessary to provide relief for the Tribe during an emergency associated with their water supply system.

Question 5. Based on your projections for next year's potential run-off scenarios, what is the Corps' preliminary forecast on the level of Lake Oahe and the impacts of that level on the water and irrigation intakes at Standing Rock? What steps are being taken to ensure the tribe will not lose access to water based on those projections?

Answer 5. Absent significantly above normal runoff this year, Lake Oahe is not likely to refill substantially in 2005, and Fort Yates will continue to experience river conditions at their intake. Releases from Garrison will be adequate to serve the water supply needs of the community. As described above, the Corps is currently working with the Bureau of Reclamation to develop an Emergency Action Plan to respond to any emergency associated with their water supply system.

Question 6. How many Missouri River intakes and/or inland reservoirs has the Corps constructed, operates and maintains?

Answer 6. The Corps has constructed a total of 51 reservoirs in the Missouri River basin including the six System reservoirs and 45 tributary reservoirs. In recent years, the Corps has constructed three intakes along the lower Missouri River to pump water into environmental restoration sites. The Corps does not own, operate or maintain any municipal, rural, industrial or private intakes on the Missouri River; however, we have provided emergency assistance to municipalities, such as Parshall, ND, for water intakes that fall under the authorities of the Public Law 84-99, Flood Control and Coastal Emergencies.

PREPARED STATEMENT OF RICHARD OLSON, M.D., DIRECTOR, DIVISION OF CLINICAL AND COMMUNITY SERVICES, INDIAN HEALTH SERVICE, DEPARTMENT OF HEALTH AND HUMAN SERVICES

Mr. Chairman and members of the committee:

Good morning, I am Dr. Richard Olson, director, Division of Clinical and Community Services, Indian Health Service [IHS]. I am accompanied by Ronald Ferguson, director, Division of Sanitation Facilities Construction, Indian Health Service. We are here today to discuss the impact of the failure of the Fort Yates municipal water system on the Standing Rock Sioux Reservation in November and December 2003 and its impact on the IHS hospital at Fort Yates, ND service unit.

Because the water system failure happened quickly, local officials were unable to provide advance warning to the public. Since that time, the Bureau of Reclamation [BOR], has made certain improvements to the water intake system. In addition, we have successfully drilled and installed a well on the IHS hospital property grounds that could keep our boilers and furnaces in operation and provide water to bathroom facilities. However, this water would not be suitable for medical use or human consumption.

I would now like to provide to the committee background on the IHS and the events of last year that left the Standing Rock Community without water and particularly its impact on the IHS health facility's ability to continue to provide health care services to the Standing Rock tribal community.

The IHS, an agency in the Department of Health and Human Services, delivers health services to more than 1.6 million federally recognized American Indians and Alaska Natives (AI/ANs) through a system of IHS, tribal, and urban [I/T/U] operated facilities and programs based on treaties, judicial determinations, and Acts of Congress. The mission of the agency is to raise the physical, mental, social, and spiritual health of AI/ANs to the highest level, in partnership with the population we serve. The agency goal is to assure that comprehensive, culturally acceptable personal and public health services are available and accessible to American Indian and Alaska Native people and communities.

On Sunday November 23, 2003, the Service Unit staff was informed that the intake pump and water line into the Missouri River was either plugged with silt or frozen or both. The water fines were rapidly losing pressure as the municipal water storage tanks were rapidly being depleted.

Immediate steps were taken to make sure the safety of patients was not compromised and to implement backup plans to maintain the operation of the Fort Yates Indian Hospital. At this time, there were no in-patients in the Hospital and no patients being seen in the emergency department. Without potable running water, we made a decision to send the in-patient nursing staff home. The service unit leadership conferred with the tribal ambulance staff and advised the emergency medical technicians to transport patients directly from the pick-up sites to hospitals in Bismarck, ND, and to cease delivery of patients to the Fort Yates Indian Hospital. Dialysis services also had to be closed until it was again safe to run the dialysis units at the Hospital. Emergency staff was sent home and the Hospital closed entirely except for the maintenance staff who remained on duty to keep the boilers and furnaces up and running. The furnaces were kept running by hauling water to the Hospital from a private well located approximately 4-5 miles from the Hospital.

On Monday November 24, due to complete shut-down of water services to the city of Fort Yates, the decision was made to completely close the hospital after conferring with the tribe. Public statements by radio stations were used to inform the public of the water supply problem, the closure of the Fort Yates Indian Hospital, and where to seek medical services. Arrangements were made to transport dialysis patients to the, Med Center One Hospital in Bismarck, ND. All necessary medical staff reported to the Indian Health Service Clinic in McLaughlin, SD, which is located 25 miles south of Fort Yates, ND, to assist in the added number of patients resulting from closure of the Hospital. We operated under this plan for 2 days.

By Wednesday, November 26, 2003, we were able to operate a general walk-in clinic for non-invasive procedures using local antiseptic hand-washing procedures and limited restroom facilities with the use of hauled water to the restrooms. The Fort Yates Indian Hospital returned to full operation during the first week of December after running water was restored by Tribal Officials and the Bureau of Reclamation, and the water was determined to be safe by the Environmental Protection Agency.

Mr. Chairman, this concludes my statement. Thank you for this opportunity to discuss this health related matter. We will be happy to answer any questions that you may have.

**TESTIMONY OF
CHARLES W. MURPHY, CHAIRMAN
STANDING ROCK SIOUX TRIBE
BEFORE THE SENATE COMMITTEE ON INDIAN AFFAIRS
ON STANDING ROCK RESERVATION WATER CRISIS
November 18, 2004**

Introduction

Good morning Mr. Chairman and members of the Committee. I am Charles W. Murphy, the Chairman of the Standing Rock Sioux Tribe. With me this morning is Tribal Councilman Mike Claymore, who serves as Chairman of the Economics Committee. We greatly appreciate the longstanding concern this Committee has shown for the needs of our Tribe. Today we are here to discuss an ongoing crisis our people are experiencing concerning one of the most basic and critical elements for any community - water.

Next week is Thanksgiving. Exactly a year ago, over Thanksgiving weekend of 2003, we had no water for our people. Water levels in Lake Oahe reached historic lows and massive amounts of sediment moved down river, completely burying the water intake system that provides water for our people.

Without any warning, we had no source of safe water for two of our largest Reservation communities. Several thousand Reservation residents had no water for many days. We had no water in our homes, in our Tribal government offices, in our schools and in our hospital. Our irrigation projects were affected, and we lost our crops. Several tribal businesses were shut down for many days. The result was tremendous social and economic hardship for our people, as we struggled first to address the most basic health and safety needs in our communities.

In this testimony, I will try to give the Committee some sense of what it was like to be on a Reservation without water in those difficult days around Thanksgiving a year ago.

This problem most seriously affected our children, our elderly, and those needing medical care – and I will tell you about some of their experiences.

I will also show you pictures of the water conditions we face today. I have brought photos showing 1997 conditions around Fort Yates, when Lake Oahe was at normal levels, as well as photos showing current conditions. The difference is almost unbelievable. Where people were previously at risk of drowning, you can now walk across the river. I will also present photos showing the underlying causes of the Tribe's water shortage problem. These were produced by an engineering team from the University of Minnesota, following a fly-over study of the current river conditions.

The problem we faced last year may well occur again – and we are particularly at risk when the water freezes this winter. In dealing with the crisis last year, the Tribe spent a considerable amount of our own Tribal revenues as part of our response to the emergency. We are still waiting to be reimbursed for all these costs, and we certainly cannot afford to incur these costs again. While we have been reimbursed by the U.S. Bureau of Reclamation for some of those costs, many well-documented Tribal emergency response costs still have not been reimbursed – including some \$400,000. The Tribe did not create the conditions for the water crisis to occur, and we should not be made to absorb these costs. We hope the Committee can assist us in resolving the issue of reimbursement of the Tribe's direct costs once and for all.

I also ask for the Committee's help as we develop a long-term physical solution to our water intake problems. As matters now stand, the intake system currently in place to provide water to our people is, at best, a temporary solution. While we have water for our people today, the problem we faced last year could happen again at any time. Water levels remain low and sediment, pump failures and freezing conditions are constant

threats to the operation of our systems. Many of our people live in fear that the water will be shut off at any moment. I have many Tribal members who fill up their bathtubs every night for fear of running out of water. This cannot be allowed to continue.

We need the Committee's support as we find a long-term engineering solution so that we can put these fears to rest. Like other America citizens, our people deserve the right to be confident that their water supply is safe and secure. We have some good ideas on how to go about this, which I will share with the Committee in my testimony this morning. I would also ask the Chairman for permission to follow up on today's testimony by providing additional written testimony focusing on these technical issues, within 14 days of today's hearing. We provided background material to Committee staff last week, and we would be happy to provide additional copies of these materials as needed.

Background on the Tribal Water Systems

The Standing Rock Reservation is home to over eight thousand residents and includes our eight Districts, which are our Reservation communities. The Reservation encompasses approximately 2.3 million acres situated in North Dakota and South Dakota. The Reservation consists of all of Sioux County in North Dakota and all of Corson County in South Dakota.

Reservation communities in North Dakota, Fort Yates, Cannonball and Porcupine are served through one treatment plant and intake system that takes water from Lake Oahe. The water is pumped from Fort Yates to Cannonball and Porcupine through a rural water system, which also serves approximately 150 homes located just outside these three communities. This is the system that failed last Thanksgiving.

Most of the South Dakota Districts are currently served from well water. Bear

Soldier, Rock Creek and Little Eagle are served from a well field, and the community of Kenel is served from a single well located five miles south of the community. A second water treatment plant in Wakpala takes water from the Grand River arm of Lake Oahe to serve that community.

Well water on the Reservation has high levels of minerals and sodium. The dissolved solids, salts and other minerals in the ground water make it mostly unusable for cooking, washing and livestock. This water is also unsafe for infants, the elderly, and tribal residents with diabetes and other medical conditions. Many Standing Rock residents are forced to buy bottled water and haul water for domestic purposes because of the poor ground water quality.

The Tribe's long range water development plan is to serve all Reservation communities from Missouri River water. The water is of high quality compared to the ground water available in our communities. Because of the Tribe's need for a safe and dependable Missouri River water supply, we were pleased to be part of a joint State-Tribal effort – lead by our North and South Dakota Congressional delegations – to gain passage of the Dakota Water Resources Act of 2000 (DWRA). But funding under that Act has so far been insufficient to provide us with a dependable water supply system. The planned extension of our rural water system was also put on hold last year, when our limited DWRA funding was diverted by the Bureau of Reclamation to address the water emergency.

The current water crisis is particularly harsh because it comes after our long, painful history of violated treaty rights and the unilateral taking of our best lands for the Oahe project. It is a bitter irony that the same Oahe project that hurt us by flooding our homeland is now hurting us again by leaving us without any water at all.

Treaty History and Reserved Water Rights

The Standing Rock Sioux Tribe has continuously occupied the land that comprises the current Reservation since long before the Lewis and Clark expedition. The Tribe reserved the exclusive rights to the lands of the Reservation and the water (at one time including entire portions of South Dakota and North Dakota west of the Missouri River) in the Treaty of 1851 and the Fort Laramie Treaty of 1868.

The 1851 Treaty reserved the exclusive use and occupancy of the lands and water in much of North and South Dakota to the Great Sioux Nation, and the 1868 Treaty established a permanent Sioux homeland. Recognizing the importance of the Missouri River, the treaties established the eastern boundary of the Great Sioux Reservation on the east bank of the Missouri River and encompassed the entire channel of the river within the Reservation.

When Congress created the Standing Rock Reservation with its current boundaries in 1889, our Tribe's exclusive land and water rights were again reserved, and the Tribe became the sole owner of these rights. In *Winters v. United States*, 207 U.S. 564 (1908), tribal reserved water rights were confirmed. In that case, the United States Supreme Court ruled that a treaty between the United States and an Indian tribe establishing a permanent homeland for the tribe also reserved federally protected water rights that are paramount to other water rights.

However, despite our treaty rights, our Tribal lands were seized without our consent for development of the Oahe Dam, constructed in the 1950s. The Oahe project flooded 56,000 acres of prime Standing Rock bottomland and displaced 90 tribal families from their homelands. These Tribal lands were sacrificed to create Lake Oahe and provide flood control and navigation opportunities for downstream states in the Missouri River Valley. As this Committee and the Joint Tribal Advisory Commission (JTAC) have found, this came at the expense of the Tribe's sacred sites, grazing lands, shelter, wild

game, water, and other means of economic stability for the Standing Rock people. JTAC estimated our losses to be in the \$181 to \$349 million range. JTAC also recommended a series of additional measures to benefit the Tribe, including the return to the Tribe of the excess lands taken by the Corps of Engineers but not needed for the Oahe project, recommendations that irrigation be developed “to the fullest possible extent on the Standing Rock Reservation,” and that a federally-funded municipal, industrial and rural water supply system be completed on the Reservation.

Today, Lake Oahe is a source of drinking water and irrigation for people located far from our Reservation. Lake Oahe water is pumped hundreds of miles to other communities in North and South Dakota; while many of our tribal residents – living right along its banks – do not have a dependable source of quality water for drinking and irrigation purposes. This is the historical backdrop for what happened last year.

Thanksgiving 2003 Water Emergency

Since the time it was created in the late 1950's, the Oahe Reservoir has been a massive lake alongside our Reservation. I was Chairman when, not too many years ago, steps had to be taken to prevent the roadway into Fort Yates from being flooded by the high water levels of Lake Oahe. But the current drought in the Upper Missouri River system – which has now lasted five years – and the U.S. Army Corps of Engineers' operation of the Upper Missouri dams have led to a dramatic dropping of the water levels.

Rather than a lake, the water around Fort Yates is now a “braided” river, which means that the river channel is not stable and could shift from year to year. The extended drought and the Corps' management of the Upper Missouri River have directly and adversely affected the operation of our treatment plants and the people we served through them. Our two water treatment plants – one in Fort Yates and the other in Wakpala – depend on “pooled” water for their intakes, as shown in the photos, but Oahe no longer provides the conditions needed for these intake systems to operate reliably. The

movement of the Missouri River delta down river below Fort Yates during this period of historically low water drastically increased the sedimentation in our area. The braided river channel could shift at any time, leaving our Fort Yates intake high and dry. This same sedimentation problem affects our two existing irrigation intakes at Cannonball and Fort Yates, and may well create similar problems for the future irrigation intake at Kenel.

In July 2003, the dropping lake levels first started to seriously affect the amount of water that could be pumped to the Fort Yates Treatment Plant. From November 20 - 23, 2003, the low water level and increased sedimentation combined to bury the Fort Yates intake with silt. The intake stopped operating, which forced the Fort Yates treatment plant to shut down. The communities of Fort Yates, Cannonball and Porcupine, with 852 homes, starting losing water service on Monday, November 24, 2003 when the pumps failed completely. The complete water outage lasted until Wednesday, November 26, 2003, when an overland pipeline started delivering some water to the intake structure. The period until the water supply was relatively secure and the water itself was confirmed to be safe to drink lasted nearly two weeks.

During the November 23-26 time period, there was no water at all in Fort Yates. Cannonball ran out of water on Tuesday, November 25th. Fortunately, Porcupine was kept supplied with water by the North Dakota National Guard. During the crisis, all Tribal resources were focused on solving this problem. The Tribe purchased and distributed bottled drinking water and other supplies. The Tribe's District offices also purchased and distributed bottled water, juice for diabetics, and paper plates because people could not wash their dishes. The District offices also purchased and provided food to the emergency crews working day and night to restore water.

At the expense of other important on-going tribal projects, our Tribal roads department built an access road over the silted river bed so that the heavy machinery would not get stuck in the mud. Our Tribal social service programs also provided

emergency supplies, shelter and other resources to people without water.

Our Tribal members also pitched in. Some residents melted snow in their bath tubs to have water to flush their toilets. One of our elders put a 50 gallon barrel on his truck and went around distributing well water to his neighbors. People also cancelled their Thanksgiving plans and sought refuge in Bismarck and other towns that had water.

The most severe impact was on the young, the elderly and the sick. Our schools were closed for much longer than the water outage period because it could not be immediately determined the water was safe to drink, even after the water came back on. Our IHS hospital also was forced to shut down for several days. Dialysis patients and others with serious medical conditions had to be transported to Bismarck for treatment, typically three times a week. This created a tremendous hardship on these frail, elderly people, and the shuttles cost the Tribe and the IHS hundreds of thousands of health care dollars that would otherwise have been spent for direct medical care on the Reservation. Our IHS Service Unit Director Tim Yellow has reported that we were fortunate not to lose any patients during the dialysis shuttles, but that the next water outage could well be measured in lives lost.

In short, the water crisis has posed serious health risks, disrupted commerce and daily activity, and created financial and social hardships for the Standing Rock people. There is a detailed day-by-day account of the water outage and the joint Tribal-U.S. Bureau of Reclamation emergency response in the background materials we previously supplied to Committee staff.

However, just when we started to get a handle on the Fort Yates emergency, our Wakpala intake system was threatened. On December 1, 2003, we discovered that only 2 ½ feet of flowing water remained above that intake screen in a location where 3 feet of

ice is normally expected in the winter. The Tribe again took immediate emergency measures to avoid another crisis. We obtained a grant to extend a new intake pipeline to the deepest depth feasible in that location, but we have since learned that even this deeper intake structure could be threatened if Lake Oahe continues to hit new record lows.

Events since the Thanksgiving 2003 water outage

Tribal and Bureau of Reclamation personnel have worked through the winter and into the spring of 2004 to keep the Fort Yates emergency intake facilities in operation. We have constructed a new intake structure using a submersible pump, which we intend to use until a permanent replacement facility is constructed. Because we know the current system could go out at any time, we have also developed with Reclamation an emergency response plan in the event that the water levels drop again. But the current intake system is too costly and is operating on borrowed time.

Divers who examined the situation around our intakes shortly after the water outage, and in later months, have reported that silt and other river conditions around the intakes are changing rapidly and dramatically, and our intakes remain vulnerable. For example, a diver inspected the Wakpala Intake on December 14, 2003 and found it was only 1 ½ feet below the ice and in danger of freezing over. The design of the intake screen allowed him to manually rotate the screen to gain an additional six feet of water over the intake, narrowly averting another community water outage. As you can see from our photos, the water conditions remain quite unstable, and the water intake situation remains highly volatile.

The Tribe's Short and Long-term Proposals to Remedy the Water Crisis

So what is to be done to remedy the lingering effects of last year's water outage and to make sure it does not happen again? We have several recommendations, but they require the coordinated efforts of this Committee and the Congress, the Bureau of

Reclamation, the BIA, the Indian Health Service, the U.S. Army Corps of Engineers and the Tribe, working in a true government-to-government partnership.

First, I request the Committee's assistance to help us resolve – once and for all – our current disagreement with the Bureau of Reclamation over reimbursement of the Tribe's direct costs in addressing the water outage emergency. The Tribe's direct out-of-pocket costs in responding to the water outage exceeded \$800,000, but Reclamation has so far only allowed for the reimbursement of \$449,249 in tribal costs.

I had hoped this reimbursement issue had been resolved when Commissioner Keys wrote to Senator Dorgan on August 5, 2004 stating that \$2.8 million had been reprogrammed "to cover costs of the Fort Yates water intake repair," but we received only \$261,000 in FY 2004 "year-end" Reclamation funding, and – as far as I know – none of it was for these prior tribal emergency costs. In fact, our tribal financial officer confirmed to me just before I came out here to testify that over \$400,000 in Tribal costs still have not been found "allowable" by Reclamation. These costs include meal services provided to the intake repair workers by the Tribal District offices, juice and water purchases for our diabetics and the extra overtime and related costs of essential tribal government workers who were called in to address the water emergency and ensure that minimum government services continued to operate during the tribal office shut down.

So-called "camp costs" (meals and lodging) are plainly allowable expenses for any federal emergency repair project, which is exactly what the Fort Yates intake repair project was. The Tribe is at a loss to understand why Reclamation has so far found these costs to be disallowable. I would like clear answers from the Bureau of Reclamation so that we can resolve this issue as soon as possible and move forward. While I do not believe further legislation is needed to clarify the allowability of these costs, if it is, I would ask for the Committee and Reclamation's support for such legislation.

I would also like the Bureau's firm commitment that all the extra costs incurred to address the Fort Yates water emergency – whether incurred by the Bureau or by the Tribe – will not be counted against the Tribe's limited Dakota Water Resources Act (DWRA) MR&I and irrigation funding caps. We need every penny of that money to complete the rural water and irrigation systems contemplated by the JTAC and the DWRA legislation.

These projects were promised to the Standing Rock Sioux Tribe long before the current water shortages arose, in order to meet the long-term water needs of the Reservation and to make the Tribe whole for the flooding of our fertile bottomlands. The well water serving several Reservation communities is still of poor quality, and the need for these MR&I and irrigation projects is as great as ever. Reclamation funding for these projects must not be reduced or delayed, as happened this year, to make funds available for the water shortage emergency. Doing so would only compound the historic wrongs and broken promises that were previously inflicted on the Tribe by the Federal government's development of the Oahe project.

I understand Bureau of Reclamation officials have verbally assured Senator Conrad and Senator Dorgan's staff that additional legislation expressly removing these emergency costs from the DWRA funding cap is unnecessary, but we need a concrete written assurance from Commissioner Keys and Secretary Norton that Reclamation will stick by its stated position. We do not want to go several years down the road and have Reclamation's position suddenly change to our detriment. If they are unwilling to provide this Committee with such written assurances, then we would ask the Bureau of Reclamation to support Senator Conrad's and Senator Dorgan's sensible effort to enact as law this exemption of the emergency repair costs from the DWRA funding caps. We have previously worked with Senator Conrad's and Senator Dorgan's staffs to draft proposed legislation, and we would be happy to share this legislative proposal with the other members of the Committee for their support.

Second, we must develop a long-term engineering solution to the water intake problem. While we have done the best we can to prepare for the next emergency, our people cannot be expected to live with the constant fear that their water will be shut off at any moment. One idea discussed quite extensively by tribal planners and rural water officials is a proposal to develop permanent legislation that would authorize the construction of an “inland reservoir” system surrounding Fort Yates – modeled after Lake Audubon – to provide a secure “pooled” water intake source for the Tribe. I have brought a preliminary concept drawing showing what this inland reservoir might look like upon completion.

While still in a conceptual stage, this proposal potentially has several attractive features and incidental benefits. Among other things, it could provide:

1. a permanent and reliable water intake source for the Tribe’s MR&I and irrigation projects;
2. wetlands and additional wildlife habitat;
3. additional emergency access routes in and out of Fort Yates, a prudent homeland security and disaster preparedness measure; and
4. potential economic development and recreation benefits (marina, fishing, boating etc.) for the Reservation and the surrounding area.

Since the land around Fort Yates is already a flood plain and covered in water when Lake Oahe is at normal levels, this proposal should be less disruptive to our Tribe’s cultural and religious sites. Our preliminary estimates suggest that the water required to maintain the inland reservoir would also be fairly insignificant from the perspective of the

overall flow of the Missouri River. It would not have a major impact on downstream users. It may also provide a fairly cost effective engineering solution to the Tribe's water intake problem. The proposal would certainly be preferable to continually relocating the Tribe's intakes, seeking out ever deeper intake locations in the braided river channel from year to year.

However, we also have other several innovative engineering ideas under active consideration, including constructing a new "single source" water intake system and treatment plant to serve the entire Reservation, which may or may not be done in conjunction with the inland reservoir concept. Possible sites under consideration are Fort Yates, Kenel and Wakpala. A recent survey found one deep site near Wakpala in the old river channel that is approximately fifty feet deep under current river conditions. The survey also found a site near Fort Yates consisting of a large gravel deposit where it may be possible to drill horizontally to develop a water intake that would operate at all river or lake conditions. Finally, the University of Minnesota engineers proposed constructing reinforced banks to stabilize the river channel and guide the water over our intakes.

All these ideas require further sedimentation studies and engineering feasibility studies before a final course of action is decided upon, but we must not wait for years of government studies. This on-going emergency situation requires extremely prompt action for all of us. I therefore ask for the Committee's full support and assistance to develop authorizing legislation, not only to study, but also to plan, design and construct the most feasible and beneficial long-term water intake solution for the Reservation.

Equally important, our guiding principle for any of the projects selected is that the cost of this long-term solution must come from the Army Corps of Engineers' budget – not the IHS, BIA, or Bureau of Reclamation budgets – because the Corps' management of the Upper Missouri River has been most directly responsible for our current water

shortage problems. It is the Corps that has allowed the limited water supply to flow downstream to maintain barge traffic, while our people face a lack of water to drink. As I mentioned above, the funding for this project must not be drawn from the Bureau of Reclamation budget because it would interfere with on-going tribal water projects authorized under the Dakota Water Resources Act.

Finally, I would like this Committee's help to assist the BIA and the IHS to recoup the additional funds they spent to address the water emergency. As Senator Dorgan knows, our Acting BIA Great Plains Regional Director verbally assured us and Senator Dorgan that the BIA would reprogram FY 2004 "year-end" funds to compensate the Tribe for the Indian Reservation Roads (IRR) program funding that was used to build a temporary access road for the emergency repair crews. Unfortunately, the Acting BIA Regional Director has moved to another position, and FY 2004 came and went without the promised reprogramming of funds.

Similarly, our IHS Service Unit Director Yellow and his excellent staff all worked hard transporting dialysis patients to Bismarck and taking other steps to address the health-related aspects of the water outage. Director Yellow has determined that the IHS Service Unit at Fort Yates lost a total of \$324,650 due to administrative leave and related costs, extra overtime for maintenance personnel and dialysis drivers, and lost third party collections. This money could have been used to provide health care services to our Tribal members. Again, we believe the Corps of Engineers is the federal agency that is most responsible for these extra costs and should help to replace them through its budget.

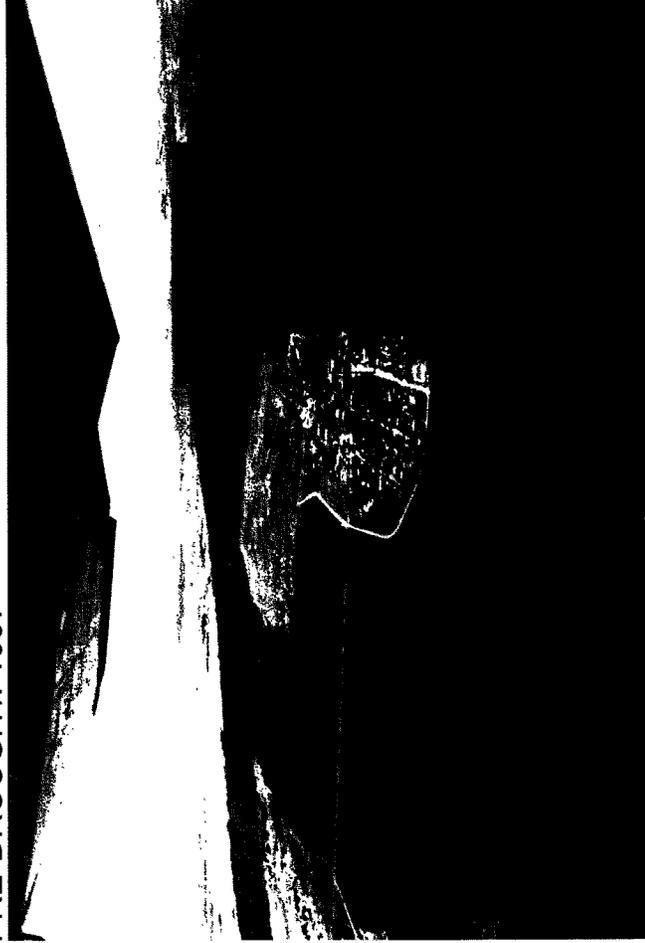
Conclusion

We look forward to working with the Committee and the relevant federal agencies to address these difficult issues in the most positive and constructive manner possible.



STANDING ROCK SIOUX TRIBE

PRE-DROUGHT: 1997



FORT YATES

THE SENATE COMMITTEE ON INDIAN AFFAIRS HEARING ON
STANDING ROCK SIOUX TRIBE WATER CRISIS. (NOVEMBER 18, 2004)



STANDING ROCK SIOUX TRIBE

PRE-DROUGHT: 1997



THE SENATE COMMITTEE ON INDIAN AFFAIRS HEARING ON
STANDING ROCK SIOUX TRIBE WATER CRISIS. (NOVEMBER 18, 2004)

SIOUX VILLAGE



STANDING ROCK SIOUX TRIBE

POST-DROUGHT: 2004



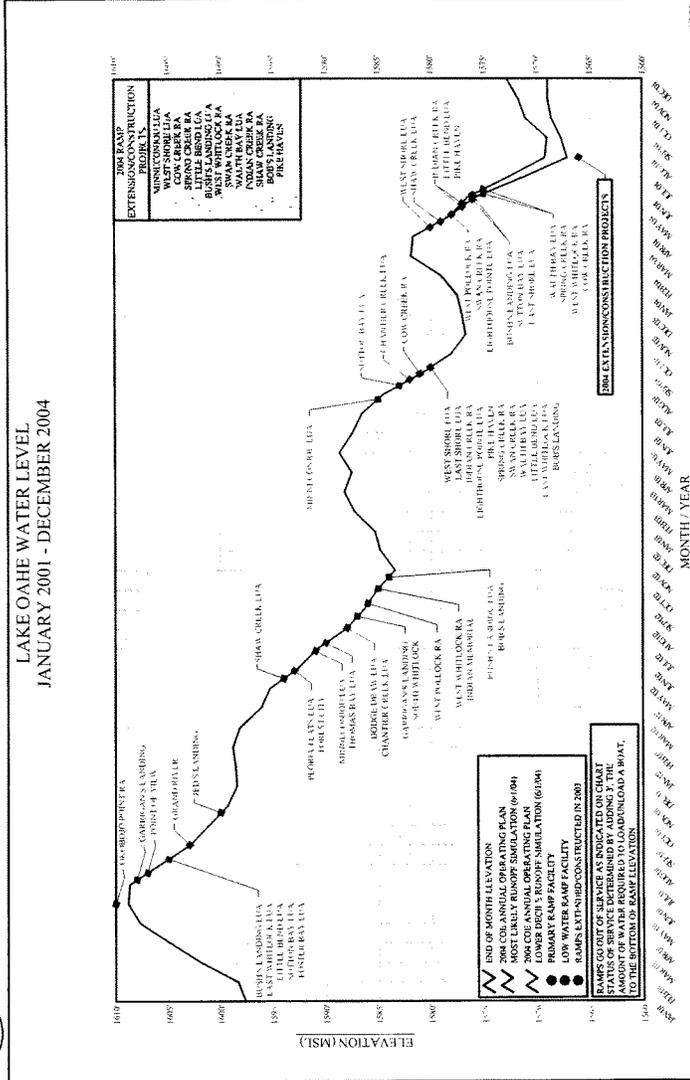
This photograph shows the Fort Yates water intake under 2004 drought conditions.
This photo detail is marked as a red box on the pre-drought 1997 Fort Yates photo.

THE SENATE COMMITTEE ON INDIAN AFFAIRS HEARING ON
STANDING ROCK SIOUX TRIBE WATER CRISIS (NOVEMBER 18, 2004)



STANDING ROCK SIOUX TRIBE

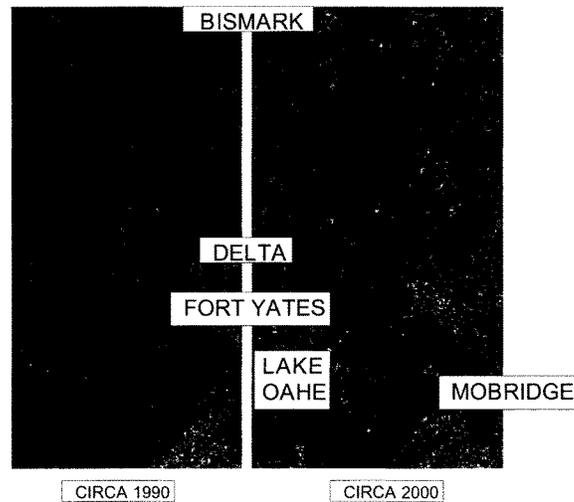
LAKE OAHE WATER LEVEL
JANUARY 2001 - DECEMBER 2004



THE SENATE COMMITTEE ON INDIAN AFFAIRS HEARING ON
STANDING ROCK SIOUX TRIBE WATER CRISIS. (NOVEMBER 18, 2004)



STANDING ROCK SIOUX TRIBE



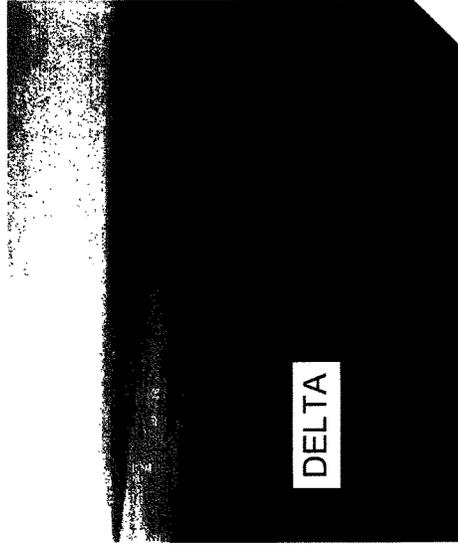
The position of the delta of the Missouri River as it enters Lake Oahe has varied greatly over time migrating tens of km upstream and downstream, depending on the operation of the Oahe Dam. It is seen in these two images that the delta in about 1990 was far downstream of the delta in about 2000.

The Oahe Dam provides control on lake levels. When lake levels are held low (e.g. during a drought) the delta migrates downstream. When lake levels are raised again, the delta migrates upstream.



STANDING ROCK SIOUX TRIBE

POSITION OF THE DELTA AS OF JULY 15, 2004



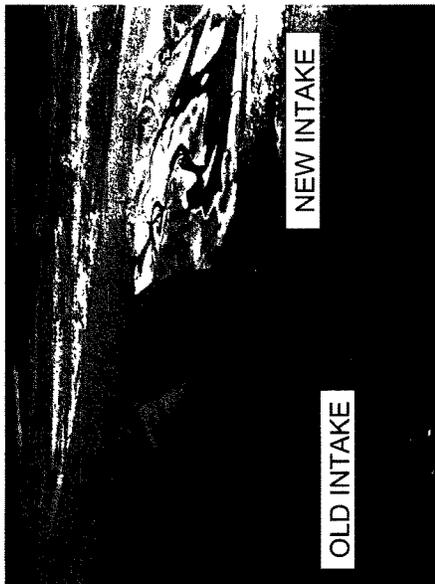
Missouri River looking downstream from Fort Yates



As of July 15, 2004, the delta was located over 10 km (6 miles) downstream of Fort Yates. This position far downstream is associated with the extended drought. The original intake at Fort Yates was designed for the ponded water conditions of Lake Oahe, and not for the freely-flowing braided river shown above.

THE SENATE COMMITTEE ON INDIAN AFFAIRS HEARING ON
STANDING ROCK SIOUX TRIBE WATER CRISIS. (NOVEMBER 18, 2004)

 **STANDING ROCK SIOUX TRIBE**
DISORDERLY SHIFT ON THE BRAIDED MISSOURI RIVER





STANDING ROCK SIOUX TRIBE

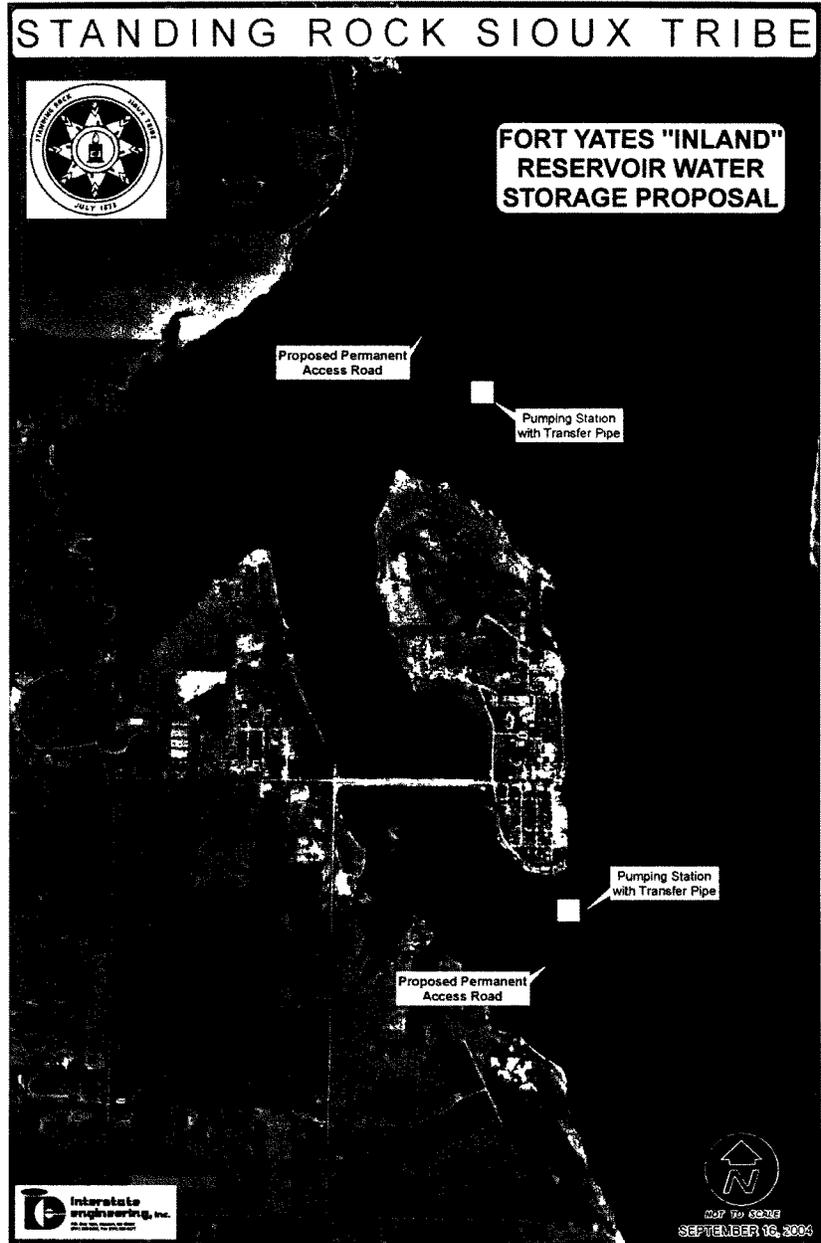
DISORDERLY SHIFT ON THE BRAIDED MISSOURI RIVER

The Fort Yates intake area has been so recently exposed by lake level lowering that the floodplain remains unvegetated and unstabilized. The river forms multiple branches here, freely shifting in unpredictable ways. The intake at Fort Yates has already been relocated once to accommodate the change from a lake to a freely-flowing river. In the present state, however it is only a matter of time before the river shifts away from the intake, leaving it useless.

Summary:

Short-term problem: channel shift will likely render the intake useless in the near future.

Longer-term problem: as long as the delta remains not too far downstream of Fort Yates, channel aggradation will cause the river to silt up in the reach near the intake.



THE SENATE COMMITTEE ON INDIAN AFFAIRS HEARING ON STANDING ROCK SIOUX TRIBE WATER CRISIS. (NOVEMBER 18, 2004)

Without water

Schools, clinics, tribal offices and hospital closed as about 5,000 are left high and dry in Fort Yates

By MIKE ALBRECHT
Bismarck Tribune



FORT YATES — Faucets ran dry here for the second consecutive day Monday, leaving about 5,000 people without water and closing schools, clinics, tribal offices and the hospital.

If the problem isn't corrected soon, Cannon Ball, Porcupine and the Prairie Knights Casino and Resort — another 5,000 people — also will run out of water. Officials from Standing Rock Municipal, Hunt and Industrial Water System said a low Missouri River is the ultimate cause. Water is pumped from Lake Oahe

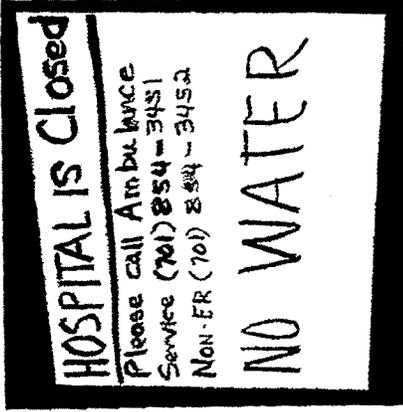
Charles Murphy, Standing Rock Sioux tribal chairman

into a wet well before it's treated and moved to two 250,000-gallon holding tanks.

In anticipation of the low river levels, a submersible pump was installed this summer to move water from the river to the wet well. The pump began sucking up silt and sludge Thursday, likely because a sandbar developed in front of the intake pipe, the pipe cracked or the screen was faulty.

Water Treatment Supervisor Darrell Bullhead Sr. said they were able to continue moving water by routinely backwashing the pipe. The clogging became

WATER: Continued on Page 7A



The Indian Health Services Hospital at Fort Yates was closed Monday due to the loss of water.

**SUPPLEMENTAL TESTIMONY OF
CHARLES W. MURPHY, CHAIRMAN
STANDING ROCK SIOUX TRIBE**

**BEFORE THE SENATE COMMITTEE ON INDIAN AFFAIRS
ON THE STANDING ROCK RESERVATION WATER CRISIS**

December 10, 2004

As Chairman of the Standing Rock Sioux Tribe, I offer this additional testimony as a supplement to the testimony I provided the Senate Committee on Indian Affairs during the November 18, 2004 hearing on our Tribe's on-going Missouri River water supply crisis. I thank the members of the Committee for the concern they demonstrated during the hearing for the welfare of the Standing Rock Sioux people and for their demonstrated willingness to assist us in seeking a permanent water supply solution for the benefit of our Tribe, our people and the surrounding Reservation communities.

I. History: Treaty and Reserved Water Rights

Our Sioux ancestors have occupied the lands and relied upon the waters of the Upper Missouri River basin since long before the Lewis and Clark expedition in 1803. Based upon our occupancy of and our dominion over our tribal homeland, the Standing Rock Sioux Tribe holds legal rights to the waters of the Missouri River that have long been recognized in our treaties with the United States government. Our reserved rights to Missouri River water serves not only to underscore the great injustice of our Tribe's current water crisis but to reinforce, as well, the Federal government's legal and moral obligation to work with us on a government-to-government basis to develop a permanent water supply solution for the Standing Rock Sioux Tribe.

A. Early History

When Lewis and Clark began to explore the Louisiana Purchase territories and use the Missouri River as their principal route of ingress and egress, the Sioux tribes had long held full dominion and control over the lands and waters of the Upper Missouri River basin. We were the possessors and owners of all rivers, soil, plains, woods, mountains, marshes, lakes, flora, fish and wildlife.

For centuries, the Missouri River served as the principal trade route for our ancestors, and the fur trappers and mountain men who entered our territory shortly after the Lewis and Clark expedition used the River in the same fashion. These new arrivals first mined the wealth of our Missouri River homeland for the benefit of the worldwide beaver trade. While our ancestors initially welcomed the fur traders, conflicts arose when the beaver trade declined and fur companies began trading in buffalo hides and other

goods that threatened the survival of our people. Buffalo were the lifeblood of the Sioux people, and the decimation of our life-sustaining buffalo populations necessarily brought the Sioux tribes into conflict with these early immigrants into our homeland.

Increased migration into the Upper Missouri River basin also brought devastating illness to our people. In 1837, a smallpox epidemic virtually annihilated several Sioux tribes and bands. The toll on our population and the suffering of our ancestors cannot be fully appreciated by those that did not experience it. Smallpox, combined with the loss of the buffalo, the mainstay of our traditional Indian economy, ravaged our people for the remainder of the century. Still, we fought to maintain our dominion and control over the Upper Missouri River basin and its resources.

Louisiana Purchase lands west of the Minnesota Territory were not officially opened to white settlement until the passage of the Kansas-Nebraska Act in 1854.¹ But even before the passage of this Act, permanent settlers began moving across the Missouri River into our tribal homeland in larger and larger numbers. These settlers replaced the transient trappers and missionaries of the previous decades. Thus, despite our ownership of the Upper Missouri River basin (and federal laws such as the Indian Non-Intercourse Act that were expressly intended to protect tribal property rights), these settlers began to appropriate for themselves land, water, gold, fish, game and other resources belonging to our Tribe. The location of the Pacific Railroad line in the Upper Missouri River basin further trespassed onto our tribal homeland.

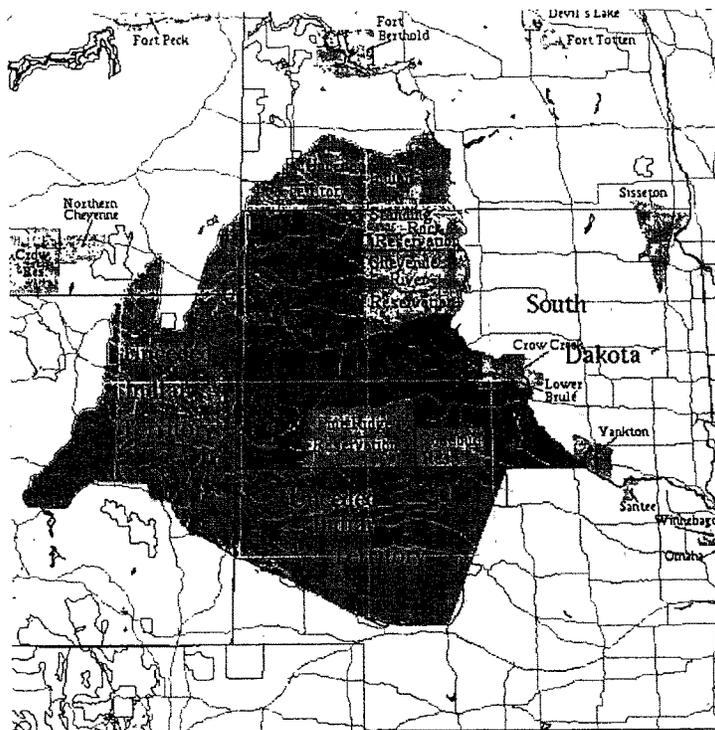
B. Treaty Rights

These increasing encroachments and the conflicts they generated eventually developed into outright warfare between the Sioux tribes and the United States Army. To end these conflicts, the United States sought to negotiate treaties with the great Sioux leaders and warriors of the time. The 1851 Treaty at Fort Laramie, among other things, set aside territory for the Sioux tribes in the Missouri River basin and compensated our tribal populations for previous settlers' theft of our land and resources.²

The 1851 Treaty reserved to the Great Sioux Nation exclusive occupancy and use of the lands and waters of a territory including parts of what are now five states. Our first "permanent" homeland, as recognized in the 1851 Treaty, is shown on the map below as "Unceded Indian Territory," and it also includes the other reservations set aside for individual tribes and bands of the Great Sioux Nation.

¹ Kansas-Nebraska Act, 10 Stat. 277 (1854).

² Treaty of Fort Laramie, 11 Stat. 749 (Sept. 17, 1851)



Unfortunately, white settlers, railroad companies, miners and trappers ignored the 1851 Treaty and continued their encroachment into our homeland. This naturally led to more violence and bloodshed, which eventually led to the outbreak of the Powder River War in 1866.

The Fort Laramie Treaty of April 29, 1868, 15 Stat. 635, formally ended the Powder River War. In this new treaty, the United States again legally recognized, reserved and permanently set aside for the use and benefit of the Sioux Tribes full and exclusive rights to the lands, water and natural resources of the large territory displayed on the map above as the Great Sioux Reservation. While the Fort Laramie Treaty of 1868 significantly diminished our territorial homeland, which the United States had legally recognized only a few years before, the Fort Laramie Treaty nonetheless included the entire portion of South Dakota and North Dakota west of the Missouri River. According to the treaty, the Great Sioux Reservation "set apart [this territory] for the absolute and undisturbed use and occupation" of the Great Sioux Nation.³ Recognizing

³ Fort Laramie Treaty, 15 Stat. 635 (Apr. 29, 1868).

the importance of the Missouri River to the culture, health and welfare of the Sioux people, both the 1851 and 1868 Treaties established the eastern boundary of our “permanent” homeland on the *east* bank of the Missouri River, thereby encompassing the entire channel of the river, from east bank to west bank.

When gold was discovered in the Black Hills a few years after the execution of 1868 Treaty, the United States government again failed to respect the permanency of the Great Sioux Reservation. With South Dakota’s admission into the United States as a state in 1889, Congress again diminished the Great Sioux Reservation. The Act of March 2, 1889, 25 Stat. 888, divided the large Reservation into nine smaller Indian reservations for individual Sioux tribes, as shown on the map above. These smaller reservations were again established as a “permanent” homeland for the individual Sioux tribes. Within reservation boundaries, Congress declared the Tribes of said reservations held undiminished title, thus retaining land and resource rights.⁴

When Congress created the Standing Rock Reservation with its current boundaries by the 1889 Act, our Tribe was legally recognized as the sole owner of these land and water rights. The Standing Rock Sioux Tribe retains these legally enforceable rights to the present day.

C. Reserved Water Rights

Tribal reserved rights to the land and waters within their possession have been recognized since long before the drafting of the United States Constitution. After the American Revolution, the United States Supreme Court in 1832 similarly recognized the aboriginal property rights of Indians in the case of *Worcester v. State of Georgia*, 31 U.S. 515 (1832):

America, separated from Europe by a wide ocean, was inhabited by a distinct people, divided into separate nations, independent of each other and of the rest of the world, having institutions of their own and governing themselves by their own laws. It is difficult to comprehend the proposition, that the inhabitants of either quarter of the globe could have rightful original claims of dominion over the inhabitants of the other, or over the lands they occupied; or that the discovery of either by the other should give the discoverer rights in the country discovered, which annulled the pre-existing rights of its ancient possessors.

* * *

This soil was occupied by numerous and warlike nations, equally willing and able to defend their possessions. The extravagant and absurd idea, that the feeble settlements made on the sea-coast, or the companies under whom they were made, acquired legitimate power by them to govern the

⁴ See The Act of March 2, 1889, 25 Stat. 888 (March 2, 1889).

people, or occupy the lands from sea to sea, did not enter the mind of any man. They were well understood to convey the title which, according to the common law of European sovereigns respecting America, they might rightfully convey, and no more. This was the exclusive right of purchasing such lands as the natives were willing to sell. The Crown could not be understood to grant what the Crown did not effect to claim; nor was it so understood.⁵

The legal principles set forth in *Worcester v. Georgia* are also the foundation of the ruling announced by the U. S. Supreme Court three quarters of a century later relating to the Yakima Indian Nation in the case of *United States v. Winans*, 198 U.S. 371 (1905):

The right to resort to the fishing places in controversy was a part of larger rights possessed by the Indians, upon the exercise of which there was not a shadow of impediment, and which were not less necessary to the existence of the Indians than the atmosphere they breathed. New conditions came into existence, to which those rights had to be accommodated. Only a limitation of them, however, was necessary and intended, not a taking away. In other words the Treaty was not a grant of rights to the Indians, but a grant of rights from them - a reservation of those not granted.⁶

The United States Supreme Court continued to apply the *Worcester v. Georgia* and *Winans* principles in the landmark case of *Winters v. United States*, 207 U.S. 564 (1908). There, the Supreme Court determined that the reservation of sufficient water for the cultivation and maintenance of civilization was implied in the establishment of an Indian reservation by Treaty, Executive Order or Congressional grant. The Court found that a legal agreement between the United States and an Indian tribe reserving lands to the tribe also implicitly reserved federally protected water rights that are prior to and paramount over other water rights, including water rights secured by non-Indians under state law after the date the reservation was established.⁷

For example, the Ninth Circuit Court of Appeals applied the *Worcester-Winans-Winters* doctrine in *United States v. Ahtanum Irrigation District*, 236 F.2d 321 (9th Cir. 1956), to reserve the entire flow of Ahtanum Creek for the benefit of the Yakima Indian Reservation:

The record here shows that an award of sufficient water to irrigate the lands served by the Ahtanum Indian irrigation project system as contemplated in the year 1915 would take substantially all of the waters of Ahtanum Creek. It does not appear that the waters decreed to the Indians in the *Winters* case operated to exhaust the entire flow of the Milk River,

⁵ *Worcester v. State of Georgia*, 31 U.S. at 543-45 (emphasis added).

⁶ *Winans*, 198 U.S. at 381.

⁷ See *Winters*, 207 U.S. at 576-77.

but, if so, that is merely the consequence of it being a larger stream. As the *Winters* case, both here and in the Supreme Court, shows, the Indians were awarded the paramount right regardless of the quantity remaining for the use of white settlers. Our *Conrad Inv. Co. Case, supra*, held that what the non-Indian appropriators may have is only the excess over and above the amounts reserved for the Indians. It is plain that if the amount awarded the United States for the benefit of the Indians in the *Winters* case equaled the entire flow of the Milk River, the decree would have been no different.⁸

The *Winters* line of precedent fully supports the Standing Rock Sioux Tribe's federally reserved right to appropriate the waters of the Missouri River to meet the complete water supply needs of our Reservation, now and into the future. Our reserved water rights are not dependant upon state law and are senior in priority to any state-authorized water uses.

As Senator Conrad indicated in questioning Brigadier General William Grisoli of the U.S. Army Corps of Engineers during the November 18 hearing, the Tribe's reserved water rights must receive federal protection as the Corps develops plans for management of the Missouri River basin. However, as discussed below, the Corps of Engineers and the Bureau of Reclamation have never properly taken this federal protection obligation into account as they have developed and administered Missouri River water projects.

II. The Standing Rock Sioux Water Crisis

A. The Federal Government Failed to Protect our Reserved Water Rights in the Development and Implementation of the Pick-Sloan Plan.

Despite the Standing Rock Sioux Tribe's superior legal right to Missouri River water, the United States government – our trustee and fiduciary – utterly failed to protect our rights in the development and implementation of the Pick-Sloan Plan. Instead of assisting us in making productive use of our Missouri River water rights, the United States subsidized large, costly diversions of Missouri River water for non-Indian municipal, industrial and agricultural uses, while providing only minimal support and funding for tribal water supply projects. Over the last several decades, the U.S. Bureau of Reclamation and the U.S. Army Corps of Engineers have spent billions of dollars developing irrigation, hydroelectric and other water use projects along the Missouri River to serve non-Indian communities, while virtually ignoring the water needs of our people.

This Committee previously found that “[i]t has been estimated that the value of the benefits conferred by Pick-Sloan exceed several billion dollars annually. However, those benefits came at the cost of destruction of more Indian land than any other public works project in America.”⁹ The Committee also found that our Tribe was:

⁸ *U.S. v. Ahtanum Irrigation District*, 236 F.2d. at 327.

⁹ S. Rep. No. 102-250, at 2-3 (1993).

forced to relinquish 56,000 acres of the best land on its reservation. Trees along the river had provided the Tribe with its primary source of fuel and lumber and protection from the ravages of winter blizzards and scorching summer heat. Ninety percent of the timbered area on the reservation was demolished. In addition, the wooded bottom lands also served as a shelter and feeding ground for many kinds of wildlife. The hunting and trapping of game had provided the Tribe with an important source of food, income, and recreation. But destruction of this environment by the Oahe Dam and Reservoir reduced the wild game and plant supply at Standing Rock by 75 percent. The elimination of thousands of acres of grazing and rangeland put 60 percent of the ranchers at Standing Rock out of business.¹⁰

The Joint Tribal Advisory Commission (JTAC) report issued in May 1986 estimated that the losses we sustained as a result of the Pick-Sloan flooding of our land ranged between \$181 to \$349 million.¹¹ The JTAC report made several formal recommendations to begin compensating our Tribe and our people for these tremendous losses, but few of them were implemented to the degree originally contemplated in the JTAC report. So while non-Indian communities that have no legally recognized claim to Missouri River water continue to enjoy billions of dollars in annual benefits as a result of the federally-subsidized Pick-Sloan Plan, many Standing Rock tribal members must still truck water to their homes and drink foul-smelling ground water containing dangerously high levels of sodium and other contaminants.

Now, as illustrated by the Thanksgiving 2003 water outage, the water level in the Missouri River flowing along our Reservation has been diminished to the point that there is not even a safe and dependable supply of drinking water for our people. As members of this Committee forcefully stated during the November 18 hearing, the current water supply situation on the Standing Rock Sioux Reservation is intolerable, and a remedy must quickly be found to avoid another, even more disastrous water outage.

As discussed below, the causes of our current water supply crisis are now fairly well understood and several possible solutions are already under active consideration. We will need this Committee's continuing support as we work toward a long-term solution in partnership with the U.S. Army Corps of Engineers, the Bureau of Reclamation, the Indian Health Service and other relevant federal agencies.

B. Sedimentation Problems and Low Water Levels Lead to Current Crisis

When Garrison Dam was enclosed in 1955, the Missouri River downstream from the dam had an elevation of approximately 1,676 feet above mean sea level, given a streamflow of 10,000 cubic feet per second (cfs). In 1990, the same stream flow

¹⁰ *Ibid.*

¹¹ Joint Tribal Advisory Commission, Final Report (May 23, 1986).

produced a water level elevation of approximately 1,668 feet, a decline of eight feet. According to our engineers, the reason the water level has declined under the same water flow rate conditions is that the riverbed below Garrison Dam is being excavated over time. (See Figure 1 from the Corps of Engineers). With entrapment of all incoming sediment in the reservoir upstream from the dam, releases from the dam are free of sediment and have the ability to capture material from the bed and banks of the downstream river channel. Over a long period of time (1955 to 2003) this predictable erosion activity has lowered the bed of the Missouri River and eroded the banks over a considerable distance downstream from Garrison Dam, as shown in the chart below.

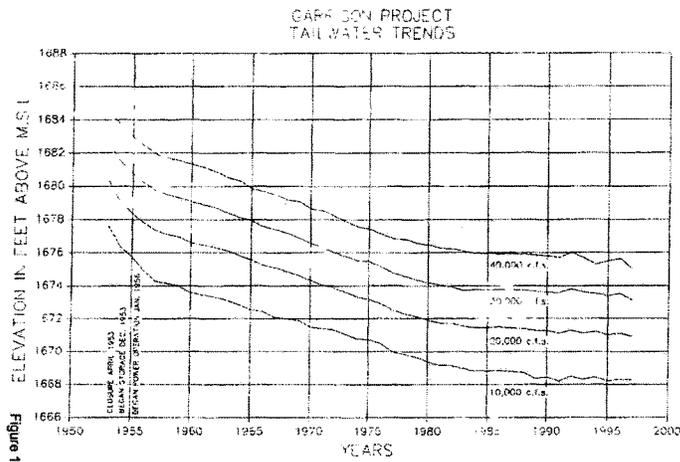


Figure 1- DECLINING RIVER BED (COE)

When Oahe Dam was enclosed and began filling in 1962, material excavated from the Missouri River below Garrison Dam was deposited by the slowing velocity of the River as it entered the upper end of the Oahe pool. Over a thirty year period an unknown volume and tonnage of sediment has been excavated upstream and deposited downstream below Bismarck. (See Figure 2 from USGS with independent modifications to show zones of excavation and deposition upstream and downstream from Bismarck, respectively).

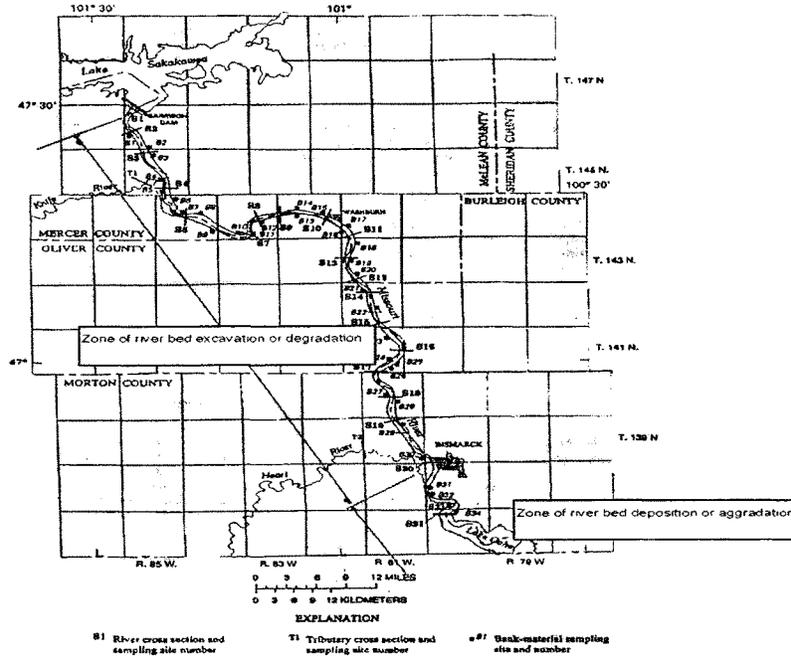


Figure 2. Location of study reach and river, tributary, and bank-material sampling sites along the Missouri River downstream from Oaistrison Dam.

Figure 2 – Map of Study Area (USGS WRR1 95-4087) With Modifications

During the drought that has plagued our area over the last few years, water levels in Lake Oahe have fallen from average elevations of 1,605 feet to historic minimums as low as 1,576 feet in November 2003. This was the lowest elevation on record prior to 2004, when the water level has dipped even lower. Sufficient information is not currently in hand - but should be readily available to the Corps of Engineers - to determine the elevation of the riverbed before sediment began to accumulate in the upper end of Lake Oahe. This information would allow for a useful comparison of the changed conditions.

This historically low water level, in combination with the sedimentation problem, has created an imminent threat to our Tribe's drinking water and irrigation supply intake systems. For example, when the intake for the Cannonball Irrigation Project was constructed in the late 1990's, the intake was placed underwater in the former channel of the Missouri River (the lowest point at that River-mile). The top of the intake screen was at 1,573 feet. Similarly, the intake for the Standing Rock municipal, rural and industrial

(MRI) Project was also constructed in the former channel of the River to maintain a sufficient depth. At the time of their construction, there was no reason to believe that the Missouri River water levels would ever fall below the height of these intakes.

However, beginning in the fall of 2003, the Corps of Engineers lowered water levels in Lake Oahe to historic minimums, and sediments deposited in the upper end of the reservoir rapidly moved downstream. The lowered lake level caused the Missouri River to flow across normally inundated areas that had been filling with sediment over the past 40 years. In this manner, the Missouri River eroded artificially deposited sediments and moved them further downstream into the Reservoir. When the sediment reached elevation 1,584 feet, just 11 feet above the river bottom, the risk of a water disaster for our Tribal communities became imminent.

This sedimentation caused the failure of the Tribe's MRI intake at Fort Yates and deposited as much as 11 feet of sediment in the former Missouri River channel at the Cannonball irrigation intake site, causing our Thanksgiving 2003 water disaster.

C. The Thanksgiving 2003 Water Crisis

In my previous testimony, I explained only a few of the dire consequences to our Tribe and our people as a result of the Thanksgiving 2003 water outage. I will not repeat that testimony here, but I do want to clarify two points for the record.

First, the large costs that the Tribe and the Bureau of Reclamation incurred in FY 2004 to install the emergency water intake facilities threatens to delay funding for several important irrigation and drinking water supply projects. These projects have been awaiting construction since the mid-1980's. So even as we address the current water supply emergency, this Committee must not allow the Bureau of Reclamation to ignore the mandate in the Dakota Water Resources Act (Pub.L. 106-554), to "construct, operate and maintain" these new water supply expansion projects. The Tribe must not be forced to choose to supply water to some of our Tribal members at the expense of others. Our people have been forced to haul water or drink unsafe water for too many years to allow Reclamation to use the current water supply emergency as an excuse for further delays in the funding of these on-going projects.

Second, I would like to set the record straight on the actual degree of assistance we received from the Bureau of Reclamation in the immediate aftermath of the water outage. The Bureau of Reclamation was commended by the Committee for its role in helping resolve, at least temporarily, our Thanksgiving 2003 water crisis. While we have certainly received important assistance from Reclamation personnel, it must be noted that our Tribal members and our Tribal institutions were the first responders to this crisis, and it was their quick work and tireless dedication that prevented a more serious human catastrophe. Had the Bureau of Reclamation been quicker to anticipate and to react to the emergency, we may have been able to reduce some of the emergency repair costs and shorten the time period our tribal communities went without water.

D. Post-Crisis: Continuing Problems

In the aftermath of the Thanksgiving 2003 water crisis, many water supply problems still exist. For example, throughout 2004, the Fort Yates irrigation project has not operated, leaving potentially fertile lands without sufficient water to raise crops. The Cannonball Irrigation Unit was also to begin operation in the spring of 2004, but due to continuing sedimentation problems, the facilities still are not fully operational. Because our potato crop was at risk without this expected irrigation supply, we took temporary measures to deliver water to the Cannonball Unit in order to save the potato crop. This effort required a considerable financial investment from the Tribe.

Throughout the summer of 2004, the Missouri River has continued to set record low levels day by day. In August 2004, the Tribe had to quickly lower its water intake screen at Wakpala, South Dakota in order to continue serving 700 people in that area. As the members of the Committee noted during the November 18 hearing, these historically low Missouri River water levels are further exacerbated by the Corps of Engineers' practice of sending millions of acre feet downstream to support a marginal barge industry in the Lower Missouri River. Remarkably, General Grisoli was not even able to confirm at the hearing that the Corps of Engineers places a higher value on ensuring an adequate supply of drinking water for the 10,000 people residing on the Standing Rock Sioux Reservation than it does in serving the navigation requirements of a \$10 million barge industry.

III. Proposed Solutions – Avoiding Further Water Crises

The myriad problems which led to the Thanksgiving 2003 water disaster and the continuing risk of water shortages require much more than short-term, stop-gap solutions. The accumulation and migration of sediment and the transition from a lake to braided river conditions means that merely repairing the damaged intakes will not result in a permanent solution. Furthermore, as noted above, the current expenditures required to repair and restore intakes are depleting funds for domestic and irrigation purposes authorized by the Garrison Reformulation Act of 1986 (Pub.L. 99-294) and Dakota Water Resources Act. Without constructing new and upgraded facilities, the risk of future water outages remains high. Additional authorizing legislation and federal funding are necessary to break this cycle.

The following sections spell out proposals for short- and long-term solutions to the water problems facing our Tribe.

A. Short-Term Repairs

The Tribe faces projected expenditures of \$2.5 million for the repair and/or reconstruction of the intakes at Fort Yates and Cannonball. As noted above, water supply concerns have also developed at the Wakpala intake site. Extending, lowering and protecting the Wakpala intake site is estimated to cost approximately \$1.5 million.

Legislation is needed to authorize the appropriation of funds to reconstruct these intakes in a manner that will ensure their future dependability.

B. Reasonable Missouri River Management

Better Corps of Engineers' management of the Missouri River system will also help prevent future water outages. The Corps of Engineers constructed and operates the Missouri River dams that are causing the excavation of the riverbed, the aggradation of the upper end of Lake Oahe, and the redistribution of sediments in the upper end of Lake Oahe. This process led inevitably and foreseeably to the destruction of the Tribe's Fort Yates and Cannonball intakes in 2003. Long-term solutions for the Tribe require revision of the procedures for Garrison releases and better management of Lake Oahe during drought conditions. New operating procedures are also needed to raise the minimum water levels.

Elements of the sedimentation phenomenon reported here have long been studied by several federal agencies, including the U.S. Geological Survey and the Corps of Engineers. The Corps of Engineers knew or should have known that the lowering of water levels in Lake Oahe would cause the redistribution of sediments from the upper end of the Reservoir, where sediments were known to be deposited, to locations further downstream. At a minimum, the Tribe should have been notified well in advance of the risk to its intakes when the Corps undertook further water lowering activities in the critical October to December 2003 time period. Reasonable management of reservoir levels may have avoided the water outage suffered by the Tribe in 2003. It may also have avoided the considerable expense required to redesign, reconstruct and relocate the Tribe's MRI and irrigation intakes.

In addition to developing better Corps-Reclamation-Tribal communication practices regarding perceived threats to the Tribe's water supply system, further mitigation measures and changes in the Master Manual are needed, including diking and setting new minimum operating water levels at elevation 1,590 feet or higher. Therefore, the Tribe supports the legislation introduced by Senator Baucus in the 108th Congress (S. 2357) that would prevent the release of Missouri River water when the stored reservoir volume falls below 44,000 acre feet. We ask this Committee for its support of similar legislation in the 109th Congress.

C. New and Upgraded Facilities

In our opinion, the best method to prevent a future water outage is to plan, design and construct upgraded water supply facilities to serve the Standing Rock Sioux Reservation. As Chairman Inouye suggested, the Standing Rock Sioux Tribe plans to meet with officials from Corps of Engineers, the Bureau of Reclamation and the Indian Health Service on December 13, 2004 to continue evaluating the best means of constructing permanent intake facilities to provide a dependable water supply for the residents of the Standing Rock Sioux Reservation. Based on our current – but admittedly preliminary – estimation of costs, the “Core Facilities” required to provide a permanent

solution would include a new intake facility (with consideration being given to several alternative intake facility designs), the initial phase of a new Water Treatment Plant, transmission pipelines connecting the Fort Yates and Wakpala distribution pipeline systems, a main storage tank and a new elevated Fort Yates storage tank. The location and nature of the intake is yet to be decided.

In addition, Continuous Resistivity Profiling (CRP) performed in April 2004 at Lake Oahe, identified a potential "horizontal well" intake location near Fort Yates and potential "Lake Intake" locations near Wakpala. Additional testing is currently underway at the Fort Yates location, and future hydrographic survey work is planned at the Wakpala locations. This further testing will help us evaluate the feasibility of the horizontal well concept.

For the Committee's information, I briefly list some of the proposals currently under consideration.

1. *Wet Well Structure at Fort Yates*

Alternatives for the Fort Yates MRI permanent intake include variations that would use dikes to direct an otherwise uncontrollable migrating channel of the Missouri River to a fixed location to supply the intake. At this fixed location, a wet well structure (a vertical cylinder that permits the capture of water and prohibits the entry of sediment) would be built to surround the intake. Dikes would be needed when the Corps of Engineers lowers water levels in Lake Oahe to the point that water is only present in the channel of the river, primarily in the late fall and winter. During this time period, ice is present and the river channel is subject to rapid changes in location. Dikes are necessary to hold the river channel at the entry location for the intake system, which would then deliver raw water to the Tribe's water treatment plant. A wet well is necessary to isolate the entry to the intake system from a rapid, unpredictable deposit of sediment, such as the deposit that rendered the intake system inoperable in November 2003. The likelihood of the success of this alternative in controlling the location of the channel of the river, and thus preventing sediment deposits which injure the intake system, is still undetermined and requires further study. Up to \$5 million is believed necessary to implement this type of system, and confidence in success is moderate to low.

2. *Horizontal Infiltration at Oahe*

Another alternative for the Fort Yates MRI intake is the construction of horizontal infiltration galleries beneath the bed of Lake Oahe, whereby the facilities would extend over such a considerable distance that the movement of the river channel would not threaten the continued supply of water to the intake facility underlying the riverbed. However, there remains concern that the infiltration capability of this system would decline as sediment is carried into the galleries. There is also concern that water quality would be poorer than a direct diversion from the river. The extent of contamination of sediments in Lake Oahe is unknown, but any contaminants would be drawn into a system designed to capture surface water. If a system were designed at lower levels in the bed of

Lake Oahe, some reduction of contaminants from the sediment deposits might be exchanged for greater concentrations of iron and other chemicals common in the alluvium of the Missouri River. This alternative has an unknown cost of at least \$5 million, and confidence in success is low.

3. Off-stream Reservoir

Another alternative for the Fort Yates intake is the construction of an off-stream reservoir modeled after Lake Audobon, in which water is captured during the high water season to create a pooled supply for a new intake facility built in the off-stream reservoir. The stored water in the reservoir would supply the intake, as an alternative to locating the intake in an unpredictable and braided river system. This plan would require sufficient work in the river to prevent sediment from depositing on the intake when water levels are lowered, but it would not require dikes to confine the channel at a particular location. I listed some of the potential benefits of this proposal in my previous testimony and will not repeat them here. However, a careful assessment of the feasibility of this alternative cannot be made without further site investigations and engineering studies.

4. Relocation of Intakes

Another possible solution is the relocation of the Fort Yates intake to a point sufficiently downstream that a permanent pool in Lake Oahe would be available under all foreseeable circumstances. This would require the relocation of the water treatment plant and the construction of large connecting pipelines over a minimum 20 mile distance to reconnect to the current distribution system. Preliminary estimates for this alternative have been on the order of \$30 million but may be higher. Consideration of this alternative should be undertaken following an assessment of the rate of progress of sediment movement and the potential for interference with new intakes at this site.

5. Costs of Resolving Our Water Problems

Preliminary Core Facilities construction cost estimates are as follows:

Conceptual Core Facilities Cost Estimates	
<i>Intake Facility</i>	\$ 6.0 Million
<i>Water Treatment Plant</i>	\$ 8.5 Million
<i>Raw Water and Transmission Pipelines (connecting the existing system)</i>	\$11.5 Million
<i>Main Storage Tank</i>	\$ 2.0 Million
<i>Fort Yates Storage Tank</i>	\$ 2.0 Million
<i>Total Estimated Core Facilities Costs</i>	\$30.0 Million

If adequate funding for these facilities were available today, it is anticipated that design, bidding, and construction of a new intake and water treatment plant facility, transmission pipelines, main storage tank and Fort Yates storage tank would require a minimum of two

years. It is imperative that funding for these facilities be secured as soon as possible to ensure that a safe, clean, dependable water supply is available to the residents of the Standing Rock Reservation now and for years to come.

D. Further Study/Research

Obviously, more research needs to be done to determine the most cost-effective and feasible long-term solutions to our Tribe's current water crisis. In advance of any permanent reconstruction, appropriate investigations will be needed of baseline sediment conditions and the probable future redistribution of sediments. Specifically, a sediment survey in the upper reaches of Lake Oahe is needed to document the current position of sediment deposits. Analysis is also needed to determine where these deposits will move in the future and how the Tribe can locate and build dependable intakes. This problem affects the two existing irrigation intakes at Cannonball and Fort Yates, as well as the Fort Yates MRI intake. The future irrigation intake at Kenel is also subject to an unknown level of sedimentation risk. Depending on the findings of these studies, a diking system may be needed to contain upstream sediment. It is important that these investigations be funded immediately, so that long-term solutions can be conceived and implemented as soon as possible.

IV. Conclusion

The Standing Rock Sioux Tribe looks forward to working with this Committee, the Corps of Engineers, the Bureau of Reclamation, the Indian Health Service and other federal agencies to develop a safe, secure and abundant supply of water for our people. This is one of the most important challenges we face, and I thank the Committee for its interest in and support of our efforts.

**Statement of Dennis Breitzman
Area Manager, Dakotas Area Office
Bureau of Reclamation
Before the Senate Committee on Indian Affairs
On Water Problems on the Standing Rock Sioux Reservation**

November 18, 2004

My name is Dennis Breitzman and I am the Bureau of Reclamation's Area Manager for the Dakotas Area Office in Bismarck, North Dakota. Thank you for the opportunity to provide testimony concerning the recent water supply problems on the Standing Rock Indian Reservation. Reclamation has worked with the Standing Rock Sioux Tribe on water supply projects for almost 20 years following the passage of the Garrison Diversion Unit Reformulation Act of 1986, as amended by the Dakota Water Resources Act of 2000 (DWRA). Under these authorities, we have worked with the Tribe on the development and operation of a rural water system to distribute drinking water to a design population of 16,500 residents throughout the Reservation. The Tribe has prepared a Final Engineering Report which presents the Tribe's plan for completing construction of the reservation-wide system (we note that this is the Tribe's plan, and has not been reviewed for compliance with standards applied to federal projects). We have also been helping the Tribe construct a water supply system to deliver Missouri River water for the irrigation of 2380 acres of crop land per section 5 of DWRA. These water projects are being designed, constructed, operated and maintained by the Tribe through Indian Self-Determination Act (P.L. 93-638) contracts with Reclamation.

Reclamation's participation over the past year on the Standing Rock Indian Reservation focuses on water supply intakes from the Missouri River. These include the Fort Yates intake, Wakpala intake, and the Cannonball irrigation intake. The Fort Yates and Cannonball intakes are located on the Missouri River at the upper end of Lake Oahe. The Wakpala intake is located in Lake Oahe near the mouth of the Grand River.

The Fort Yates raw water intake is an integral part of the Standing Rock rural water system. The intake transmits river water to the water treatment plant located in the community of Fort Yates. The intake provides the primary source of drinking water for a population of over 3400, including the communities of Fort Yates, Cannonball and Porcupine, as well as the Prairie Knights Casino and Lodge.

The Fort Yates intake failed on November 24, 2003 due to low water conditions and shifting river sediment. (Normally the intake is in a reservoir with 30-40 feet of water above it, but due to the drought in the Missouri River watershed, the intake is now in a river channel in the delta formed at the upper end of Lake Oahe). Without a water supply, the Tribe closed schools, hospitals, and tribal offices. The water supply was restored by the afternoon of November 26, 2003 by using temporary pumps and above ground piping assembled across the mud flats of the river channel. In consultation with the Environmental Protection Agency, a precautionary "boil water" advisory was issued and remained in effect until December 2, 2003. This allowed for water quality sampling

and flushing of the distribution system. Reclamation secured supplemental operation and maintenance funding from within the agency to cover the immediate costs of restoring the water supply.

In December of 2003, work focused on making the temporary pump system more reliable during the freezing weather conditions. This included construction of an access road and installation of a pipeline below the frost line. We appreciate the assistance we received from the Army Corps of Engineers through coordinated releases and operation of the reservoir to manage water levels and reduce ice formation during intake construction activities. By March 2004, a new interim intake sump structure and submersible pump assembly was operational.

Concerned about the continuously changing river conditions, the Tribe requested that Reclamation prepare backup water supply plans. Reclamation is working with the Standing Rock rural water office on finalizing emergency response plans to address potential problems caused by low water levels and provide a continuous water supply to the Standing Rock rural water system. If the intake fails, or the river channel shifts, and the water supply were cut off, a backup portable pumping plan has been developed. A recent field exercise demonstrated that capabilities now exist to restore water supply to the treatment plant in nine hours before all system storage is fully depleted. This emergency response plan should avoid future water service interruptions.

Reclamation and the Tribe are planning to construct a ground water well to provide a back-up water supply that will be independent of changing river conditions due to continuing drought. This groundwater source would only serve as an emergency back-up water supply because of poor water quality and inadequate quantity to meet long-term water needs. This back-up water source could be completed before the end of the calendar year.

The Wakpala intake on the Standing Rock Indian Reservation also has been affected by the low water levels in Lake Oahe. The Wakpala intake provides water for a population of about 1600, including the community of Wakpala and the Grand River Casino. The Lake Oahe water forecast for the spring of 2004 indicated the Wakpala intake would likely become inoperable in the summer of 2004. The intake screen was lowered as a short term solution and the Tribe thus was able to maintain a water supply throughout the summer. Concerned about continuing reservoir decline, the Tribe secured funding through USDA Rural Development, Indian Health Service, and Reclamation to construct a replacement intake that will be approximately 9 feet lower than the existing intake. This new intake should be completed this fall. To address potential intake problems in the event of long-term low water conditions for both the Fort Yates and Wakpala service areas, Reclamation and the Tribe are conducting additional investigations for a horizontal well system near Fort Yates.

The Cannonball intake, constructed to provide a water supply to irrigate approximately 800 acres of cropland near the community of Cannonball, has also been impacted by the low water levels in the Missouri River. This area is upstream of Fort Yates. The receding water levels in Lake Oahe left this intake high and dry during the 2004 irrigation season. The Tribe used project funds to install a portable pump to provide a temporary water supply during this period.

This concludes my testimony. I would be pleased to answer any questions you may have.



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240
JAN - 5 2005



The Honorable Daniel K. Inouye
Vice Chairman, Committee on Indian Affairs
United States Senate
Washington, DC 20510-6450

Dear Senator Inouye:

Enclosed are responses prepared by the Bureau of Reclamation to the questions you submitted following the November 18, 2004, hearing on the "Water Problems on the Standing Rock Sioux Reservation."

Thank you for the opportunity to provide this material to the Committee.

Sincerely,

Jane M. Lyder
Legislative Counsel
Office of Congressional and
Legislative Affairs

Enclosure

cc: Honorable Ben Nighthorse Campbell
Chairman
Committee on Indian Affairs

Bureau of Reclamation's Responses
To Questions Submitted by the Honorable Daniel K. Inouye,
Vice Chairman of the Senate Committee on Indian Affairs
Following the November 18, 2004 Oversight Hearing
on Water Problems on the Standing Rock Sioux Reservation

Question 1. Why has the Tribe been denied reimbursement for expenses for meal services and overtime for individuals repairing the intake?

The costs of meal services for individuals repairing the intake, as well as overtime costs of essential tribal government workers summoned to address the operation and repairs of the water system, are eligible for reimbursement. We estimate these costs to be approximately \$79,000, and are waiting for the Tribe to provide documentation supporting these costs prior to reimbursement. During the past year we have attempted to arrange meetings with the Tribe to review such documentation; however, the Tribe has not met with us and has only provided limited information related to these expenses. For other documented expenses, we have reimbursed the Tribe in the amount of \$449,249.

We will continue to pursue this matter with the Tribe. If there are areas where complete documentation is not available, we will work with the Tribe to negotiate a fair reimbursement of tribal expenses to address the repair of the water system.

Question 2. What is the source of funds to construct the backup water supply well and will it be counted against the authorization ceiling for the Dakota Water Resources Act? How much does this project cost and will it be able to supply the communities of Cannonball, Porcupine and Fort Yates in the event of another intake failure?

Reclamation is using operation and maintenance funds for the backup well. This expenditure is not counted against the construction ceiling authorized by the Dakota Water Resources Act. The estimated cost for the backup system is \$200,000. Fort Yates, Porcupine, and Cannonball are all served by the same system. Our intent is to drill a well or wells with sufficient quantity to serve all three communities. The ultimate capacity of the backup system is subject to the quantity and quality of available ground water.

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**Senate Indian Affairs Committee
Oversight Hearing on water problems on the Standing Rock Sioux Reservation
November 18, 2004
Written Testimony of Harold Frazier, Chairman of the Cheyenne River Sioux Tribe**

I am submitting this testimony as Chairman of the Cheyenne River Sioux Tribe to express my grave concern about the water situation here on the Cheyenne River Sioux Reservation and for our neighbors and relatives to the North, the Standing Rock Sioux Tribe. The Cheyenne River Sioux Tribe is currently experiencing losses in water pressure as its water intake system silts in from the operation of the Oahe Dam, and as lowered water levels result in reduced water pressure. Current effects include: 1) Loss of fire protection for lack of water pressure to fight fires, which has caused the loss of precious young lives in a fire where there was insufficient water pressure to fight the fire; 2) Inability to build new homes for lack of access to water due to lowered water pressure; 3) Inability to guarantee water service for a new nursing home and desperately needed new hospital, which will result in continued abysmal health care for tribal members; and 4) Inability to provide new business ventures with water service including a meat packing plant venture resulting in reduced economic development.

The blue represents the thunder clouds above the world where live the thunder birds who control the four winds. The rainbow is for the Cheyenne River Sioux people who are keepers of the Most Sacred Calf Pipe, a gift from the White Buffalo Calf Maiden. The eagle feathers at the edges of the rim of the world represent the spotted eagle who is the protector of all Lakota. The two pipes fused together are for unity. One pipe is for the Lakota, the other for all the other Indian Nations. The yellow hoops represent the Sacred Hoop, which shall not be broken. The Sacred Calf Pipe Bundle in red represents Wakan Tanka - The Great Mystery. All the colors of the Lakota are visible. The red, yellow, black and white represent the four major races. The blue is for heaven and the green for Mother Earth.

In addition, **the most recent information indicates that unless there are incredible snowfalls in Montana this winter, and the Corps of Engineers shortens the barge navigation season downstream, the entire Cheyenne River water intake system will fail by next fall.** The loss of water intake ability from the Missouri River will result in no clean, safe water for over 14,000 people in Dewey, Ziebach and Meade Counties. The latest information indicates that the current water level is 1574.14' msl as of August 2004. The Tribe had divers go into the river and measure the intake location in conjunction with the Indian Health Service and the State of South Dakota. Their findings are as follows:

1. The top of the screen for the intake is located at 1555.4' msl. Due to wave action, the IHS determined that at least 6.5' of additional water are necessary to operate the intake for a minimum necessary water level of 1561.9' msl.
2. The intake structure can only be lowered 1.5' below its existing height due to silting in at the intake location. However, this may not be operational, as this would put the intake at the silt level causing poorer water quality, and the sucking of silt into the water treatment plant.
3. The current projected water level based on Corps analysis by August 6, 2004 is 1574.4' msl. The snow pack data from the Corps of Engineers shows that the snow pack averages for the winter of 2003 varied from the average by as much as up to 69%, indicating that water levels will continue to decline steadily and rapidly.
4. **The Indian Health Service District Engineer indicates that by next summer, the intake will fail unless there is an incredible amount of snow in Montana to increase the snow pack levels.**

The most important priority of the Cheyenne River Sioux Tribe this year is securing funding and authorization for the Mni Waste' Water Project to restore clean Safe drinking water for the residents.

The Tribe is actively seeking the participation of the State, the Corps of Engineers, and all federal agencies. However, to date the Tribe has not received any firm commitments regarding funding to stem this crisis. Because of the extensive scope of this Project, it will take between six months and twelve months to complete the environmental assessment required under National Environmental Policy Act. Therefore, securing some level of funding this year so that we can start this process is critical so that construction can start by next Spring to avoid the crisis we will certainly face by next Summer, if not sooner.

The Cheyenne River Sioux Tribe funded an updated needs assessment and engineering study on the location of the new intake. The study found that the only solution is to move the intake North from its present location, install a new intake station, pipeline and new water treatment plant, and a new water line from the new intake to Eagle Butte. The cost of this project is estimated at \$46,795,000.00 (See Attachment I).

The Corps of Engineers Missouri River Master Water Control Manual states, "the Corps acknowledges that the operation and maintenance of the Missouri River can and does significantly affect Tribal trust assets, and therefore, the Corps has a legal and trust responsibility to the Tribes affected." P. 1-10, March 2004. However, the Master Manual for the Missouri River system does not address this critical water issue. The only comment in this manual is that the Corps of Engineers continues to encourage water system operators to seek funding. The Corps of Engineers position on this water crisis is that they have not been authorized to engage in water system projects in the Dakotas even when their actions in

operating the dams on the Missouri River is responsible for the loss of clean, safe drinking water.

Given that the Corps of Engineers' operation of the Oahe Dam is causing the silting in of our intake, and that the Master Manual still ignores the need of human beings for clean water in setting the water levels, the Corps of Engineers should be held accountable for remedying the loss of clean drinking water for the residents of Cheyenne River Sioux Reservation as well as the residents of the Standing Rock Sioux Reservation.

In addition to notifying the Corps of water quality issues as a result of arsenic and mercury and heavy metal contaminates in the silt covering the Cheyenne River intake station in 2002 (See Missouri River Master Manual Appendix 2, p. A4-471-486), the Tribe asked the Corps of Engineers for their assistance in this matter last year. The Corps of Engineers Assessment recommended using an additional pump in the water treatment plant to increase water pumping as the intake silting in, causes additional water pressure problems in the short term. The Indian Health Service and the water system operator – Tri-County Water Association both notified the Corps of Engineers that their possible solution will not work for this intake station. The Corps of Engineers solution of running two water pumps rather than one to increase water capacity will destroy the main line that transmits water to the Reservation as it is made of antiquated asbestos cement pipe. Since the Corps issued their assessment, there have been three main line breaks even with only one pump operating. The Corps of Engineers has been apprised of this fact. No further action has been taken by the Corps to revise their assessment or to seek alternative solutions.

Discussions with all federal agencies with jurisdiction including the Environmental Protection Agency, The United States Department of Agriculture, the Bureau of Indian

Affairs, the Bureau of Reclamation, Indian Health Service, and the Corps of Engineers have resulted in every agency saying it would like to help but lacks standing authority to do a project of this size, and lacks appropriations to contribute to this project.

Clearly, the only course of action that makes fiscal sense and that will secure safe water for the residents is the construction of a new intake and transmission line. Given that new construction of homes, businesses, and the new hospital cannot proceed without access to water through a new intake and upgrades to the current lines which are overcapacity, the residents and the Tribe are facing an impossible situation and a future devoid of any serious economic development or gains in health care services until this Project moves forward.

The only assistance the Tribe has been able to secure is a promise that when Dewey, Ziebach, and Meade County run out of water, the Corps of Engineers and FEMA will provide temporary water. No plan of action has been developed. How will FEMA and the Corps ensure that 14,000 people in 16 communities living in some of the most rugged terrain in the United States actually get clean water? The alternative for tribal members is to drink from the river, which is polluted with arsenic, mercury, heavy metals and dangerous agricultural chemicals, causing both short and long term health effects. The cost of this endeavor can be estimated from the Standing Rock Sioux Tribe's experience, which I am sure will be fully discussed today. Rather than waste funding on temporary water tankers to sixteen communities and over 14,000 people, why not authorize funding for the ultimate solution? The current system of making Tribes compete for new water projects, whether authorized under the Bureau of Reclamation or the Corps of Engineers, erodes tribal sovereignty by pitting Tribes against one another for scarce resources when there is a federal

responsibility to all of the affected Tribes, particularly where it is the operation of the dams by the Corps of Engineers causing the failure of these water intake stations.

The Corps of Engineers must have standing authority to fix the water systems that it's action in operating dams on the Missouri River have destroyed in order to solve this problem and similar problems with water systems for all of the Missouri River Basin Tribes. The failure to protect the Tribal members who will no longer have access to clean drinking water as a result of the Corps of Engineers activities, the inability to build new homes with access to running water, a new hospital and nursing home facility, and the inability to open new businesses for lack of access to water is and will continue to cripple tribal sovereignty and the health and welfare of all tribal members. I strongly urge this Committee to take action to fulfill the United States trust responsibility to protect the federally recognized tribes of the Missouri River Basin, their members, and tribal trust assets by providing the Corps of Engineers with standing authorization to design and construct replacement water facilities for the Missouri River Basin Tribes whose water intake systems have been devastated by the operation of the Missouri River dams, and to appropriate sufficient sums to meet this responsibility.

Submitted this 18th day of November 2004

Harold Frazier
Chairman
Cheyenne River Sioux Tribe

Project Component	Direct Construction Cost (1998\$)	Contingencies and Contracting Factors (35%)	Indirect Costs (38.7%) + Fees & Taxes (8%)	Total Construction Cost (1998\$)	Total Construction Cost (2003\$)
Intake System	\$ 2,857,000	\$ 999,950	\$ 1,334,219	\$ 5,191,169	\$ 5,992,000
Raw Water Transmission Pipeline	\$ 7,155,000	\$ 2,504,250	\$ 3,341,385	\$ 13,000,635	\$ 15,007,000
Water Treatment Plant	\$ 9,970,000	\$ 3,489,500	\$ 4,655,990	\$ 18,115,490	\$ 20,911,000
Electrical Power Service Improvements	\$ 2,329,000	\$ 815,150	\$ 1,087,643	\$ 4,231,793	\$ 4,885,000
Totals	\$ 22,311,000	\$ 7,808,850	\$ 10,419,237	\$ 40,539,087	\$ 46,795,000