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WATER RESOURCE MANAGEMENT ISSUES ON THE MISSOURI RIVER

HEARING

BEFORE THE

SUBCOMMITTEE ON WATER AND POWER

OF THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE

ONE HUNDRED SEVENTH CONGRESS

SECOND SESSION

TO RECEIVE TESTIMONY RELATING TO WATER RESOURCE MANAGEMENT ISSUES ON THE MISSOURI RIVER

JULY 10, 2002

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WATER RESOURCE MANAGEMENT ISSUES ON THE MISSOURI RIVER

WEDNESDAY, JULY 10, 2002

U.S. SENATE,
SUBCOMMITTEE ON WATER AND POWER,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:30 a.m. in room SD–366, Dirksen Senate Office Building, Hon. Byron L. Dorgan presiding.

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

Senator DORGAN. We will call the hearing to order this morning. This is a hearing in the Subcommittee on Water and Power. We are conducting a hearing on a matter that is of great significance to the heartland of our Nation, that is, the management of the Missouri River and the issues pertaining to the delays in issuing the revised master manual.

The fight over water is as old as people living in caves wearing loincloths, and it does not seem to stop. This is a fight over the management of the dams along the Missouri River, over the management of the reservoirs and the river itself, and for whose benefit that river has been managed.

Let me say that I have a self-interest here. My State is host now to a flood that came and stayed forever, a flood the size of the State of Rhode Island. In exchange for a Rhode Island-sized flood in my State, that stayed forever, other States got significant benefits. People in the State of Missouri, for example, at some point could not play softball in the spring in their parks because they had flooding that destroyed everything, and the downstream States, from Missouri on up, they have got the flood benefits that came from the installation of these dams. We got the flood that came and stayed.

We were promised a certain series of benefits from this. What would be the interest of a State like North Dakota hosting a Rhode Island-sized flood forever? Well, the interest was in the Pick-Sloan plan. The people of North Dakota were told that if they would play host to a flood that comes and stays forever in order to provide benefits for others, we will provide you certain benefits.

Among the benefits that we would have expected to occur would be the management of this system in a manner that is fair to all of the interests in the river. I must say, however, that the mechanism by which that management exists today is out of balance with

the concept of fairness for the upstream States. We are managing the river now based on an idea that was hatched in 1943 and 1944. In the 1980's—excuse me, 1970's, it was clear that that idea, that management plan had to change to meet the realities of the new day. Some 30 and 40 years had passed. There were new realities, and the suggestion was by the Corps of Engineers and others that the management plan should change to meet those new realities.

The Missouri River directly affects over 10 million people in eight Missouri River Basin States, North Dakota, South Dakota, Iowa, Nebraska, Missouri, Montana, Kansas, and Wyoming. The management of this river is significant to the people in all of the States, not just the Northern States, the Southern States, but not just the Southern States, also the Northern States.

The Missouri River master manual, the master control manual for managing this water, was originally published in 1962. The system is made up of six main stem dams and reservoirs, including Fort Peck, Garrison, Oahe, Big Bend, Fort Randall, and Gavins Point. The mainstream system has a storage capacity of 73.4 million acre feet, making it the largest reservoir system in North America.

As I mentioned, in recognition that a 40-year plan needed to be updated, the Corps of Engineers began revising the master manual in 1989, and I would like to have a chart—that is a rather lengthy chart—just to show in terms of a timeline where we are. This plan has been underway now for 12 years, and most of us are fairly well out of patience. So I thought we would show—each of these marks is a year—over 12 years what has happened with respect to the master manual plan. Let me just make the point that in 1989 the study was initiated, and the proposal was it would take 6 months, and the master manual would be revised in May of 1990.

As you can see, it does not appear the Corps has met this date. May 1990 came and went, and then year after year after year. We will have a great deal of discussion this morning about what has happened up in this area, because in this area we have really a thimbleful of policy and a barrelful of politics, but you will see what has happened. In May 1990, the expectation was that this master manual would be revised. We sit here now in July 2002 and we have no master manual revised, and this describes the failure. In my judgment, that failure is an outrage. We should expect, all of us who live on that river we should expect this master manual revision to be completed, and completed soon.

Let me ask that we go ahead and take this away. We think we all understand what all these marks mean. Year after year after year after year, 12 years of stalling and delay, and what has happened in most recent years is that promises have been made and not kept.

Now, let me just make a couple of other comments. We were finally told that May 31 of this year is when we would receive the preferred alternative and the final plan. Well, May 31 has come and gone, as well. We have not seen a preferred alternative. The Corps has not published a final EIS. We are now told the revisions have been remanded to the Fish and Wildlife Service and the Corps of Engineers for, quote, "informal consultations."

As far back as November 30, 2000, Brigadier General Carl Strock said there is significant agreement between the Corps and the Service on the known biological attributes necessary to recover the listed species. Now apparently they have to have more consultations, which has meant they have not met the dates they had promised us.

Navigation interests yield about $7 million in economic benefits annually. That is far, far lower than was expected much, much earlier when these dams were built. Upstream recreation and tourism benefits yield about $80 million annually, and those are increasing, while the barge traffic continues to decline.

We have GAO reports that say that the Corps' Missouri River management plan was based on assumptions about the amount of water needed for navigation and irrigation in 1944, but they are no longer valid, and the plan does not reflect the current economic conditions in the Missouri River Basin. We have study after study. I mentioned the GAO. The Congressional Research Service and many other studies talk about the way this river has been managed to the detriment of upstream States. The GAO pointed out the Corps was giving recreation a lower operating priority, even if this lower priority results in decreased system benefits. The GAO said it sees no appropriate basis for the Corps view.

The delays that have existed with respect to this management plan are totally unacceptable. These are devastating consequences to people who live in my State and other States. They should expect our government to be able to move with some dispatch and make thoughtful decisions.

I personally am out of patience. I think it is an outrage that we have been promised for 12 years a revised operating plan, and that operating plan has not been made available.

Let me tell you about Mel and Kathy Etsler. Mel and Kathy Etsler, an older couple in North Dakota, bought a marina with all of their life savings. It had a restaurant, a little bait shop, and docks. They were on the reservoir. They were very hopeful about their future. Well, the water is now 2 miles from their marina. Mel and Kathy Etsler are just one more example of people who are affected by the incompetent management of this river and the dam systems. We are going to talk a lot about that today, but the point is, this has to stop. This makes no sense.

Some of the people who are concerned about this and upset about this say, well, let us take the dams out, then. Just let the water go. If somebody else wants the water, let them have it. Let them have it all at once. That is not a thoughtful approach in my judgment. We have dams that harness and regulate that river, but they have to be managed. These dams and the river must be managed for the benefit of all the States, but that has not been the case, regrettably.

So we have a lot to say and a lot to do here today. This will be a rather lengthy hearing. We have four of our colleagues who wish to testify at the outset, and I am going to recognize them in a moment. Senator Daschle will be here. I will call on a couple of my colleagues. Senator Smith is the ranking member on this subcommittee, and let me call on him. When Senator Daschle comes—I believe he is going to be here at 9:45—I will recognize him, and

then all three of the other members of the Senate, and then we will come back to opening statements, if that is satisfactory.

Senator Smith, would you proceed?

[A prepared statement from Senator Baucus follows:]

PREPARED STATEMENT OF HON. MAX BAUCUS, U.S. SENATOR FROM MONTANA

Mr. Chairman, the Missouri River and its tributaries are the lifeblood of Montana, supporting our vital agricultural and ranching industries, and world class recreation and fishing. That's why I'd like to commend you for holding this important hearing today on the future management of the Missouri River. I know we share similar interests in updating the management of the Missouri to better reflect the actual needs of the Missouri River Basin states.

Mr. Chairman, I'm frankly getting tired of saying the same thing again and again, and hearing the same thing again and again from other Senators and my constituents—after more than 50 years, it's time to change the Missouri River Master Manual. It's past time. We've been struggling with this issue for more than 12 years and its time for the Army Corps and the Administration to step up to the plate and make a decision. The status quo is just not acceptable.

As we all know very well, the current Manual was designed to support steady downstream flows for a barging industry that never materialized. Managing the river to support a marginal annual barging industry leaves upstream reservoirs and boat ramps high and dry, particularly during droughts like the one Montana has suffered for more than four years. This has a devastating impact on the vital recreation economies of upstream states, particularly in rural states like Montana. It's not much good for the fish that folks like to catch, or the endangered and threatened species that depend on the river.

And, it's another blow to communities in eastern and central Montana that are struggling through tough times, including drought and low commodity prices. It's high time the Corps recognized the key role recreation plays in the economies of local communities along the Missouri. It's imperative that the Manual be changed to ensure adequate lake levels in upstream reservoirs.

But, as has happened time and time again, the Corps has failed to meet even its own deadlines for revising the Master Manual. Apparently, a decision on a preferred alternative has been delayed indefinitely. What's going on here? As I have stated before, the recent lawsuits by the states of South Dakota, North Dakota, Montana and Nebraska over Missouri River water should have been a wake up call to the Corps, not a reason for further delay.

To add insult to injury, Mr. Chairman, I've received several communications from the State of Montana, including the Governor's office, that indicate to me Montana may not derive any real benefit from any of the Corps' proposed alternatives for changing the management of the Missouri River. This is so even though Montana will bear the brunt of any adverse effects of the proposed "spring rise" from Fort Peck Dam. I supported the concept of the spring rise, as did the State of Montana, on the condition that the revised manual result in higher levels at Fort Peck Lake for recreation and fish, particularly during drought years.

So, not only will we not see a revised Master Manual at any point in the near future, Montana won't necessarily benefit from any revised Manual that is eventually released. I've already indicated to the Corps that I hope the continued delay in releasing a preferred alternative for the Master Manual will result in a better outcome for Montana.

In short, Mr. Chairman, Montana is home to the headwaters of the Missouri River. The water that originates in Montana, and the power that it produces, provides a tremendous benefit to downstream and surrounding states. Moreover, the Missouri and its tributaries are the lifeblood of Montana, supporting our vital agricultural and ranching industries, and world class recreation and fishing. We in Montana just want a fair shake when it comes to how that water is managed. I don't think that's too much to ask of our fellow Missouri River states or of this Administration.

Life along the Missouri River is not what it was 50 or 60 years ago. The economic, social and environmental conditions are not the same. Why then do we continue to rely on a Master Manual that was written for a world that no longer exists? It's time for a change, Mr. Chairman.

Thank you again for accepting my testimony.

STATEMENT OF HON. GORDON SMITH, U.S. SENATOR FROM OREGON

Senator SMITH. Thank you, Mr. Chairman. I appreciate your willingness to conduct this oversight hearing on the Missouri River water resource management issues. The issues and efforts to modify the Corps of Engineers master manual for Missouri River operations have been the source of controversy for well over a decade now. Therefore, it is not surprising that the most recent time frame for release of the final environmental impact statement has slipped from the administration's self-imposed May 2002 target date.

The current efforts to review the master manual were initiated by the Corps in 1989. In fact, the first draft environmental impact statement was released by the Corps in 1994 with a preferred alternative. It subsequently took the last administration until 1998, over 4 years, to issue a preliminary revised draft environmental impact statement.

Much of the controversy is ostensibly being driven over how to manage the river for three species listed under the Endangered Species Act. They are, the endangered interior least tern, the threatened piping plover, and the endangered pallid sturgeon.

There is no consensus about how best to proceed in this basin, which drains parts of eight States and empties into the Mississippi River. All river navigation and flood control downstream of Gavins Point dam to New Orleans will be affected by any modifications to the Corps' master manual.

Just last year, the Senate voted 100 to nothing that the Secretary of the Army during fiscal year 2002 may consider and propose alternatives for achieving species recovery other than the alternatives specifically prescribed by the United States Fish and Wildlife Service in the biological opinion. The Secretary shall consider the views of other Federal agencies, non-Federal agencies and individuals to ensure that other congressionally authorized purposes are maintained. Such an effort takes time, but I would rather have river operations done right than done hastily, and I think we need to give the administration time to consider the proposed alternatives to those measures being prescribed by the Fish and Wildlife Service.

In fact, the Governors of Arkansas, Kentucky, Louisiana, Mississippi, Tennessee, Minnesota, Missouri, Wisconsin, and Illinois have signed letters to the President expressing concerns about the serious impacts that changes to the Missouri River operations will have on the Mississippi River, and urging more disclosure of documents before any final decisions or recommendations are made.

I would like to submit these letters, Mr. Chairman, for the record, as well as a resolution by the Southern Governors Association.* This resolution urges the Corps to consult with affected inland waterway States prior to endorsing any proposal that would alter the current edition of the manual.

While I do not represent a State affected by the master manual, the situation raises a key resource issue that has plagued the Pacific Northwest as well for over a decade. We are maintaining and managing public lands, and in some cases entire watersheds, only

*The letters and resolution have been retained in subcommittee files.

for ESA-listed species. There seems to be insufficient, at least, regard for the economic or human impacts, or the impacts on other species.

We are now contemplating managing an eight-State river basin with impacts on 35 million people downstream for the supposed benefit of three listed species. Even then, there is concern about the effect of the proposed low summer and fall flows on the sturgeon. We need to recognize as a society that we cannot continue to manage large ecosystems only for the benefit of one or two species. I believe we can improve our environmental stewardship without forgetting our human stewardship.

I look forward to hearing from today's witnesses. Again, Mr. Chairman, thank you for holding this hearing.

Senator DORGAN. Senator Smith, thank you very much, and with the forbearance of Senator Burns and Senator Hagel I would like to call on the Senators who have come. We will call on our colleagues for statements following the testimony of the four Senators, if that is satisfactory.

Let me call on the majority leader, Senator Daschle. Senator Daschle, we appreciate your appearance here today.

STATEMENT OF HON. TOM DASCHLE, U.S. SENATOR FROM SOUTH DAKOTA

Senator DASCHLE. Thank you very much, Mr. Chairman, and I appreciate very much my colleagues' indulgence. I thank you as well for holding this hearing. It is one of the more important questions, I think, facing our country and certainly the upper Great Plains.

We are going to be talking about fundamental questions about what value should guide the management of our country's natural resources in this hearing, and I welcome your addressing those questions. As the bicentennial of the Lewis & Clark expedition approaches, we are faced with a stark choice. As we are attempting to take the necessary steps to recover the health of the historic Missouri River, the question is, are we going to perpetuate the status quo and continue to allow it to die a slow death, or are we going to take another direction?

For over 40 years, we in South Dakota and throughout the Missouri River Basin have watched the Corps of Engineers slowly kill this national treasure. The Corps has straightened out the channel, changed the flow, and basically turned one of America's greatest rivers, the river of Lewis and Clark, into a drainage ditch, and the Corps has done all of this to prop up a tiny downstream barge industry that never came close to meeting its original expectations, and that has declined to the point where it is now worth only a few million per year.

The Corps' current effort to update the Missouri River master control manual, the policy document that governs the Corps management of the river from Montana to Missouri, has been a frustrating and time-consuming exercise. It demonstrates not only that the Corps can be indifferent to the environment, but also that the relationship between the Corps and the barge industry often drives the Corps to ignore science and the law in order to protect that special interest.

Throughout this review process, the Corps has bent over backwards to protect the $7 million per year barge industry and its own program to maintain the barge channel. Ironically, maintaining the barge channel costs taxpayers over $7 million a year, more than the annual value of the barge industry itself.

The Corps says that it needs to protect river navigation. Consider the facts. There are 72 barges on the river. In any given week during the busy summer months, you will be lucky to see a dozen barges operating on the river hauling commercial loads. The others were in dry dock or were parked, and empty. The Corps management priority should be a concern to all Americans. They are certainly of deep concern to South Dakotans. The Missouri runs down the center of our State, and is a major source of income, recreation, and pride.

More than 40 years ago, the Corps built dams up and down the Missouri River in order to harness hydroelectric power. In return, it was expected to manage the river wisely, and in compliance with national laws. The Corps has not kept that public trust. Today, the Missouri River is dying, in significant measure due to the Corps' lack of concern about its ecology.

The river currently nurtures three species currently on the endangered species list, the piping plover, the least tern, and the pallid sturgeon, whose survival is jeopardized by Corps management, and the Corps continues to bend over backwards to block the management changes necessary to meet the requirements of the act and recover the health of the river, but this goes way beyond three species. In fact, I would argue this has so much more to do with the ecology of the river and the country surrounding it than it does the three species itself.

Recent lawsuits against the Corps filed by South Dakota, North Dakota, and Montana illustrate the frustration with the willingness of the Corps to sacrifice the health of this river with the overwhelming cost of that management regime in the States. In recent years, studies were commissioned to determine how to restore the health of the river. We now know what needs to be done. The Fish and Wildlife Service has stated in a formal biologic opinion that the flow of this river needs to change more closely to mimic its natural rhythm, higher spring flows and lower summer flows.

Under the law, the Corps knows it should take these management changes, and yet here we sit, waiting and wondering if the Corps will ever find the courage and will do what is right and lawful. After 12 years of study and review of the science and economics of river management, the Corps had promised that it would announce long-awaited changes to the management of the river by May 31. That date has come and gone without any Corps announcement.

In addition, it has been reported that the White House has intervened to defer any final decision until after November. That this dodge may not be surprising is not any more surprising than it is disappointing to people who care about the fate of the river, but my hope is that management of the river will be evaluated as a public policy issue, not as a political or a parochial issue.

The committee can contribute significantly in that regard by considering the record of the Corps management of this historic river,

reviewing the mountain of ecological and economic analyses of management options, and pondering the enormity of what is at stake with this decision. In the end, I hope you will join in urging the Corps to issue new management plans for the river as soon as possible, one that implements the recommendations of the Fish and Wildlife Service and begins the process of restoring this magnificent river to its health. That would be an appropriate way to celebrate the bicentennial of the courageous expedition of Lewis & Clark.

Thank you, Mr. Chairman and members of the committee.

Senator DORGAN. Senator Daschle, thank you very much. I understand that you are going to have to leave, is that correct?

Senator DASCHLE. That is correct.

Senator DORGAN. With the permission of the other Senators I will call on the rest of the panel. Senator Bond, would you like to go next? It does not matter. You had actually requested to testify first at this hearing.

STATEMENT OF HON. CHRISTOPHER S. BOND, U.S. SENATOR FROM MISSOURI

Senator BOND. I thank you, Mr. Chairman, and I just wanted to advise the distinguished majority leader that I will be talking about some of his comments if he wishes to stay for a moment or two.

Senator DASCHLE. I am well represented.

[Laughter.]

Senator BOND. Okay. I thank the majority leader, and I thank you, Mr. Chairman, for giving me this opportunity to testify. You will be pleased and probably surprised to know that these will be the most concise Missouri River remarks I have ever delivered, as a special treat.

You have noted, as I think most of us understand, that few issues are harder to sort out than water disputes. Many elements of the dispute are complex, but the fundamental political problem is quite simple. Mr. Chairman, you want the river managed to support your State's needs, and others want the river managed to support their State needs. Your so-called Rhode Island flood in your State is actually a series of reservoirs that you all value very highly for their recreational benefits, and we commend you for that. There are many different sides, and we only hope that the folks in the administration will be able to find the correct balance.

This spring in Missouri we saw nine people die because of flash flooding that occurred when rain in the basin raised the river from below normal to above flood stage in less than 72 hours. This increase from 7 to 28 feet in 72 hours was without the 2 to 3 feet extra that the Fish and Wildlife Service says might make the pallid sturgeon feel more lovable.

Now, just last week, the Fish and Wildlife Service, in an incredible precedent, has shut down the entire Lower Missouri River as an alternative to allowing the usual practice of letting the Corps move a few interior least tern eggs that are resting on a small sand bar. The power of unelected bureaucrats may be convenient to some now, but giving the unelected absolute power is not what we were sent here to do.

For downstream Missouri and Mississippi River States, every proposed option so far is bad. What the chairman insists that the administration adopt is bad for Missouri, Iowa, Illinois, Arkansas, Kentucky, Louisiana, Mississippi, and Tennessee, just to name a few States.

Geography may not be everyone's strong suit, so I remind everyone listening that the Missouri does not need any space. It is connected to the Mississippi River, which gets as much as two-thirds of its water during the summer from the Missouri.

While our Missouri Department of Natural Resources has a number of recommendations on habitat improvement, our DNR thinks proposed flow modifications are poor economic and environmental policy. As indicated by Senator Smith, the Southern Governors Association opposes it, 99 waterways and levee districts have opposed it, all the major farm groups, including the Farm Bureau, Wheatgrowers, Corngrowers, Soybean Association and others oppose it.

Missouri farmers alone ship nearly $1 billion in grain on our affected waterways. Contrary to the assertion of the distinguished majority leader, the benefits of water transportation are not limited to some insignificant $7 million figure. A study done for the Corps of Engineers shows that farmers in the heartland exporting to the world market save over $200 million in shipping costs each year because of the competition that the barges provide to railroads, which otherwise would hold a monopoly. That is why the Maritime Administration under the Bush administration and under the Clinton administration opposed the preferred alternative that the upstream States support.

In summary, I believe that the Government should protect people from flooding, not cause floods. It should produce more efficient transportation options, not railroad monopolies. The plan we oppose fails because the value to fish habitat is dubious, while the risk to people is very real.

I appreciate that you want to keep the lake level stable and high, but while this may be good for you, it is bad for all the downstream States. That was confirmed by testimony from Omaha to St. Louis to Memphis to New Orleans. I assure you that officials in Louisiana know their river reach better than you and I do, and better than the Northwest division officials do.

With regard to the preposterous suggestion somehow that the new administration is dragging its feet in not adopting the Dakota-preferred plan, permit me to add some context. First, the previous administration, the Clinton administration ducked the issue for 8 years. In fact, as the chairman knows, there was, and he said, there was a preferred alternative back in 1994 that had a spring rise and a low flow, and the Clinton administration shelved the plan and sent the Corps back to the drawingboard. I have the letter which announced in 1995 that they would come back with a draft in 1997. We did not see anything until 2001.

Back in the Clinton administration, Secretary of Transportation Peña and Deputy Secretary of Agriculture Rominger were very critical of the previous spring flood and low flow alternatives in 1995. These are Clinton administration officials, representing farmers and our transportation networks, and I might say parenthetically

that in addition to transportation, the 1.4 million acres of fertile farmland in Missouri protected from every year flooding is larger than the State of Delaware.

Second, let us be clear, the issues are further complicated because on October 29, 2001, our friend the senior South Dakota Senator testified, I strongly support both the spring rise and the split season, but on April 24 of this year he called on the Bush administration to support halt, stop, end water releases to stabilize water levels. After this flip-flop, if I were in the administration I would be sending out a search party for the real South Dakota position. Apparently they support a so-called natural spring flood, but only if their lakes are at unnaturally high stable levels. So much for a natural hydrograph.

Finally, what the administration is apparently doing is what every Senator here voted to instruct them to do last year in Public Law 107-66, which is, as Senator Smith indicated, to consider and propose alternatives for achieving species recovery other than the alternatives specifically prescribed by the U.S. Fish and Wildlife Service.

Further, the language directed the Secretary to ensure that other congressionally authorized purposes are maintained. Furthermore, the Senator from South Dakota included language requiring that the Secretary not accelerate the schedule to finalize the record of decision. Again, we all voted for this, and no one attempted to modify it.

So it is obvious to me why this should take some extra time. First, it is more important that it be a balanced and correct decision than it be fast. It is an excruciatingly difficult balancing act.

Second, the administration is doing what Congress told it to do.

Third, this administration, the Bush administration deserves a fraction of the 8 years of indecision we saw during the previous administration.

Fourth, what Lower Missouri and Mississippi Governors want is no less important for this administration to consider than what the Dakotans want. This matter is so important to the 35 million downstream citizens that I hope the administration will think twice before embracing the Dakotan plan, that it should devise and adopt a balanced plan.

Since we are all State patriots today, I add in closing that according to the latest Fish and Wildlife Agency funding survey, while the States of North Dakota and South Dakota raised from their own State sources $4.1 million for fish and wildlife conservation measures in 2000, the State of Missouri raises over $98 million every year, so I hope we can all agree that following Missouri's lead might be a good place for upstream conservationists to start.

I proposed a great number of measures to restore habitat on the Missouri and Mississippi without harm to people, and I pledge to help the citizens in the Dakotas improve their recreational industry. If you wish help, Mr. Chairman, in providing assistance to the fine couple who have the marina that is 2 miles from the water, I will join you in supporting funding to solve their problem.

Again, I respect the priorities of our good Dakota citizens, and I hope that you will understand the priorities of our citizens, and I would ask just to keep the record complete, that we put in the

public comments of the current Maritime Administration and USDA in the record. I believe they are probably more substantive than the sanitized testimony some committee obviously and hastily threw together to ensure that nothing is said, because the previous comments speak to the needs of farmers and some of the miscalculations of transportation data.

Also, just for your information, I would submit for the record a letter of March 1995 from the Department of Agriculture signed by Acting Secretary Richard Rominger, and a letter of April 5, 1995 submitted by Secretary Federico Peña, and also I have for your information and elucidation lengthy testimony I gave in Cape Girardeaux, letters from Congressmen, mayors, and Mississippi Governors, and the Southern Governors Association so you will have a complete record.*

Thank you.

Senator DORGAN. Senator Bond, thank you very much.

Senator Johnson.

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

Senator JOHNSON. Well, thank you, Chairman Dorgan for holding this timely and important oversight hearing into the water resource management issues on the Missouri River. I would like to recognize the presence of Doug Hofer, who is director of the division of parks and recreation for the State of South Dakota, who will testify later at today's hearing.

Doug and other folks at Parks and Recreation have performed an absolutely Herculean job to keep open the boat ramps and recreational sites.

As you know, Mr. Chairman, the mainstream reservoirs in the Upper Missouri River Basin provide a wide array of recreational opportunities for hundreds of thousands of anglers, sportsmen, and wildlife enthusiasts. Unfortunately, a long drought in combination with the failure of the U.S. Army Corps of Engineers to update the Missouri River master water control manual threatens the long-term health of the Missouri River.

South Dakotans understand the cycle of drought, even the once-in-a-generation drought currently gripping the region. The failure of the Corps to follow the law and revise a decades-old river management plan is simply inexcusable. The U.S. Fish and Wildlife Service has determined that the current Corps operation of the Missouri River violates Federal law, violates the Endangered Species Act, and the failure to restore more natural flows to the Missouri River will result in the Corps continuing to be in violation of the ESA. The path is clear, and action is required, but yet the Corps continues to delay.

Throughout the spring, to maintain the necessary water flows below Gavins Point Dam, the Corps released water from Lake Sharp, Lake Oahe, and Lake Francis Case, negatively impacting the multi-million recreational and wildlife economy of South Dakota. This is not a small matter for my State. Last year, 3 million visits were made to the Missouri River recreational sites in South

*The information referred to above has been retained in subcommittee files.

Dakota, contributing to an $84 million industry. In comparison, Corps mandated water releases to support downstream navigation will cost my State more money this year than the entire economic benefits of the negligible barge industry.

The Corps failure to follow the law and revise the master manual has real consequences for South Dakotans. While the Corps haphazardly fluctuated the water levels of the South Dakota reservoirs, marina operators such as Ken Dooley of Platte, South Dakota, have suffered. The Corps decision to lower Lake Francis Case by 3 feet this past spring left Ken and other marina operators scrambling to keep the ramps operational and businesses open. In response the State of South Dakota filed a lawsuit against the Corps to halt releases from Lake Oahe, that lawsuit led by our Republican Governor, Governor Janklow.

Although litigation is not a long-term solution to the problem, it is the only position left open after a decade of delay and indecision.

Failure to revise the master manual in time for the 2003 operating season will result in the Corps breaking the law and disregarding the U.S. Fish and Wildlife Service biological opinion, and violating the Endangered Species Act. Last year, top-ranking Army officials pledged to Congress that the Corps would end 12 years of indecision and choose a new management plan guided by scientific analysis, not guided by what upstream members of the Senate want, or downstream members of the Senate want, but by scientific analysis. This is best not made an upstream-downstream political issue. What we need is to allow these decisions to be made by the best scientific and economic analysis available so that the balance is reached that accommodates the best interests of our entire Nation and the health of the Missouri River.

Recognizing the seriousness of a process that began in 1989, the Corps was expected to release a final environmental impact statement with a preferred alternative for a new water flow plan in May 2002. The Corps delayed, pleading the need to consult with U.S. Fish and Wildlife Service and other Federal agencies still further. However, on June 14, the Bush administration indefinitely postponed releasing the identified preferred alternative, throwing another roadblock to revising the master manual, and threatening the sustainability of America's longest river.

This consistent delay must end. The science and the law is clear, and the Corps must implement the necessary changes to sustain the viability of the Missouri River, not to do what upstream Senators want, or do what downstream Senators want, but to sustain the viability of the Missouri River. The Corps must be held accountable for violating the public trust and called to task for failing to implement a new adoptive management approach for the Missouri.

I look forward to today's hearing and receiving testimony from all witnesses, and again I appreciate this very timely hearing on your part, Mr. Chairman. Thank you.

Senator DORGAN. Senator Johnson, thank you, and finally, Senator Carnahan, you may proceed.

STATEMENT OF HON. JEAN CARNAHAN, U.S. SENATOR FROM MISSOURI

Senator CARNAHAN. Thank you, Mr. Chairman. I thank you for this opportunity to testify today on an issue that is of great importance to both of our States, and I thank you, too, for granting my request to allow a representative from the Missouri Department of Natural Resources to testify today, and I also want to thank my colleague, Senator Bond, for his ongoing and vigorous support of this issue over the years.

We are joined by the Missouri congressional delegation in support of this issue as well, and the Missouri Department of Natural Resources and many other entities in my State. We stand together as one voice on this topic. We are resolved to preserve the Missouri River for its many uses while protecting the environment for future generations.

I am here to address the economic and social upheavals that would be certain in my State if drastic changes are made in the management of the Missouri River. Generations of families have worked hard to build homesteads and communities on the fertile land of the Missouri River Valley. These families help feed the world while providing the economic and social backbone for their communities. They rely on sound flood control measures to protect both their investments and their communities. I share their outrage at the possibility that a Government-imposed spring rise could threaten their livelihood. I share their concern for unreasonably low summer flows that halt barge traffic and further increase transportation costs for farmers along the Missouri and the Mississippi Rivers.

These hard-working families deserve to till their land without the threat of flooding from a man-made spring rise. They are not alone in depending on the current management of the river. There are millions of Missourians who rely on the river's current management for power and drinking water. The proposed lower summer flows will force powerplants in Missouri to reduce or halt production at a time when it is needed most, and low summer flows will also jeopardize the safe and stable drinking water supplies in municipalities of all sizes throughout Missouri.

I want to mention an incident that occurred back on October 10 2000. Then presidential candidate George Bush spoke to a group of farmers in one of our Mississippi River communities, and he said, and I quote, "I stand with Missouri farmers. I believe we can save species without affecting the farmers' way of life."

Well, I agree with the President. I hope he will honor his commitment to Missouri farmers. Unfortunately, last Friday, in an effort to protect two shorebirds, his administration announced a decision to stop water releases that are critical to Missouri's municipal water supplies, powerplants, and navigational interests. This decision was made in spite of significant increases in the number of interior least terns and piping plovers over the last few years without changes in the downstream flows. These increases are due in part to mitigation efforts and other prudent conservation programs that I am proud to support. Such programs protect endangered species without endangering livelihoods.

The recent decision to stop upstream water releases will likely halt barge traffic along a 250-mile stretch of the river. The decision denies already struggling Missouri River farmers an additional mechanism to get their product to market in a cost-effective manner, and this decision sets a dangerous precedent for future river management decisions. It puts downstream powerplants, water supplies, and entire communities at risk. It allows Federal agencies to wreak havoc in thousands of lives.

I hope that families and communities in my State can sometime soon have a degree of certainty when making long term decisions and investments. Standing with Missouri farmers means our agricultural communities can count on government to work with them to protect and not destroy generations of hard work. Standing with Missouri farmers means not jeopardizing their power sources and drinking water supplies. Standing with Missouri farms means no manmade spring rise and no man-made low summer flow. I am confident that a thorough evaluation will lead to the conclusion that dramatic changes in the Missouri River master manual will lead to economic disaster and destroy generations of hard work.

Thank you, Mr. Chairman, for this opportunity to reflect the feelings of the many Missourians whose livelihood and future depends on the flow of the Missouri River.

Senator DORGAN. Senator Carnahan, thank you very much. I think the testimony from the four colleagues has been an excellent review of the fundamental disagreement that exists between upstream and downstream interests here. I am going to defer questions. We have the opportunity to ask questions of each other all day, every day working here in the Senate, but I want to call on Senator Burns and Senator Hagel, who did not have an opportunity to make statements, and I would ask before we do that, are you intending to ask questions of this panel? We have eight other witnesses today, and if you have questions we will ask the panel to remain. If you do not have questions, we will ask, then, for your opening statements.

Senator BURNS. They might have questions.

Senator DORGAN. Will you be having questions, Senator Burns? If not, let us thank you very much for your preparation, for your testimony here today, and your contributions. Your full statements will be made a part of the permanent record, and we again appreciate your continuing work on this issue.

Why don't we ask panel 1 to come forward, and as they get seated, then I am going to ask Senator Burns and Senator Hagel for their statements, and then we will begin the testimony from the first panel. As I call them forward—Brigadier General David Fastabend, Commander, Northwest Division, U.S. Army Corps of Engineers, David Smith, Deputy Assistant Secretary for Fish and Wildlife and Parks, U.S. Department of the Interior, Hon. Bill Hawks, Under Secretary of Agriculture, Marketing and Regulatory Programs, U.S. Department of Agriculture, and Margaret Sibley, Director of Policy, Bureau of Reclamation, U.S. Department of the Interior. We appreciate very much the presence of all four of these witnesses, and if you would please take your place at the table, I am going to call on my colleague, Senator Burns, first for his comments, and again let me thank him for his forbearance.

STATEMENT OF HON. CONRAD BURNS, U.S. SENATOR FROM MONTANA

Senator BURNS. Well, I thank the chairman for holding this hearing, and we are where it all begins, in Montana. The Missouri River, I have lived on both ends of it and traveled every State in between, and I would say that this really is not a fight. We had the Missouri River Basin put together a long time ago, and they ran the river pretty good I think, but this is years and years ago, so my institutional knowledge of the river goes way back to a level of agriculture and of course management of the river and all this, and I will be like Yogi Berra, this is deja vu all over again.

We in Montana have heard conflicting stories. It all depends what suits you as to the position you take on the management of the river. It is a tremendous resource that middle America has, and we have seen the floods come and go, we have seen dry weather, but keep in mind basically this argument that we are having right now is a result of 5 years of drought in the intermountain West. It is the volume of water that flows from one end, from Three Forks, Montana, where three rivers make up the Missouri, the Galatin, the Jefferson, and the Madison.

We have had no snow pack. Especially that river is fed by—the majority of the volume of that river comes off of the Rocky Mountains, so we are talking about agriculture and the effects of it. If you want some endangered species, and there is only three been mentioned here, I can give you another list, including the plover.

If you all want some black-footed ferrets, we can get some of those for you. We can get you some grizzly bears, wolves—we have got a lot of black-footed ferrets, and we have to contend with ours, too, so whatever we do to that river effects also another endangered species called the American rancher and farmer from the North Dakota line clear to Three Forks, Montana.

I was at Fort Peck last Saturday, and I will tell you that reservoir is low. If you want a spring rise—and as you know, once you let water go it does not come back up that river, I will tell you that.

We also produce power at Fort Peck, and in the spring rise, or the release of the water, we are producing a lot of power that is not worth much because there is a lot on the grid. Then comes midsummer, when electricity becomes a little bit scarce, we are way down. Just talk to the Western Area Power Administration and they will tell you about how that affects them.

So we all have our different challenges. We are building a new warm water fishery at Fort Peck to feed our recreation industry. We believe that is very, very important, and of course when we come to the discussion of the master manual, why, that brings up another one, but actually I think we have one agency that probably exerts a little more influence on the management of that river than basic common sense, and that is what sort of tilts the debate whenever we start talking about that magnificent river.

So yes, we are going to try to hang on to all of our water, as much as we can. We know the spring rise, there is no part of that river that experiences erosion that actually takes private land into the river and is never replaced, between Fort Peck and Culbertson all the way to basically—maybe all the way to Williston on some of those releases.

Do we build into the manual that the land lost because of that sudden release of water out of Fort Peck, are those landowners compensated, because I have got a rancher down there who says he loses 20 acres a year. Now, pretty soon that goes to bite on you a little bit, and we hear no compensation for that, and yet in low years they say take your pipes out of the water because we cannot irrigate.

Are we going down this thing of a mentality of what happened in the Klamath Basin of California? Senator Smith is exactly right, the policies that we have here should be consistent, should be consistent and not be subject to a change, or the whims, but basically what we are talking about is the volume of water and when it is released, and common sense has to take place on that.

So we know what drought is. We know the people that depend on the river. We understand that when there is drought and low water that all of us must share and sort of feel the pain all the way from Three Forks to St. Louis, and we would participate in that, because we understand what drought is all about, because we all need that river, and a common sense view of it and sitting down with the States and coming up with a plan—you know, you can plan—we know what the snow pack is. We measure the snow pack in the mountains. We know what the approximate run-off will be. What we do not know is the amount of rain or moisture that will fall between Helena, which is the gates of the mountains—it starts into the prairies. You have got to remember, the Missouri River runs north when it first starts out.

I have been dealing with Canada, you know. We are supposed to get all of that water out of all the land that drains into the Milk River, too, that would get us up into Alberta, but I am not having a lot of luck getting that land back up there. The Canadians take a dim view of everything that happens above the 49th.

But nonetheless—but we understand that. We understand how those flows flow. What we do not understand is sometimes the heavy rains or no rains that flow on further downstream from the gates of the mountains. So we are willing to work with anybody, understanding that it all starts in Montana. We have certain obligations in power production, irrigation, and recreation, and would willfully share what goes downstream with those needs if we all balance and share in the pain alike. That is what this is all about.

So I thank the chairman for this hearing. I look forward to the testimony of those who are in charge of the management of the river, and I thank you.

Senator DORGAN. Senator Burns, thank you very much.

Senator Hagel.

STATEMENT OF HON. CHUCK HAGEL, U.S. SENATOR FROM NEBRASKA

Senator HAGEL. Mr. Chairman, thank you. I, too, add my appreciation to you holding this hearing. I have a statement I would like to ask be included in the record, Mr. Chairman, as well as a letter I received yesterday from the president of the Nebraska Farm Bureau Federation.

Senator DORGAN. Without objection.

Senator HAGEL. I appreciate that. Thank you.

Let me take a minute or two to respond generally to what I have heard this morning, and look forward to hearing yet in this hearing from our witnesses. I think the two Missouri Senators summed it up pretty well as to the perspective here that most of us are trying to approach this difficult issue with. This is, as Senator Burns has stated, a challenge of balanced perspective. I do not know if there is a Senator in the U.S. Senate who does not care about wildlife and the environment Maybe there is. They have not so stated if there is such a Senator, but the fact is, we need to approach this with some common sense and understand all the interests here.

This hearing is very valuable for many reasons, but one reason it is so valuable, Mr. Chairman, is because it allows all interested parties to understand what is at stake here. We are talking about power generation, huge amounts of power generated along the Missouri River that are affected, will be affected if this plan would be allowed to hold and to stay.

You heard much this morning about agriculture, transportation, navigation. We have not even touched upon the municipality interest along the Missouri River. I mean, drinking water, sanitary, storm sewers, flooding. These are huge interests that affect real people. The cost of these issues are immense as to if we pull back what would happen, and allow a radical change in the course of management along the Missouri River.

Wildlife habitat, recreation are important, and I would suggest to my colleagues from the Dakotas that wildlife habitat, hunting, fishing, recreation are important to States downstream as well. We in Omaha, for example, have a very significant investment in an area called the Old Market that is along the Missouri River. We have significant marinas along that river, a lot of fishing and hunting, so downstream interests in that area are not exclusive to the interests of the upstream States.

These issues are obviously of critical importance to each of our States, to the country, to the management of our resources, and it is through hearings like this that we can develop, I hope, not just an understanding but a common sense approach to how we are going to go forward here.

I am not one, Mr. Chairman, who believes that we need to rush to a conclusion today or tomorrow. I am one who believes that the outcome is far more important than the timing of the outcome, because the consequences are dramatic, and the consequences will affect real people in real ways and. in fact, ways that we cannot quite imagine here today.

I might also remind this panel and those here today that the Senate voted overwhelmingly last year to give the Corps the authority to review and propose alternatives other than those proposed by the Fish and Wildlife Service. That language, by the way, included in the Senate Energy and Water Appropriations bill requires that other congressionally authorized purposes for the river be maintained, and I hope the administration follows that mandate from Congress.

I hope, as Senator Carnahan says, that President Bush remembers the pledges he made as he campaigned and carried Missouri, and maybe carried Missouri in that election because of that promise, so we have significant political dynamics that are thread

throughout. The currents are running swiftly and deeply here, but I think we all want to keep it above the politics because the interests are so real that affect all of our constituencies, and again I say to you, Mr. Chairman, thank you for allowing this discourse and free exchange of information.

I do not know of an issue that is affecting and will affect my State as much for the short term and long term as this issue, so thank you very much, and I look forward to hearing from the witnesses.

[The prepared statement of Senator Hagel follows:]

PREPARED STATEMENT OF HON. CHUCK HAGEL, U.S. SENATOR FROM NEBRASKA

I thank the Chairman for the opportunity to review the management of the Missouri River. This is a matter of great importance to Nebraska and every other Missouri River Basin state. Unfortunately, it has also become an issue that has pitted region against region, state against state.

Last week, without public comment, without Congressional notification, and without precedent, the Fish and Wildlife Service shut down the Missouri River by telling the U.S. Army Corps of Engineers that they could not relocate the nests and eggs of two types of birds, the piping plover and least tern. That will keep the Corps from increasing dam releases to support water levels on the Missouri, which is already at very low levels. As a result, all barge activity—from Sioux City, Iowa, to Kansas City, Missouri—could very well be grounded.

While I support the goals of the Endangered Species Act, it certainly was never intended to trump every human interest. A balanced, common-sense approach to the management of the Missouri River is required. That means factoring into this equation all competing interests along the Missouri, from agriculture, to navigation and transportation, to wildlife habitat preservation, and recreation.

AGRICULTURE

Should any changes be made to the Missouri River's water control plan, agriculture would be one of the most dramatically affected sectors. The Nebraska Farm Bureau has asked that I convey their concerns to the subcommittee. I request that a copy of their July 9, 2002 letter to me be inserted into the record.

Altering the management of the river by allowing for a spring rise would not only impact farmers in downstream states—Nebraska, Iowa, Missouri and Kansas—by flooding their land, but would also affect barge movement on the Nlissouri and Mississippi. River transportation of agricultural commodities is critical to the overall farm economy—and is one of America's major competitive advantages in world grain trade.

Without the water transportation alternative, farmers will have to rely on what amounts to a transportation monopoly, resulting in higher prices and less reliable service. According to the Food and Agricultural Policy Research Institute (FAPRI), the loss of Missouri River commerce could reduce corn prices by 19 cents per bushel. Our farmers could not afford this.

Also, according to the Corps of Engineers, flooding and drainage problems could impact up to 1.4 million acres of farmland, an area larger than the state of Delaware. This would significantly affect the 30,400 residential and commercial buildings along the river—worth an estimated $17.6 billion.

It is no surprise that national farm organizations, including the National Association of Wheat Growers, National Corn Growers Association, American Soybean Association, Ag Retailers Association, American Farm Bureau Federation, National Council of Farmer Cooperatives, and the National Grain and Feed Association, strongly oppose the proposed changes.

POWER INDUSTRY

Electricity generation is another sector that would be drastically impacted by any changes to the river's management. Nebraska's two largest providers of electric power, Omaha Public Power and Nebraska Public Power Districts, are strongly opposed to any flow changes to the Missouri River.

Reducing river flows would make it nearly impossible for electric generators located along the river to comply with federal water laws. Reduced river flows could cause a reduction or even a complete shutdown of power generation along the river. That is not something we can take lightly, considering that as many as twenty-five

power plants along the river—with a combined generating capacity of over 15,000 megawatts—could be adversely impacted by any changes made to the flow.

It is estimated that such flow changes would cost Nebraska and Iowa power plants anywhere from $9 million to $78 million annually, and could total between $25 million and $200 million for all Missouri River-based plants below Gavins' Point Dam. These costs would be directly passed on to consumers.

Also, Missouri River flow reductions would reduce hydropower generation by the Western Area Power Administration (WAPA). The Power Administration estimates that this will cause up to a 21 percent increase in the cost of the power it sells to customers.

MUNICIPALITIES

We must remember that cities and towns along the river rely on an adequate water supply for essential services, from drinking water, to sanitary and storm sewers, to industrial uses. Omaha, Nebraska, for example, has committed several millions of dollars into new development on the river front. Omaha Mayor Mike Fahey has told me that changes to the river's flows would dry up marinas and leave recreational boaters grounded. Recreational activities—fishing, hunting and wildlife watching—are a true benefit created by the river. These activities create jobs, and increase property values and tax revenue. And this holds true for those of us downstream from Gavins' Point Dam. Indeed, a vibrant, flowing Missouri River is a key element for cities like Omaha and Council Bluffs, as well as every other community along the river, both upstream and down.

Finally, it should be noted that much of our water supply comes from the river. And river levels have an impact on the releases of our sanitary systems and storm sewers.

Mr. Chairman, we need to re-examine the decisions made by our federal agencies, particularly the Fish and Wildlife Service. We need to provide ultimate authority to a single agency, while allowing the opportunity for input from other agencies and the general public. The Corps of Engineers seems to be the appropriate agency to grant this ultimate authority.

Last year, I, along with the rest of the Senate, voted to give the Corps the authority to review and propose alternatives other than those proposed by the Fish and Wildlife Service. That language—included in the Senate Energy and Water Appropriations bill—requires that other congressionally-authorized purposes for the river be maintained. I hope the Administration follows that mandate from Congress.

The Bush Administration's decision to reconsider the impact of proposed changes to the Missouri River flow was the responsible thing to do. When it comes to management of the Missouri River, a good decision is far more important that a quick decision. Rushing to judgment to satisfy an arbitrarily set deadline, without considering all the economic and pubic safety consequences, is neither responsible nor fair to the taxpayers or those whose livelihoods depend on the river. There is too much at stake, for too many people.

Senator DORGAN. Senator Hagel, thank you very much. As always, a thoughtful statement. Let me say, though, on the last point you made, I am actually trying to determine what commitment was made in the State of Missouri by the President. I think that is very helpful for us to understand as well. No such commitment was made, I believe, in Montana or North Dakota, so I am trying to understand exactly what this commitment was, and we will try to track all that down so we can evaluate the background of this. But again, thank you both for your statements, and Senator Johnson, thank you for your statement as a witness today.

We will hear from the four witnesses at the table, and then we will ask questions, and then we will have the four final witnesses.

Brigadier General David A. Fastabend, commander of the Northwestern Division, U.S. Army Corps of Engineers. General, thank you for being with us. Your entire statement will be part of the record. We would ask that you summarize, so why do you not proceed.

STATEMENT OF BRIGADIER GENERAL DAVID A. FASTABEND, COMMANDER, NORTHWESTERN DIVISION, U.S. ARMY CORPS OF ENGINEERS

General FASTABEND. Thank you very much, Mr. Chairman, members of the committee. Good morning. You have my prepared statement, of course. It will be entered into the record.

As Commander of the Northwestern Division of the Corps of Engineers, I have been dealing with Missouri River Basin issues for approximately 11 months. I will tell you that my entire military career up to this assignment has been in tactical combat engineer units. I was recently asked, "given that background, what has prepared you to deal with the Missouri River Basin issues?" My answer without hesitation was "Bosnia."

When I was in Bosnia, I found myself between groups that felt very passionately and very divergently on what the future should be. These groups had a great deal of difficulty communicating with each other. There was a legacy of distrust and perceived wrongs, and each group felt very passionately that God was on their side. My experience in the Missouri River Basin has not been all that different.

The Corps has a role to manage the Nation's inland waterways, and the inland waterways are a precious resource that many people feel passionately about, and many people have very divergent ideas about how those precious resources should be managed. When you combine the role of the Army's Corps of Engineers in that respect, with the Army's traditional ethic of being a selfless servant to the Nation, you get an agency that is famous, or infamous, if you will, for its stoic and silent endurance under criticism.

Some people like to say that the Corps only cares about navigation, or the Corps only cares about hydropower, or the Corps only cares about flood control. The Corps does not "only care" about any of these things. There is one thing that the Corps cares about. The Army Corps of Engineers cares about executing the will of the American people, as expressed by their elected representatives here in Congress, as directed by the national command authority, and as sanctioned by the courts. That is what we care about, and that sounds simple, but the reality is that over time the American people have given us multiple instructions.

In the 1930's and the 1940's they told us to build, operate, and maintain these projects for multiple purposes. In the 1970's, they had additional instructions that included the Endangered Species Act and the National Environmental Policy Act. In the eighties we had the National Historic Preservation Act, and the Native American Graze Protection and Repatriation Act. I respectfully suggest to you that no one ever really stopped to think if any of these instructions might perhaps at times be contradictory. Our challenge is to try to resolve these contradictions and faithfully execute the will of the American people. It has become more complicated as the agencies, my peer agencies that are doing their job to the best of their ability, have had to make specific rulings, particularly on endangered species.

The law they used to make those rulings and the rulings themselves came decades after those projects were built, and therefore they were not necessarily designed to accommodate those consider-

ations. So we have some challenges, and I welcome this opportunity to describe those challenges to you so that you can see first-hand the kind of challenges we face.

Yesterday, I was on the bank of the Missouri River and someone asked me what it feels like to be a "human pinata." It feels a lot better than you might imagine. In the Corps of Engineers, we are absolutely proud of the role we have in applying the best available science, the best available engineering judgment to resolve these issues, to balance the purposes for which these projects were built, while simultaneously complying with the Endangered Species Act and our trust and treaty obligations to federally recognized Native American tribes.

In the Army we have a saying: "Good news, you are on point, and it is a position of honor." Being on point is the most dangerous position to have, but only the best get it, and only the most trusted get it. I believe that the Northwestern Division of the Corps of Engineers is on point in the Missouri River Basin. It is a position of honor. We welcome the challenge. We are proud of what we have done, and I look forward to your questions.

[The prepared statement of General Fastabend follows:]

PREPARED STATEMENT OF BRIGADIER GENERAL DAVID A. FASTABEND, COMMANDER, NORTHWESTERN DIVISION, U.S. ARMY CORPS OF ENGINEERS

Mr. Chairman and Members of the Subcommittee, I am Brigadier General David A. Fastabend, Commander of the Northwestern Division of the U.S. Army Corps of Engineers. It is my pleasure to be here today to testify on water resource management issues on the Missouri River.

The Army Corps of Engineers operates a system of six dams on the Mainstem of the Missouri River for the Congressionally authorized purposes of flood control, hydropower, water supply, water quality, irrigation, navigation, recreation, and fish and wildlife. The Missouri River Master Water Control Manual (Master Manual) sets forth the guidelines for operation of the system.

There are a myriad of complex operational and resource management issues surrounding revision of the manual. Upstream interests want high, stable lake levels to address recreation, irrigation, and hydropower needs. Environmental interests seek a hydrograph that more closely mimics the natural hydrograph of the Missouri River. Upstream and downstream interests below the dams support different flow regimes for flood control, water supply, water quality, recreation, and commercial navigation on the Missouri and Mississippi Rivers.

During the period of 1987-1992, the Missouri River basin experienced a moderate to severe drought. As a result of the drought, the Missouri River Mainstem reservoirs were drawn down significantly to meet authorized purposes. There were numerous lawsuits and inquiries concerning the operation of the reservoirs. In November 1989 the Corps voluntarily initiated a Review and Update of the Master Manual to address concerns over the adequacy of the existing water control plan and determine operating criteria that might better serve the contemporary needs of the Missouri River basin. A Draft Environmental Impact Statement (DEIS) which included a Preferred Alternative (PA) was published in 1994. There was no agreement in the basin on this PA. In an effort to foster basin consensus regarding a flow management plan, a preliminary revised DEIS, which identified eight representative alternatives, was published in 1998.

Two bird species, the threatened piping plover and the endangered interior least tern, were listed in 1985. The pallid sturgeon was added to the list of endangered species in 1990. Although the Corps and the United States Fish and Wildlife Service (Service) had consulted formally under Section 7 of the Endangered Species Act (ESA) in 1990 on the effects of Mainstem System operations on terns and plovers, and had consulted informally during the 1990's on impacts to pallid sturgeon of various project operations, in April 2000 the Corps requested formal consultation on the current operation of the Mainstem System, the Missouri River Bank Stabilization and Navigation Project (Sioux City, Iowa to St. Louis, Missouri), and the current operation of the Kansas River Reservoir System with regard to effects to terns, plovers, sturgeon, and the bald eagle. A Final Biological Opinion (BiOp), received from

the Service on November 30, 2000, concluded that current operations jeopardize the continued existence of the piping plover, interior least tern and pallid sturgeon. As a component of the Reasonable and Prudent Alternative (RPA) to jeopardy, the Service indicated in their Final BiOp that higher spring releases and lower summer releases from Gavins Point Dam, the lowest dam on the system are necessary to preclude jeopardy of the three protected species.

On August 31, 2001, the Corps published a revised Draft Environmental Impact Statement (RDEIS) on modification of the Master Manual. The RDEIS identifies the impacts associated with six alternative operational plans. In addition to the current Water Control Plan (CWCP), the Corps analyzed a Modified Conservation Plan (MCP). The MCP includes more stringent drought conservation measures and all of the flow-related elements of the Reasonable and Prudent Alternative (RPA) with the exception of modified releases from Gavins Point Dam. The RDEIS also analyzed four alternatives that added various Gavins Point Dam release changes to the MCP. These latter four alternatives addressed the full range of changes in releases from Gavins Point Dam that the Service included in the RPA in its November 2000 BiOp and are called the GP alternatives. The release of the RDEIS marked the beginning of a six-month public comment period. Tribal and public workshops and hearings were held throughout the Missouri River basin and at locations in the Mississippi River basin. Oral, written, and electronic comments were taken until February 28, 2002. Over 55,000 comments were received.

The Corps has reviewed all of the comments received, all information developed in the course of the 12-year effort on possible revisions to the Master Manual, including the BiOp and the recent National Academy of Sciences Report for the Missouri River published in January 2002. We are working to achieve an outcome that meets the contemporary needs of the Basin and the Nation, serves Congressionally-authorized project purposes, complies with environmental laws including the ESA, and fulfills the Corps responsibilities to Federally-recognized Tribes.

The Corps and the Service now have entered into informal ESA consultation and are meeting regularly. During this informal consultation process, the Corps and the Service will work to assess available scientific and technical information and explore a range of possibilities regarding operation of the system.

The Corps will use the results of the consultative effort as the Final Environmental Impact Statement (FEIS) is completed. The Corps will complete a FEIS that will include a description of the environmental and economic impacts of a preferred alternative and will offer a 30-day review and comment period on that document.

The FEIS will address the Tribal and public comments received in response to the RDEIS and present the new PA and its impacts. Following the FEIS, the Corps will prepare a Record of Decision, revise the Master Manual if appropriate, develop an Annual Operating Plan, and implement that plan.

Mr. Chairman, this concludes my statement. I would be happy to answer any questions you or the other Subcommittee members may have.

Senator DORGAN. General, thank you very much. Next, we will hear from David Smith, Deputy Assistant Secretary for Fish, Wildlife, and Parks, Department of the Interior.

Mr. Smith, why don't you proceed.

STATEMENT OF DAVID P. SMITH, DEPUTY ASSISTANT SECRETARY FOR FISH AND WILDLIFE AND PARKS, DEPARTMENT OF THE INTERIOR

Mr. SMITH. Thank you, Mr. Chairman.

Mr. Chairman, members of the committee, I am David P. Smith, Deputy Assistant Secretary for Fish and Wildlife and Parks, Department of the Interior. I appreciate this opportunity to present testimony on behalf of the Department concerning the current and future management of the Missouri River and the relationship of that management to the Endangered Species Act. Before I continue with my statement, Mr. Chairman, I would like to offer some brief remarks regarding the events of last week on the Missouri.

As you are probably aware, the Corps of Engineers voluntarily halted action to assist navigation that would raise water levels of the lower portions of the Missouri River after contacting the Serv-

ice and being notified that these actions may inadvertently run afoul of the provisions of the biological opinion for current year operations.

We understand the difficulties the Corps faces this year in meeting the challenges of operating the system in drought conditions, and the Service has already begun to work closely with the Corps to ensure that both agencies meet their responsibilities under the Endangered Species Act. Under the ESA, Federal agencies are directed to use their authorities to conserve endangered and threatened species. The Missouri River is home to three of these species, the endangered pallid sturgeon and least tern, and the threatened piping plover.

The Service assists other Federal agencies to ensure that their actions do not jeopardize the continued existence of these species. For the last 12 years, the Service has worked with the U.S. Army Corps of Engineers to address management of the Missouri River so as to help conserve and recover these species while still providing many beneficial economic and recreational uses of the river.

Given the complexity of the system, management of the Missouri River has never been a simple issue. The river system encompasses nearly 530,000 square miles and drains approximately one-sixth of the land mass of the United States. The Missouri River Basin is home to about 10 million people in 10 States and 28 Native American tribes. The river's natural heritage, as well as its role in human history, is part of the heritage of all the States through which it flows, including North Dakota and the Nation as a whole.

The challenge is to balance the needs of the many communities in the basin while conserving the listed species. We believe compliance with the Endangered Species Act on the Missouri River can be accomplished in a manner that benefits both wildlife and people. At present, the Corps and the Service have entered into informal consultation and are working at multiple levels to address issues related to future operations in the Missouri River system. The service in the regional office is working with General Fastabend and the Corps' staff in Omaha, and the U.S. Fish and Wildlife Service's Director Steve Williams, has met repeatedly with General Griffin here in Washington.

We are working towards a consultation agreement which will address how best to proceed from here. Considering all of the conservation tools available to us, we are committed to exploring a variety of approaches towards meeting our obligations to conserve the listed species and provide for beneficial economic and recreational uses of the river. These discussions are continuing regularly, but we are not yet at a point where we have reached an actual agreement on exactly how to proceed.

Mr. Chairman, we appreciate your interest in the management of the Missouri River, and the efforts by the U.S. Fish and Wildlife Service and the Corps of Engineers to jointly protect the river's diverse natural resources and economic values. We will keep you and the other interested members of Congress advised of our progress on this issue.

This completes my prepared remarks. I look forward to answering your questions.

Senator DORGAN. Mr. Smith, thank you very much. Next, we will hear from Hon. Bill Hawks, Under Secretary of Agriculture, Marketing and Regulatory Programs, the Department of Agriculture.

Mr. Hawks, thank you for being here. You may proceed.

STATEMENT OF BILL HAWKS, UNDER SECRETARY OF AGRICULTURE, MARKETING AND REGULATORY PROGRAMS, DEPARTMENT OF AGRICULTURE

Mr. HAWKS. Thank you, Mr. Chairman, members of the committee for the invitation to appear before this committee today. The Missouri River is very important to the Department of Agriculture. It is important that we work together to find a balanced, science-based solution that meets the needs of all interested parties. This situation is complicated by a number of competing interests, as we have already heard here this morning, and the purpose that the river serves among several States. However, I believe that we can work together to find a reasonable solution. I have a saying that I always use, and that is, working together works, and I think that will certainly apply here.

Let me begin by saying the Department of Agriculture believes in the importance of barge traffic as a means to transport agricultural supplies and commodities. Barge transportation is unrivaled as the least expensive, most environmentally friendly and the safest mode for moving bulk commodities to export. The water flow on the Missouri River contributes to the maintain adequate river levels on the Mississippi River for the transport of grain and oilseeds from the Midwest to the Gulf of Mexico.

USDA recognizes the importance of maintaining an efficient transportation system. Our competitive edge in the global market depends on our ability to effectively move our product. This is true more than ever today, particularly as we strive to compete in markets where many producers benefit from Government policies that assist their producers in production marketing and distribution systems much more than our producers due in the United States.

Indeed, many of our competitors are making significant investments in their own transportation infrastructure, public investment that will no doubt improve their ability to move product into the markets that compete with the United States. Transportation by water is low cost, environmentally friendly, and highly effective at moving vast quantities of bulk commodities to port. The availability of barge traffic helps keep rail rates competitive. That should be of significant interest to some of the upper States. By offering a low-cost alternative for the shippers that use the Missouri River, the majority of U.S. grain for export which are produced in the interior States of the Nation are moved by rail and truck to the major arterial waterways that then feed into the Mississippi River. The impact of any change in the river operation on U.S. grain exports and on the ability of barge traffic to move freely during harvest time will be carefully considered.

I will conclude by saying that the Department of Agriculture recognizes, as other Departments before us have recognized the advantages that inland waterway navigation offers to U.S. agriculture and the related benefits to rural economies throughout the Nation. USDA also acknowledges that competing interests have dif-

ferent perspectives. However, I can assure you that the administration is considering the impact of the proposed change in the Missouri River operations on the agricultural sector as well. Within the executive branch, USDA will continue to be an advocate for our Nation's agricultural commerce and the producers, families, rural communities that both produce and depend on agriculture commerce for their quality of life and their livelihood.

Mr. Chairman, that concludes my comments, and I am looking forward to responding to questions.

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

Next, we will hear from Margaret Sibley, Director of Policy at the Bureau of Reclamation.

STATEMENT OF MARGARET SIBLEY, DIRECTOR, OFFICE OF POLICY, BUREAU OF RECLAMATION, DEPARTMENT OF THE INTERIOR

Ms. SIBLEY. Thank you, Mr. Chairman.

Reclamation has been involved in the Missouri River Basin almost since its inception in 1902. At the very beginning, the projects were typically single purpose irrigation projects located on headwater and tributary streams of the Missouri River. Some 40 years later, the Pick-Sloan Missouri Basin program that was authorized by the Flood Control Act of 1994 and gave the Corps of Engineers to have the responsibility for navigation and flood control on the main stem of the river. Reclamation was responsible for the development of the irrigation hydropower and other uses of the tributaries in the basin with the exception of the Canyon Ferry Hydroelectric Power Plant at the headwaters of the river.

The initial power produced by Pick Sloan is used by irrigation to provide power to be able to pump the water from its source to irrigation lands, but the 1944 Control Act also required that the preference be given to certain entities for marketing power. The power development in the basin has exceeded the original plan. Changes in energy market demand resulted in more facilities being built. Irrigation development on the other hand, has fallen far short of what was originally envisioned in the act.

The program to date has only about 518,356 acres of irrigation and 34 dams, not including the Corps' mainstream dams that was developed in the Pick-Sloan program. Much of the original acreage was determined not to be suitable for irrigation, and social and local economic changes dramatically changed since the 1944 act was passed.

The evolution of the Garrison Diversion Unit of the Pick-Sloan is somewhat representative the direction water development has taken in the basin. It has been reformulated twice, and now is a multipurpose project that emphasizes municipal, domestic, and industrial water supply. Reclamation is also an active member in the Missouri River Basin Interagency Roundtable. This is the consortium of agencies where communication and cooperation, reducing duplication and effort, and enhancing the effectiveness of each agency's resource management capabilities in the Missouri River Basin take place.

Reclamation has followed the developments of the Corps of Engineers Missouri River Master Water Control Manual and associated

environmental impact statement. We have reviewed and commented on various draft documents in order to provide general technical input and to identify the possible effects of various alternative plans on the Bureau of Reclamation projects and its facilities. Our main concerns are to continue meeting contractual requirements and to fulfill the authorized irrigation, power, recreational, and Fish and Wildlife functions of our project.

Thank you very much for the opportunity to comment on Reclamation's role in this. This concludes my statement, and I would be happy to answer any questions.

[The prepared statement of Ms. Sibley follows:]S6621

PREPARED STATEMENT OF MARGARET SIBLEY, DIRECTOR, OFFICE OF POLICY, BUREAU OF RECLAMATION, DEPARTMENT OF THE INTERIOR

My name is Margaret Sibley, I am the Director of the Office of Policy for the Bureau of Reclamation. I am pleased to describe the Bureau of Reclamation's activities in the Missouri River Basin and the relationship to the Corps of Engineers operations.

Reclamation's involvement in the Missouri River Basin began soon after the agency's founding under the auspices of the Reclamation Act of 1902. Investigations were initiated throughout the basin, and construction of several projects was soon well underway. Before World War II, projects were typically single purpose irrigation projects located on headwater and tributary streams of the Missouri River.

The pace and planned scale of Reclamation's activities increased considerably with the authorization of the Pick-Sloan Missouri Basin Program (Pick-Sloan) by the Flood Control Act of 1944. Under the plan, the Army Corps of Engineers was given the responsibility for navigation and flood control on the main stem of the river. Reclamation was responsible for the development of irrigation, hydroelectric power, and other uses on the tributaries in the Basin. With the exception of the Canyon Ferry hydroelectric power plant at the headwaters of the river, which Reclamation built and operates, the main stem federal dams and power facilities are owned and operated by the Corps of Engineers.

The initial power produced by Pick-Sloan projects is used by irrigation projects to provide power to pump water from its source to the irrigated lands. This is known as project pumping power or project use power. All power produced in excess of project use is called "Preference Power."

The 1944 Flood Control Act also required that preference be given to certain entities in marketing the balance of the power produced by Pick-Sloan facilities. These "preference power customers" include cooperatives, municipalities, public utility district and state and federal agencies.

Power development in the basin has far exceeded what was originally planned. Changes in energy market demand resulted in more facilities being built. In many cases, those facilities have been expanded or made more efficient, thus increasing production capacity. All power produced in the Missouri River Basin by Reclamation and the Corps of Engineers is marketed by the Western Area Power Administration.

Irrigation development, on the other hand, has fallen far short of what was originally envisioned in the Act. The early Pick-Sloan Missouri Basin Program called for over one-hundred dams to serve irrigation projects. Irrigation was to be provided to 4.8 million acres of farmland in six states. To date, only about 518,356 acres of irrigation, and thirty four dams, not including the Corps' main-stem dams, have been developed under the Pick-Sloan program. Much of the original acreage was determined not to be suited for irrigation, and social and economic conditions changed dramatically in the 58 years since President Roosevelt signed the Flood Control Act.

The evolution of the Garrison Diversion Unit of Pick-Sloan is somewhat representative of the direction water development has taken throughout the basin. This project began primarily as an irrigation project. It has been reformulated twice and now is a multipurpose project that emphasizes municipal, domestic, and industrial water supplies. Irrigation water is being supplied to less than one-hundred thousand acres. While the municipal and rural water systems have replaced some irrigation development on the project.

Reclamation has not been involved in funding new irrigation units of the Pick-Sloan program for many years. The last major project completed was the North Loup Project in Nebraska. It was authorized in 1976 and completed in 1990.

Interior is an active member of the Missouri River Basin Interagency Roundtable (MRBIR). The MRBIR is a consortium of Federal resource management agencies dedicated to improving interagency communications and cooperation, reducing duplication of effort, and enhancing the effectiveness of each agency's resource management capabilities in the Missouri River Basin.

Reclamation has followed the developments on the Corps of Engineers Missouri River Master Water Control Manual and the associated environmental impact statements. We have reviewed and commented on various draft documents in order to provide general technical input, and to identify the possible effects of various alternative plans on Bureau of Reclamation projects and facilities. Reclamation serves numerous water users throughout the Missouri Basin, and our main concerns are to continue meeting contractual requirements and to fulfill the authorized irrigation, power, recreation, and fish and wildlife functions of our projects.

Thank you for the opportunity to comment on Reclamation's role in water resource management in the Missouri River Basin Region, and the Bureau's role in the Corps of Engineers ongoing review of the Missouri River Master Water Control Manual. This concludes my statement, and I would be happy to answer any question

Senator DORGAN. Ms. Sibley, thank you very much. I thank all of your for your testimony, and let me begin by asking a few questions and then my colleagues will also ask some questions.

General, let me begin with you. I have a letter here from Secretary of the Army Thomas White. He is responding to a letter that I had written to him on September 21. On September 26 he wrote back and among other things he said, the Corps will release final environmental impact statement FEIS with a preferred alternative in May 2002 as currently scheduled.

Then I have a letter of February 15, 2002, from Robert Flowers, Lieutenant General, Corps of Engineers. He says, Dear Senator Dorgan, this responds to your correspondence dated January 9, and he once again says that we will continue the master manual revisions so as to develop a final EIS by May 2002 and a record of decision by October 2002.

What has happened that caused the Corps to miss September 26 of last year, February 15 of this year? Since those dates, the Secretary of the Army and the head of the Corps of Engineers have both put in writing that they will meet the May date of this year. Obviously they did not meet that date. What happened in that intervening period?

General FASTABEND. Mr. Chairman, at the time of those letters it was our intent to meet those dates, and in part I would offer to you that we have met them. In May, the Corps of Engineers did finish its assessment of the 55,000 comments we received on the Revised Draft Environmental Impact Statement, and the Corps identified a preferred alternative that it did pass over to Fish and Wildlife Service. This preferred alternative was the starting point for our informal consultations to resolve the issue and advance the process.

Senator DORGAN. What was that preferred alternative?

General FASTABEND. The preferred alternative is a description of how the Corps of Engineers would revise the master manual in order to——

Senator DORGAN. I understand that. I am asking what the preferred alternative was. What had you chosen to send as your preferred alternative?

General FASTABEND. Mr. Chairman, what I was about to tell you is that in the process of delivering that preferred alternative we de-

cided that it would be best to keep that informal consultation as an interagency process because of the controversy that is so obvious to everyone in this room with all decisions associated with the Master Manual. We believe that we could resolve our discussions best if we kept that as an interagency process, so we have not announced publicly the details of the Corps' preferred alternative back to the Service.

Senator DORGAN. But General, both Secretary White and General Flowers knew when they wrote these letters that this was controversial, so it is not a revelation that this is a controversial issue. My concern has been that the Corps of Engineers developed a preferred alternative and then pulled that alternative for reasons other than good public policy.

You were scheduled to meet with me on May 22. Your office called and requested a meeting with me, and we were set to meet at 11 a.m. on May 22. My office schedule showed that you were apparently going to brief me on the Missouri River preferred alternative announcement, which was to have occurred the next day or several days thereafter. The day before that meeting, we were called and it was cancelled. Can you tell me what you were prepared to tell me at the meeting on May 22. Would you disclose that at this hearing?

General FASTABEND. Mr. Chairman, up until the call where I cancelled my intent had been to meet with you and give you a preview on what the details of the preferred alternative would be. At that time, the Fish and Wildlife Service and the Corps of Engineers jointly agreed that we should make this a nonpublic interagency informal consultation process, and therefore I regretfully had to call and cancel that process of showing the public what that recommendation was.

Senator DORGAN. General, I am not suggesting bad faith on your part. I am saying that the Secretary of the Army, General Flowers, and you had a preferred alternative and were prepared to come to my office, among others, I assume, and tell us what that was.

We heard testimony earlier today that the President went to Missouri and made a commitment about these issues and, frankly, I am a little concerned about what is happening here. Why a preferred alternative was identified but cannot be made public. Will you make it public today? Will you tell me at this hearing what you were prepared to tell me at the May 22 meeting?

General FASTABEND. Mr. Chairman, I would ask your indulgence. I would not like to make it public today. The Corps of Engineers and the Army, which answered your letters, did have their intent to do that. However, the Corps of Engineers, of course, is not the entire administration. We have to consult with the Fish and Wildlife Service so that we develop a good understanding of any differences we have on the details of the recommendation so that the administration can have a consolidated position.

Senator DORGAN. General, I know this puts you in a tough position, but you saw what I described at the front of this hearing, 12 years. We talk about indulgence and patience. I am out of patience, so I guess I am asking you, and I understand why you do not want to tell us, but I am asking you as we are—policymakers. We fund your agency. I have a letter from the Secretary and a letter from

General Flowers, the head of the Corps, and they have said we will meet the date in May. You apparently had a preferred alternative in May, were prepared to come and tell me about it, and then decided that you want to keep it private.

I am saying I do not think that is appropriate. I think you ought to make it public, and I think you ought to do so today. I think you should tell this committee what the preferred alternative was. If it is not ultimately the preferred alternative that comes out of some internal discussions, I understand that, because there is apparently some other political commitment out here that we are also dealing with, which I hope to understand a bit more about, but at least for purposes of the Corps—and I have a great deal of respect for the Corps.

The Corps helped us fight the Red River flood. I have spent a lot of time talking to the Corps about how important they are in our lives, so this is not in any way disrespectful of you or the Corps. I respect your organization, but with these assurances of a preferred alternative, given myself, as the chairman of this subcommittee, and my colleagues, I do not think after 12 years you ought to tell us that you need our indulgence.

I think you should tell us what the preferred alternative was. Then at least we have a reference point here of what kind of internal private secret discussions are going on—let me amend that and take secret away—what kind private discussions are going on between the Corps, the Service, and others.

General FASTABEND. Mr. Chairman, I am a soldier, I am in the Army. The country has always appreciated our habit of following instructions, and my instructions are to keep this as an interagency discussion.

Senator DORGAN. And General, who are those instructions from?

General FASTABEND. My instructions are from my higher headquarters, Headquarters U.S. Army Corps of Engineers.

Senator DORGAN. Is it Secretary White, or General Flowers.

General FASTABEND. Sir, I do not talk to Secretary White. I talk to General Flowers.

Senator DORGAN. And General Flowers has instructed you not to tell us what the preferred alternative was?

General FASTABEND. Yes, sir.

Senator DORGAN. We invited General Flowers here, and I will, as a result of that, invite him once again, and we will have a separate session with General Flowers. I know General Flowers well. I think it is a mistake for him to withhold from policymakers here that which apparently is being discussed internally and outside of public view. After 12 years of trying to find a way to better manage his river, I think it is better to have in public view these kinds of discussions rather than keep them from public view, but again, my questioning has meant no disrespect to you, General.

General and Mr. Smith, let me ask both of you what kind of communications exist between you and the Council on Environmental Quality? Mr. Smith, can you tell me what kind of discussions have existed?

Mr. SMITH. I personally have not been involved in any discussions with CEQ. I know that they have been playing a coordinating

role in this, just in terms of making sure that the different agencies of the Federal family are communicating effectively.

Senator DORGAN. General, are you familiar with the activities of the Council on Environmental Quality over at the White House, and what role, if any, they have had in these discussions?

General FASTABEND. Mr. Chairman, I share Mr. Smith's understanding that CEQ has a coordinating role, but I did not deal directly with CEQ.

Senator DORGAN. The reason I am asking that question is, I assume if there is some sort of commitment that was made in the last campaign with respect to these issues, that the CEQ would be the conduit through which that commitment comes to other agencies in the administration. I would also want to understand what is going on there. I must say, we asked the head of the CEQ to be here this morning, and the CEQ said he was unavailable and they refused to send someone else, so I will also see if we cannot find a proper time when we could visit with those policymakers.

My interest here is simple. My interest is in finding a way that this river is managed for the benefit of all of the people and all of the interests on that river, the wildlife interests, the ecological interests, the interest of farmers, the interest of people involved in recreation and boating.

I do not have the time, Mr. Hawks, but perhaps we can find a little time here in a moment, but I think there is great disagreement about the suggestions you make on transportation costs, especially railroad costs. I doubt whether anybody on the southern reaches of the Missouri River would tell you that rail rates are fair. They certainly will not tell you that on the northern reaches, but there are studies that take issue with that, and the methodology especially by which some are claiming that the availability of barge traffic tends to keep rail rates down.

In fact, as I understand it, what is happening is, the barge traffic is moving grain down so that it can bring fertilizer back. It is a back-haul for fertilizer coming north, and fertilizer coming north is probably an appropriate metaphor for the difficulties we are faced with 12 years here. What we would like is good policy heading north that says to people on the northern reaches of this river in the upstream States that we are going to manage this in a manner that is fair to you. It is fundamentally unfair at the present time, and I very much want the Corps to proceed to meet the commitments that the Secretary of the Army and the head of the Corps have made to us.

Well, I have taken more of my time—let me ask Senator Hagel to inquire.

Senator HAGEL. Mr. Chairman, thank you, and to each of you, thank you for coming before our committee this morning.

General, let me ask you the general question, how do you factor in the interests of all the different dynamics that you heard this morning and you are well aware of to get to a decision like the decision the Corps made last week? Do you think about power production? Do you think about flooding agriculture, transportation, or do you think about birds, or how do you do this?

General FASTABEND. Senator Hagel, thank you for that question. There are basically three things I have to do when I deal with

these issues. First of all I have to balance the multiple economic purposes for which the projects were built. I have to simultaneously comply with all environmental law, and I must simultaneously meet our trust and treaty obligations to federally recognized tribes.

Some people think at times that we are balancing the ESA against economic purposes. We do not do that. We may balance economic purposes against each other, but we do that and simultaneously meet environmental law and our trust and treaty obligations to federally recognized tribes.

So in this process what I have done is, I have very carefully immersed myself in all the input related to this issue, and I work very hard to maintain the multiple purposes for which the projects were authorized and built. As I said in my opening statement, we get instructions from the American people. Our last instructions were, operate these projects for these multiple purposes, so I will work very hard in all cases to maintain all purposes. Only when I get to the complete elimination of all possible constraints, or all possible latitude to maintain a purpose, will I regretfully let that purpose go. That is the problem I have been having on navigation in recent days, because I have not had the latitude to raise releases out of Gavins Point.

Senator HAGEL. Well, thank you. Let me dig a little deeper into this. Then how do you weigh the differences and the interests or priorities between the charge the Corps has on management issues on the river concerning flooding, navigation, versus the Endangered Species Act? Do you give each a few points and then you total them, or how does that work?

You have explained that you have three criteria that you have to deal with, and I agree that the Congress has placed the Corps, and we do year after year, in a situation where you are constantly ricocheting from policy decision to policy decision trying to weigh all the mandates that we push down on you. I understand that. I think most of us do.

But where I want to go then is, I understand what you have just said. Then how is the Endangered Species Act compliance more important than your other responsibilities of river management?

General FASTABEND. Senator, when you look at the economic purposes, my understanding is you do not see a clear priority and legislation documented anywhere with respect to any particular one economic purpose. Obviously, any threat to life is very important to us, and so flood control issues immediately come to mind. If someone had a gun to my head and said, which one is most important, any kind of threat to human life is a big problem.

Senator HAGEL. So you would rank human interests over bird interests?

General FASTABEND. I would rank risk to human life over bird interests, yes, sir, I would, but we have not gotten to the point where we have had to compare risks to human life to compliance with environmental law.

Senator HAGEL. Well, what was the decision about last week, then?

General FASTABEND. Last week, of course, we were in a tremendous drought situation. Tributary input is extraordinarily low. At

Lake Oahe, for instance, their input is 17 percent of what was expected, and so from the beginning of the annual operating plan this year we dialed back navigation from full service to intermediate service initially 1 May, and then down to minimum service on 1 July. In order to accommodate the drought situation, we made a decision which we are allowed to make under the current water control manual to do what we call flow to target. Flow to target means we try to meet the navigation targets as assigned for minimum service at the various control points on the river.

The alternative method is called flat release. If we had gone to flat release, we would have made a judgment of how much tributary drying we would have gotten over the summer and we would have made a guess, added the drying effect, and gone with a flat release that was relatively higher in the late spring. We went to flow to target because that saves water. It saves about a million and a half acre feet in the upstream States. It helps ameliorate the impacts of drought on the upstream States. It means about a foot and a half elevation in those reservoirs.

The problem with flow to target is that sometimes you dial the river back, sometimes you dial it back up. Because of the extraordinary drying effect and the reduced input from the tributaries below Gavins Point Dam we needed to bring the river back up, and we found out when we started to move nests and eggs that our understanding of the incidental take statement in the current biological opinion was not the same as what the Fish and Wildlife Service had. Therefore we were not able to move those nests, not able to bring the water back up. This is not an issue of a threat to human life. It is an issue of maintaining the navigation purpose for which the project was authorized.

I am at minimum service and dropping now because I cannot bring the water back up. I have absolutely no other option. I have initiated releases out of the Kansas Reservoir System, but under the water control manual that increase is limited to 3,500 CFS. I am at that. That will only last a couple of weeks, and so I have exhausted every option. The only way to continue to meet the navigation purpose would be to violate the Endangered Species Act, and I do not intend to do that.

Senator HAGEL. So as you have just taken us through the process, the consequences for a decision like this staying in place, and there will be consequences. Maybe not flooding today, to your point, because we are experiencing a drought, but the consequences that will follow on here, economic consequences, power generation, municipality consequences and all the rest, if this decision holds, surely you would think about that as well, or maybe you cannot. Is that what you are telling me, that you are so locked into an interpretation of the law that the consequences be damned, or what is it?

General FASTABEND. Senator, I do think of the consequences. For instance, I would tell you if I had a barge that was in a reach of the river that would be grounded immediately, and it had a hazardous material on it, I would be thinking very seriously about making a different decision, but I do not have that situation right now.@

Senator HAGEL. Let me ask you this, because I know my time is about out, and I thank you, Mr. Chairman, where do we go from here?

General FASTABEND. Senator Hagel, I would suggest we have to continue to advance the process, allow the Fish and Wildlife Service to pursue their consultation, to come up with a consolidated position and move it forward. The sooner we can move the process forward——

Senator HAGEL. What does that mean?

General FASTABEND. We need to get to the step of producing a final environmental impact statement, allowing a 30-day comment period on that. Based on that comment, I need to sign a record of decision, and we need to update the water control manual.

Senator HAGEL. Well, I know my time is up. I would just, until we come back around, if we have another round, strongly suggest that you get the General to go see the chairman. It might be in everyone's best interest to get that done.

Thank you, Mr. Chairman.

Senator DORGAN. Following on that question, if I might, before I call on Senator Johnson, I think Senator Hagel was trying to sense, is there a time frame here? Is there a target date? I mentioned the May target date. Now you are involved in private discussions internally. Is there an end date for those discussions? Is there a target date?

General FASTABEND. In our informal discussions with the Fish and Wildlife Service we are shooting at a goal of trying to conclude our informal consultation the end of July. That may be difficult to meet. This recent event on the Missouri River last week takes a lot of the attention of the same people that are trying to do the informal consultation, so we are already beginning to wonder if we can make our internal goal of completing the informal consultation by 31 July.

Mr. Chairman, there are differences of opinion between good, honest, hardworking professionals on each side that are trying to do their job. It might turn out that the results of the informal consultation will be a decision that we have to go to formal consultation under the Endangered Species Act. That could change our time line. However, we are still working as hard as we can to get the Final Environmental Impact Statement out and to meet our goal of doing the record of decision in October 2002. That is what we are trying to do.

Senator DORGAN. Well, General, we have differences of opinion here in the Senate every single day, and we just have a debate and then we make a decision. I mean, that is just—you just make decisions, and my great angst here is that 12 years goes by, still no decision, and more concern now about a decision that may not come for some while.

Senator Johnson.

Senator JOHNSON. Well, thank you, Chairman Dorgan. Thank you to all the members of this panel. I think it has been very helpful. Welcome, General Fastabend. As the father of a son who served in Bosnia with the U.S. Army I concur that your background there, particularly the combat aspect, may serve you well in your current role.

General, may I first ask you your assurance that you and the Corps will work in a very conscientious manner with our Indian tribes along with the rest of the entities that you have to deal with on the management of the Missouri River? As you know, the Lower Brule and Crow Creek tribes in my State of South Dakota have filed suit over Lake Sharpe's operations, and it is important that we recognize the Government's unique relationships that we have with our tribes and the particular concerns that they have relative to the management of the Missouri River.

General FASTABEND. Senator Johnson, you have that assurance. We will continue to work hard with the tribes, recognize our obligation to and our consultation with them, and deal with them on a Government-to-Government basis.

Senator JOHNSON. General, it is my understanding that you have had some 55,000 public comments so far relative to the management of the Missouri River. Is there any way that you could characterize the direction of those comments, whether they support the status quo, they support a preferred alternative incorporating a return to natural river flows, or any other characterization that you could give to those comments?

General FASTABEND. Senator, I can give you an idea of the flavor of how you sort through 55,000 comments. I can tell you 45,000 were identical e-mails, the same message launched through the power of automation, so that gets you down to 10,000 and your life is feeling a little bit better right away.

Senator DORGAN. Can you describe those 45,000 identical messages?

General FASTABEND. Those 45,000 identical messages were in support of a spring rise and lower summer flows, so you have that input. The rest of the input generally reflected the wide, divergent range of interests on the river as you have heard in the testimony here this morning.

Senator JOHNSON. Well, General, I think you can understand the concern that some of us would have that the Corps was on the verge of disclosing its preferred alternative, then with the Bush announcements on June 14 that it would indefinitely postpone the Final Environmental Impact Statement, that there is the appearance of political intervention versus the need for additional scientific analysis on this issue, and the frustration that many would have and the perception that an issue which ought to involve less politics and more science and more economics has in fact been hijacked by political concerns.

Is there anything you can share with us that would lead us not to believe that this is simply a political intervention and not a need for any further scientific and economic analysis.

General FASTABEND. Senator Johnson, I can tell you the nature of the informal consultations we are having. They are not political consultations. They are not additional studies. I mean, there is generally broad agreement on the nature of the science and the economic analysis associated with these decisions. The devil is always in the details, and people have a different perspective on how to interpret the available science, they have different perspectives on how to apply that available science, and we have people that have

invested a decade of their lives in trying to resolve this issue, and as you can imagine, they feel strongly about it.

Both my counterpart in the Fish and Wildlife Service and I are telling our staffs, get past the emotion and drive to facts, just work to facts, and that is what we are doing. We are methodically understanding each other's differences of interpretation, and we are working very hard to resolve that. From my perspective it is all about understanding where people are coming from and why they interpret things the way they do, and sharing information, and working our best in a collaborative way to come up with a position that best serves the needs of the basin and the species.

Senator JOHNSON. Well, we want good analysis, we certainly want thorough consultation, but I share with Senator Dorgan the thought that at some point we need an end point where a decision has simply got to be made, and this cannot continue to be stretched out in some sort of infinite pattern.

Chairman Dorgan, I am going to have to excuse myself. I regret that, because we have an excellent next panel that is going to be here, including Mr. Doug Hofer from the South Dakota Department of Game, Fish, and Parks. There are a number of questions that I would like to ask of that particular panel, and I would request your indulgence and permission to submit those questions to that panel and to Mr. Hofer for their response.

Senator DORGAN. Without objection, we will include them.

Senator JOHNSON. I yield back my time.

Senator DORGAN. Senator Johnson, thank you very much. let me just ask a couple of additional questions, and then we will get to the next panel.

General Fastabend, if the informal consultations do not provide some kind of closure, and you must go to formal negotiations, can you restate for me what that means in terms of time?

General FASTABEND. Senator Dorgan, the nature of informal consultations, of course, is that under the Endangered Species Act there is not a rigorous time line. My understanding is when we go to formal consultation under the Endangered Species Act, Section 7 does apply a time line which is typically 135 days; 90 days to get a response and then 45 days to write it up, so if we go to formal consultation, at the point that we do, we would look for a 135-day time limit.

The other thing I can tell you, Senator, with respect to time, is that under the current Incidental Take Statement of the Fish and Wildlife Service's biological opinion, I have an obligation to make changes on the system in 2003. I am very conscious of this obligation, and so I am very highly motivated to maintain my coverage under the Endangered Species Act and meet this time line.

Senator DORGAN. Mr. Smith, can you tell me, what does the biological opinion say with respect to timing? Anything other than the 2003 date that the General just described, or is that the sole timing issue?

Mr. SMITH. That is the sole timing issue at this time.

Senator DORGAN. Mr. Smith, I understand you have some technical people with you. Are you or your technical people aware of any recommendation that has been made by the Corps of Engineers with respect to a preferred alternative?

Mr. SMITH. The Corps of Engineers has come to us with some ideas and asked for us to engage in informal consultation with them. We are currently working through that process, look at all of the available conservation measures that are in order to assist the Corps in coming up with a final preferred alternative so that we can then proceed with formal consultation in an expedited manner.

Senator DORGAN. Let me ask you or your technical person if the Corps had proposed to you a 5-year plan during which there was no spring rise, and some sort of studying during that period, would that comply with the Endangered Species Act in your judgment?

Mr. SMITH. Well, I think what we would have to do is to take a look at the entire regime in which the Corps is proposing to operate the system and all available conservation measures that they would build into that model before we can make an assessment on whether or not that the action will result in jeopardy to listed species.

Senator DORGAN. Well, last year during the consideration on the Energy and Water Appropriations Act, we put a provision in the act that allows consideration of alternatives for achieving species recovery other than the alternatives listed in the biological opinion. Are those alternatives being considered and, if so, what are they?

Mr. SMITH. We are currently considering all available possibilities and all possible conservation tools. We are not ruling out anything at this time. Some of them would include manual manipulation of habitats and off-channel spawning areas.

There is quite a lengthy list that we would be more than happy to provide your office.

Senator DORGAN. All right. General Fastabend, one last time if I might, with respect to the period towards the end of May, when we expected to hear a preferred alternative from the Corps. You will not tell me the preferred alternative, so I will have to try to get General Flowers here if we can. Can you describe to me at least the circumstances under which it was determined that no such preferred alternative would be announced to Congress? Was there a big red light that went on, or was there a door that shut somewhere, was there a telephone call made? If so, what was the origin of that?

General FASTABEND. The Fish and Wildlife Service and the Corps of Engineers at the senior levels made the decision that the process would best be served if it was a nonpublic interagency process.

Senator DORGAN. All right, and that would be General Flowers and perhaps Secretary White in your shop?

General FASTABEND. From my perspective, I am sitting here sweating bullets because I have told you General Flowers. In fact, it is his Deputy that represents him. General Griffin is my typical point of contact on this issue, but of course he represents General Flowers for many things that General Flowers is responsible for. In my primary dealings, I get my instructions through General Griffin.

Senator DORGAN. We will assume it is General Flowers unless you call me back and tell me otherwise. Knowing General Flowers, my expectation is, this decision would not be made without his active involvement.

Mr. Smith, who at the head of your agency would have been involved in making these decisions?

Mr. SMITH. I am not sure if we were involved in making any decisions at all.

Senator DORGAN. Well, the General just said the folks at the head of your agency were.

Mr. SMITH. I understand what the General said, but the people who would have been involved would be Steve Williams, Director of the U.S. Fish and Wildlife Service, and Judge Craig Manson, the Assistant Secretary for Fish and Wildlife and Parks.

Senator DORGAN. I will send you a question on this. Would you inquire inside your agencies so that I can understand what happened at that moment? Who was engaged in deciding, we are going to put the brakes on? I need to understand that so I can understand the process here. Who has control of the stop and go buttons, and what the motives are to push certain buttons?

All right, let me thank all of you for being here and testifying. Mr. Hawks, let me send you some written questions, if I might, on the transportation issues, and General Fastabend, let me again say I mean no disrespect, I appreciate your service to our country, but I do mean to be pushy with respect to the Corps of Engineers. I have no more patience on this issue.

This issue should have been resolved a number of years ago, and it is not, and it now appears to me to be an illusive finish line once again, and I am not just speaking on my behalf. I am speaking on behalf of thousands and thousands and thousands of people, and endangered species, and on behalf of sound public policy and good science. And as I said when I started, I worry that there is circling this issue a barrelful of politics and a thimbleful of policy. I hope that is not the case, but I worry that that has been the case, especially in recent months.

As Senator Johnson said, I think we ought to just plow ahead here and make decisions on sound science and good economic policy, and there need not be any, or at least much additional study. This has been studied to death. If there is anything in my public career that I have seen studied, restudied, and studied once again, it is this issue, and I think it needs very little more study. What it needs is some action.

But again, let me say thank you for preparing testimony and presenting it to us, and I expect that we will have additional encounters on this very interesting subject. Thank you very much.

As they depart, let me call the next witnesses to the table. The next panel will include four witnesses, Dale Frink, State Engineer, North Dakota State Water Commission, Bismarck, North Dakota, Doug Hofer, director, Division of Parks and Recreation, South Dakota Department of Game, Fish, and Parks, Pierre, South Dakota, Michael Wells, chief of water resources, Missouri Department of Natural Resources, Jefferson City, Missouri, and Tex Hall, chairman of Three Affiliated Tribes, Fort Berthold Indian Reservation, New Town, North Dakota.

Let me ask that we have people take their seats and ask the witnesses to please come forward. While the witnesses are being seated I am going to include in the record without objection testimony

by Richard Opper—we will include their titles—Dennis Hill, Chad Smith, and the Standing Rock Sioux Tribe.

Let me thank this panel for being with us today, and let me also ask consent that we include in the record a statement by Jonathan Bry and also Jill Denny-Gackle, and we will include the organizations for which those statements apply.*

Senator DORGAN. Mr. Frink, why don't we begin with you. Why don't you proceed. Your entire statement will be made a part of the record, and you may summarize.

STATEMENT OF DALE L. FRINK, NORTH DAKOTA STATE ENGINEER, AND CHIEF ENGINEER-SECRETARY TO THE NORTH DAKOTA STATE WATER COMMISSION

Mr. FRINK. Thank you, Mr. Chairman.

Mr. Chairman and members of the subcommittee, my name is Dale Frank, North Dakota State Engineer. Thank you for the opportunity to testify on this very important issue. Today, I present the same strong, clear, and consistent message that North Dakota and other Missouri River Basin States have been voicing for years. The Missouri River master manual must be changed to meet the contemporary needs of the basin. The time of change is long overdue.

The Flood Control Act of 1944 envisioned many benefits, and for the most part the Missouri River dams have fulfilled these expectations, but things change in 60 years, and a more detailed look at today's uses is very revealing. Flood control, power generation and water supply certainly have all lived up to their original expectations. In fact, all have significantly exceeded the original estimates, providing hundreds of millions of dollars of benefits.

On the other extreme, upper basin irrigation development and downstream Missouri River navigation have not even come close to realizing their expectations. In North Dakota, we were promised over 1 million acres of irrigation for our 500,000 acre contribution of prime river bottomland for the Garrison and Oahe reservoirs. Unfortunately, the dams flooded out more acres than were actually under irrigation in 1944 than the State has received back from the Pick-Sloan plan. Likewise, downstream navigation was expected to move 20 million tons of goods annually. That projection has proven unrealistic, with current levels of navigation being a paltry 1.5 million tons of goods annually.

Recreation, on the other hand, has far exceeded 1944 estimates. Today, recreation is big business along all reaches of the Missouri River. In North Dakota, Lake Sakakawea and Lake Oahe provide major recreation opportunities to tens of thousands of residents and visitors to the State. The Corps estimates that the national economic benefits from recreation add $84.7 million annually, compared to $6.9 million for navigation. The current master manual was developed largely in-house by the Corps of Engineers in the 1960's. It predates the passage of NEPA, the Threatened and Endangered Species Act, the Clean Water Act, and many other Federal laws passed to protect the environment. The master manual for the Missouri River must reflect these changes.

* Statements can be found in the appendix.

We are very pleased that the Corps of Engineers is considering five alternatives to the current master manual. All five alternatives conserve water in the main stem reservoirs during times of drought, a recurring plague in the Northern Plains. Conserving water in the reservoirs during dry periods improves conditions for fish survival and recreation. It also translates into more hydropower production.

If any of these alternatives would have been in place during the droughts of the 1980's, Lake Sakakawea would have been 4 to 6 feet higher than under the current plan. This would translate into far better fish habitat, more efficient hydropower generation, and an overall improvement in the economy of the areas that border the Missouri River System.

The nine members of the Missouri River Basin Association have worked very hard to reach agreement on changes to the master manual. In November 1999, seven of the eight member States agreed to support a revised plan that included drought conservation measures for the main stem reservoirs, increased monitoring, and the formation of a recovery committee to facilitate the concept of adaptive management of the river system. This plan is very similar to the Corps' modified conservation plan.

In February 2000, MRBA agreed to expand its 1999 recommendations in view of the U.S. Fish and Wildlife Service's biological opinion that spring releases from Gavins Point Dam be increased to help recover certain threatened and endangered species. Six of the eight States agreed to support this recommendation. The MRBA recommendation is rather complex, and is more completely described in Richard Opper's testimony that has been provided.

I am extremely disappointed that the Corps has chosen not to identify a preferred alternative. The lack of a preferred alternative further confuses public comment on a subject that is inherently complicated. I strongly disagree with the Corps' go-slow approach, especially since all of the alternatives will greatly improve conditions to the master manual.

Though the Missouri River and the operations of the dams are critical to the future of North Dakota, we realize all States in the basin depend on the river. Clearly, any changes in the master manual must support adequate water supplies for all cities and industries along the river. This need was carefully evaluated by MRBA members before agreeing to support their ultimate recommendation.

We and most of our neighbors also agree that the upstream and downstream interests must equitably share the pain during the periods of drought. I urge the Corps of Engineers to adhere to its current schedule for completing the master manual revision process. The time for equitable distribution of benefits of the Missouri River operations and equitable sharing of water shortages is now.

There is no question that any of the five proposed alternatives is a significant improvement over the current master manual. The results of the many economic, hydrologic, and environmental studies and restudies clearly illustrate the Missouri River System can be better managed to benefit us, our children, and the entire Missouri. As a final thought, the five main steam dams authorized by the 1944 Flood Control Act were constructed in 18 years. If the

master manual is revised in 2003, it will have taken 14 years. 14 years is long enough and further delays are not acceptable. The time has come to meet the contemporary water needs of the entire basin.

Thank you.

Senator DORGAN. Mr. Frink, thank you very much. Let me next call on Mr. Michael Wells, chief of water resources, Missouri Department of Natural Resources.

Mr. Wells, thank you. You may proceed.

STATEMENT OF MIKE WELLS, CHIEF OF WATER RESOURCES, STATE OF MISSOURI

Mr. WELLS. Good morning, Mr. Chairman. My name is Michael Wells. I am chief of water resources for the State of Missouri. I want to thank Senator Dorgan for inviting me to give testimony on this very important issue. I also would like to thank Senator Carnahan for making a request to Senator Dorgan that a representative from the Missouri Department of Natural Resources be allowed to testify on this critical matter.

Because the Missouri River is such a vital resource to the State of Missouri, all members of the Missouri congressional delegation and Governor Bob Hilden, representing more than 5.6 million people, speak with one voice to ensure that changes in Missouri River management will not harm the citizens of our State.

In Missouri, the Missouri River means drinking water for over half of our citizens, cooling water for our utilities, water to support navigation, unique recreational opportunities, and a valuable fish and wildlife habitat. The State of Missouri strongly opposes any changes in the management of the Missouri River that would be adverse to any of these uses.

We, too, are concerned that decisions regarding the future management of the Missouri River have not yet been made. Uncertainty and conflict have made long-term planning investments for Missouri River communities a tenuous task at best. However, since decisions on the future management of the Missouri River will have a profound and lasting impact on our Nation's welfare, we must ensure that the best plan possible be made.

As painful as delays can be, the State of Missouri does not support a premature decision that is made to meet arbitrary deadlines or political agendas. Reliable flows from the Missouri River are not only economically and environmentally important for the Missouri River, but for the Mississippi River as well. In times of drought, the Missouri River provides as much as two-thirds of the flow of the Mississippi River at St. Louis. This stretch of river between St. Louis and Cairo, Illinois, is often referred to as a bottleneck reach. Located between the locks and dams on the Upper Mississippi River and the Ohio River, low water in this reach can created a large bottleneck in the movement of bulk commodities, impacting the entire inland waterway system.

Because any decision to change the management of the Missouri River has far-reaching impacts, it is imperative that the impacts for the Mississippi River be fully analyzed, the information made available to the public prior to review prior to making any decision on a preferred alternative. A poor decision could have devastating

impacts to our Nation's inland waterway system. That is why eight Missouri River Governors have joined Governor Bob Holden on more than one occasion to ask President Bush to ensure that the U.S. Army Corps of Engineers fully analyze all impacts on the Mississippi River.

Because several key studies have not been finalized on the Mississippi River, a decision on a preferred alternative at this time is premature. These letters are included in my testimony for the record.*

In addition to the request made by the nine Mississippi River Governors, 16 mayors and county executives along the Missouri and Mississippi River have requested that President Bush withdraw all the new plans proposed for the Corps of Engineers because of unacceptable impacts to the Missouri and Mississippi River communities. The State of Missouri continues to oppose drastic flow changes below Gavins Point Dam that would increase flooding or provide less useable water to the downstream States.

The flow alterations recommended by the U.S. Fish and Wildlife Service's biological opinion are much too prescriptive, and do not give the Corps the latitude to develop management plans that continue the recovery of the ecosystem while not harming other uses of the river. Because the Fish and Wildlife Service recommendations have such far-reaching impacts, a high level comprehensive review of their work should be completed prior to selecting a new plan.

There also is a great concern from downstream users that measures proposed by the Corps for drought conservation are so extreme that flow support for downstream uses will be devastating to both economic and environmental interests. We are encouraged that efforts by the Corps and other agencies in recent years have improved the Missouri River's ecosystem.

Under the current master manual there have been significant increases in the number of interior least tern and piping plover. We have also seen progress and recovery efforts for the pallid sturgeon. This progress and recovery of these endangered or threatened species has been accomplished without changes in downstream flows.

We applaud the Congress for authorizing additional lands for the Missouri River mitigation project. Efforts such as these will continue to pay dividends in the recovery of the Missouri River ecosystem.

In closing, decisions should not be made until all studies have been completed and the public has had an opportunity to review them. The State of Missouri strongly opposes any increase in storage in the Missouri River System that benefits upstream interests at the expense of downstream water needs. The State of Missouri is committed to working with the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and all other interested parties to find a workable plan for the Missouri River that both enhances the environment and ensures the resource remains a river of many uses.

*The letters have been retained in subcommittee files.

I want to again thank you, Senator Dorgan and the committee for this opportunity to express the State of Missouri's position on this important issues, and look forward to any questions.

Senator DORGAN. Mr. Wells, thank you very much. Next, we will hear from Director Douglas Hofer, director of the Division of Parks and Recreation, South Dakota Department of Game, Fish and Parks.

Mr. Hofer, you may proceed.

STATEMENT OF DOUGLAS HOFER, DIRECTOR, DIVISION OF PARKS AND RECREATION, SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS

Mr. HOFER. Thank you, Senator Dorgan, and I also want to thank Senator Johnson for inviting me to appear before the committee today. I am the director of the Division of Parks and Recreation, and as part of that system of State parks that we manage in South Dakota we have 68 areas on the Missouri River on four different reservoirs that are part of the Pick-Sloan project. This hearing is extremely timely for those of us living in South Dakota, where we find ourselves in the grip of a prolonged drought. The need for a revised Missouri River master manual has never been more critical in the Upper Basin, and a contemporary approach to managing this river is long overdue.

Fishing, boating, camping, and other water-related recreation on the Missouri River are very important to us in South Dakota. Last year, 3 million visits were made to the Missouri River recreation and lakeside use areas managed by our State of South Dakota. This included 70,000 overnight camping units, over 500,000 angler days of fishing. These angler days are worth more than $40 million to South Dakota's economy and create hundreds of jobs.

Interestingly, while the dams and reservoirs bought many benefits to the downstream States, navigation on the lower Missouri has never developed to its original expectation, and while no one even mentioned recreation as one of the project benefits back in 1944, it has exploded as a viable industry on the main stem reservoirs.

The current master manual does not adequately address the conflict between navigation and recreation. Water releases for navigation continue to receive the highest priority in water management at a time when the Upper Basin is in the middle of a drought. Let me relate this directly to the situation that we are facing in South Dakota, and two crises that we have already had to deal with this year.

Our once nationally recognized trophy walleye fishery was supported primarily by a prey source of rainbow smelt. Anglers came from all over the United States to Lake Oahe to catch walleyes. In 1996, there were 2 million hours of fishing just on Lake Oahe alone, estimated to be worth $20 million to our economy. In 1997, one-half billion adult smelt were flushed downstream due to high water releases through Oahe powerhouse later in the summer after the threat of flooding downstream had passed, exacerbating the crash of Lake Oahe's crayfish populations.

We at the Department of Game, Fish and Parks have worked hard in turning this situation around by trying to get anglers to

return to Oahe in hopes of reducing predator abundance and bringing our reservoirs back into balance. Incentives have helped increase fishing pressure and predator harvest twofold from 2000 to 2001. Predator abundance has been reduced and the stage has been set to allow crayfish to recover.

However, rainbow smelt and other forage fish spawn in extremely shallow water, often 6 inches or less, and the worst case scenario is one in which lake levels drop after the fish have spawned. Rising lake levels greatly enhance crayfish survival by protecting them from harsh effects of wind and waves. If the lake levels drop below the level in which crayfish eggs are deposited, no reproduction will occur.

This spring we experienced a run of spawning smelt that held promise in restoring the prey base and the fishing that Lake Oahe enjoyed prior to 1997. Unfortunately, Lake Oahe was scheduled to drop more than 2 feet during the time the eggs were incubating, leaving them high and dry. The severe drawdown of Lake Oahe was being done at a time of drought in order to meet navigation targets established in an out-of-date master manual.

Out of desperation to save the fishery and the significant economy that surrounds it, our Governor, William Janklow, initiated a lawsuit this spring aimed at holding water levels on Lake Oahe stable until the smelt spawn was complete. South Dakota successfully demonstrated to the court that the arbitrary operation of the main stem reservoir in general, and Oahe Reservoir in particular, had severely harmed Oahe's fish population. This set off a string of lawsuits throughout the basin that ultimately led to other restraining orders and an appeal by the Corps of Engineers to the Eighth Circuit Court of Appeals.

These extreme measures simply point to the need for a contemporary master water control manual for the Missouri River, something the Corps of Engineers has been working on and delaying for 13 years, long enough for the Upper Basin States to experience two droughts.

By the end of the year, we will be approaching the lowest water levels recorded on Lake Oahe since the dams spilled in the early 1960's, over 30 feet below full pool level. We sit on the bring of losing all boating access on this huge lake if the drought persists. Right now we have 31 boat ramps in South Dakota. That does not count the boat ramps on Lake Oahe in North Dakota, but 31 ramps on Lake Oahe in South Dakota.

The primary ramps at 13 of these sites are out of service today because of the low water. By the end of the summer, we expect seven more to be out of service. That is two-thirds of the boat ramps. If the trend continues that we are on today and no change is made in the way that the river is managed, the drought continues, all of our boat ramps on Lake Oahe will be out of service by this time next year.

The effects of low water have reduced visitation to Lake Oahe this summer, and closing more boat ramps will lead to further decline in visitation. If the current trend continues, nearly all of the $20 million economy associated with recreation on just Lake Oahe will be lost next year. The recreation and fisheries management

challenges being presented in the drought year of 2002 provide a compelling example of why a new master control manual is needed.

Thank you.

[The prepared statement of Mr. Hofer follows:]

PREPARED STATEMENT OF DOUGLAS HOFER, DIRECTOR, DIVISION OF PARKS AND RECREATION, SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS

Thank you for inviting me to appear before the Subcommittee on Water and Power of the Committee on Energy and Natural Resources to discuss water management issues on the Missouri River. I am Douglas Hofer, and I appear before you representing the State of South Dakota on behalf of the South Dakota Department of Game, Fish and Parks. This hearing is extremely timely for those of us living in South Dakota, where we find ourselves in the grip of a prolonged drought. The need for a revised Missouri River Master Water Control Manual has never been more critical in the upper basin and a contemporary approach to managing this river is long overdue.

First of all, let me comment on the obvious: The dry conditions in the basin this year are creating a hardship for us in the upper basin states. These times of low runoff demonstrate the continuing and critical need for a new Master Manual which takes an adaptive management approach to water supplies and water flows within the basin on an annual basis.

Fishing, boating, camping, and other water-related recreation on the Missouri River are very important in South Dakota. Last year, three million visits were made to Missouri River recreation and lakeside use areas in our state. This included 70,000 overnight camping units and over 500,000 angler days of fishing. These angler days are worth more than 40 million dollars to South Dakota's economy and create hundreds of jobs.

It's worth noting here that, under the original Pick-Sloan Plan in 1944, our nation embarked upon a plan to harness this great river. We South Dakotans realized that there was going to be a price to pay, because rich bottom lands in South Dakota and in the other upper basin states were forever flooded so people in places like Sioux City, Omaha, Council Bluffs, Kansas City, and St. Louis could be free from devastating floods. We were willing to make sacrifices because as it was proposed, in exchange for having our lands flooded and our people moved from lands they and their parents had homesteaded and settled, the Pick-Sloan Plan included promises of prosperity to South Dakota. In exchange for our priceless bottom land, we were promised irrigation of some 750,000 acres and water supply projects to our cities and towns promises that would help provide a way of life for our farmers, tribal members, and businesses by stabilizing an economy that was all too dependent on Mother Nature. Related to these promises were additional promises of wildlife mitigation for the hundreds of thousands of habitat acres lost to the dams.

However, something happened along the way! Somehow, after the dams were built and our downstream neighbors could forget about the terrible floods while enjoying the benefit of cheap electric rates and subsidized barge traffic carrying commodities between their cities, they forgot about the promises to South Dakota and our upstream neighbors. They, and the agencies of the federal government, forgot that their benefits came at a direct and terrible price to South Dakota. They forgot that in exchange for their new found prosperity and development along their sections of the Missouri River, hundreds of thousands of acres of our richest ranching, farming and wildlife lands were taken by the federal government and forever flooded.

Interestingly, while the dams and reservoirs brought many benefits to the downstream states, navigation on the lower Missouri has never developed to its original expectations. And, while no one even mentioned recreation as one of the project benefits back in 1944, it has exploded as a viable industry on the upper basin mainstem reservoirs. In fact, as you know, the COE Revised Draft Environmental Impact Statement for the Missouri River Master Water Control Manual credits recreation with $84.6 million in annual benefits while navigation creates a mere $6.9 million in annual benefits.

So, as you can see, we are at a major crossroads today. The Corps continues to operate the reservoirs by an outdated Master Control Manual. Some of the original purposes of the Pick-Sloan Plan, like hydropower and flood control, are still valid today. However, the current Master Manual does not adequately address the conflict between navigation and recreation. Navigation still takes water to support a barge channel and during times of drought and water shortages the upper basin recreation industry suffers accordingly. To keep a full navigation channel below Sioux

City, Iowa, our reservoirs are drained and our boat docks left high and dry. An $84.6 million industry that offers recreational benefits to hundreds of thousands of people is held hostage to a declining and subsidized barge industry which has a $6.9 million annual impact. In summary, not only did the people of South Dakota get to stare at the empty promises of irrigation and water supply, but we now get to stare at declining reservoir water levels as our recreation industry goes down the drain to St. Louis.

We have often wondered how many jobs the barge industry creates. We now have that number 25 to 40! Are we in South Dakota hearing right? Are we, as a Nation, continuing to support a barge industry supplying 25 to 40 jobs a year having an economic impact of only $6.9 million a year when the overall costs to the taxpayers to maintain the barge canal costs more than the entire industry is worth? And water releases for navigation continue to receive the highest priority in water management at a time when the upper basin is in the middle of a drought?

Let me relate this directly to the conditions we are facing on the Missouri River in South Dakota this year. Our once nationally recognized trophy walleye fishery was supported primarily by a prey source of rainbow smelt. Anglers came from all over the United States to Lake Oahe to catch large walleyes. In 1996, there were two million hours of fishing just on Lake Oahe, estimated to be worth $20 million dollars. In 1997, a half billion adult smelt were flushed downstream due to high water releases through the Oahe powerhouse intakes and stilling basin exacerbating the crash of Lake Oahe's prey fish populations. Following the prey fish population crash, the walleye fishery began to suffer. By the year 2000 fishing pressure had dropped to only 25 percent of what it had been and the economic value also fell to only $8 million dollars. Many businesses and communities which depend on fishing and related recreation have been affected negatively.

We at Game, Fish and Parks have worked hard at turning this situation around by trying to get anglers to return to Oahe in hopes of reducing predator abundance and bringing our reservoir back into relative balance. Incentives have helped increase fishing pressure and predator harvest two-fold from 2000 to 2001. Predator abundance has been reduced in the lower two-thirds of Oahe and the stage has been set to allow prey fish to recover. However, rainbow smelt and other prey fish spawn in extremely shallow water, often 6 inches or less, and the worst case scenario is one in which lake levels drop during and after the fish have spawned. Rising lake levels greatly enhance prey fish survival by protecting them from the harsh effects of wind and waves. If lake levels drop below the level at which prey-fish eggs are deposited, death through desiccation is ensured.

This spring, we experienced a run of spawning smelt that held the promise of restoring the prey base and the fishing that Lake Oahe enjoyed prior to 1997. Unfortunately, Lake Oahe was scheduled to drop more than two feet during the time the eggs were incubating leaving them high and dry. This severe draw down of Lake Oahe was being done at a time of drought in order to meet navigation targets established in the out of date master manual. We already had four years of intense fishery management invested in the turn-around of Lake Oahe.

Anglers and businesses in central South Dakota had sacrificed long enough. To my knowledge, the barge industry has not sacrificed at all but continues to "have their cake and eat it too" at the expense of the recreation industry in the upper basin.

Out of desperation to save the fishery and the significant economy that surrounds it on Lake Oahe, Governor William Janklow initiated a lawsuit this spring aimed at holding water levels on Lake Oahe stable until the smelt spawn was complete. South Dakota successfully demonstrated to the Court that the arbitrary operation of the mainstem reservoirs in general, and the Oahe Reservoir in particular, had severely harmed Oahe's fish population.

This set off a string of lawsuits throughout the basin that ultimately led to other restraining orders and an appeal by the Corps of Engineers to the Eighth Circuit Court of Appeals. These extreme measures simply point to the need for a contemporary master water control manual for the Missouri River something the Corps of Engineers has been working on and delaying for over 13 years, long enough for the upper basin states to experience two drought cycles.

Since May 21, 2002, Lake Oahe's water level has dropped from elevation 1596.2 to 1592.5, a drop in the water level of 3.7 feet in this 300,000 acre lake in just over a month. Full pool on Lake Oahe is at elevation 1618, over 25 feet higher than Lake Oahe is today. If the drought continues this summer, the Corps of Engineers has predicted that Lake Oahe will drop another six feet by the end of September. By the end of the year we will be approaching the lowest water level recorded on Lake Oahe since the dams filled in the early 1960s after the completion of the Pick Sloan project.

The extremely low water level has already had a negative affect on Lake Oahe recreation and its associated recreation economy. We sit on the brink of losing all boating access on this huge lake if the drought persists and the Corps of Engineers continues to use an outdated master manual, a manual that directs the use of over sixteen billion gallons of water per day to support a very small barge industry at a time when the upstream states are suffering from a severe drought.

Thirty-one boat ramp sites exist on Lake Oahe in South Dakota. The primary boat ramps at 13 of these sites are out of service today due to the low water levels, and it is expected that another 7 primary boat ramps will be out of the water by the end of the summer. If the drought continues for another 12 months and no appreciable changes occur in the management of the river flows under the current master manual, all 31 primary boat ramps will be out of service on Lake Oahe by June of next year. What is even worse is that under the current master manual, navigation would continue to demand water releases until this reservoir is drawn down a total of 78 feet to elevation 1540, the elevation at which it is physically impossible to release water through the intakes.

The effects of low water have reduced visitation to Lake Oahe this summer and closing more boat ramps will lead to a further decline in visitation. If the current trend continues, most of the $20 million dollar economy associated with recreation on Lake Oahe will be lost next year. This will be devastating for resorts, marinas, motels, restaurants, bait shops and many other businesses in central South Dakota that depend on the visitors that come to Lake Oahe each year.

This river is in a state of decline. The time has come to change how water is managed for the Missouri River. The recreational and fisheries management challenges being presented in the drought year of 2002 provide a compelling example of what is at stake for the State of South Dakota and for all the other upper basin states.

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

Next, we will hear from Tex Hall, chairman of Three Affiliated Tribes. I might also say that Mr. Hall is president of the National Congress of American Indians, and we welcome you here.

STATEMENT OF TEX HALL, CHAIRMAN, THREE AFFILIATED TRIBES, FORT BERTHOLD INDIAN RESERVATION, NEW TOWN, ND

Mr. HALL. Thank you, Mr. Chairman, for having this oversight hearing on a very important issue and, of course, that is grandfathering our language in the Missouri River. Just about a 30-second history of our tribe as you know, Mr. Chairman, Fort Berthold is located on the west central boundary of North Dakota, and our history predates the State and, of course, our people had Sakakawea, who we lent to Lewis & Clark when they did the expedition out to the west coast, and so the contributions are many for our people.

And before the 1944 Flood Control Act came into being our tribe was one of the few 100 percent self-sufficient tribes, no unemployment, no welfare, completely self-sufficient because of the river, before they had the dams, and so we got our food, we raised our gardens, and before the flood came in, of course, when the 1948 Army Corps of Engineers came in and did not provide any consultation, it was to me one of the worst Federal removal projects in the history of this country.

The Garrison Dam created Lake Sakakawea, which flooded out 156,000 acres of our capital, and it was very interesting to hear Senator Carnahan and Senator Bond and other Senators talk about loss of homes, loss of jobs, loss of shoreline. We know all about that, and it happened 60 years ago, and our grandparents, basically our parents have said what happened in the loss of that 156,000 acres was, we really lost our economic engine. There is no way that can ever be replaced and, of course, we are very grateful

for you, Mr. Chairman, and Senator Conrad for the Equitable Compensation Act that was partial compensation for what we lost, but we can testify for hours about what we lost, and the devastation of the dam that created.

And so 60 years later now we are just starting to replenish and rebuild our economy, and I concur with a lot of the speakers here now that now that you have the loss of the lake levels, we have a lot of recreation areas at Fort Berthold now, and it is a big part of our economy, and now we have boat docks that we cannot access, we have people that are not going to that part of the lake, and I concur with Mr. Hofer and some of his—I have been down to Standing Rock, and I have seen the Oahe Reservoir. It is a terrible scar. It is an ugly scar to see the lake levels drop, and so we are very concerned and very disappointed in the Corps' lack of decision, and I appreciate your comments, Mr. Chairman, on trying to get to some sort of a resolution or answer to that.

We, too, I mean, all of the tribes have been—we just met yesterday in Bismarck on the Trust Reform Task Force on Reorganization. We believe as tribes that under the Winters doctrine the river is a trust asset, and we feel it is being mismanaged.

Just like in the Cabell litigation on the Department of the Interior trust assets mismanagement, where we cannot account for billions of dollars in the Department of the Interior, now we are having mismanagement of the river, which clearly there is a legal obligation here to the Indian tribes, and I was very appreciative of General Fastabend's comments about the—I think it was when Senator Hagel asked him what criteria he used when he was making his decisions, one of the criteria—he named three, was recognition of the trust responsibility to Indian tribes, and so I was very appreciative of that, and we want to hold him to that, and I am glad he said that on the record, because that is very important to us.

One of our big concerns is the lack of consultation with the tribes. We did put up many, many comments in my testimony, Mr. Chairman, written testimony submitted for the record, and we submitted many, many comments about the need for full and meaningful consultation, because there is a legal obligation, because the water is under the Winters doctrine a trust asset of the tribe, but we are concerned that there is not enough consultation.

And I do not know if there ever was a specific answer from General Fastabend about the time frame, but we had asked for an Indian desk at the headquarters in the Army Corps of Engineers, so we have a point of contact, so we can get resolutions as well, and answers to some of our questions, and we would ask for your help, Mr. Chairman, in getting that desk established at Army Corps of Engineers Headquarters here, so that is very important.

Let me just give some recommendations, Mr. Chairman, what we think can be done. The first recommendation we have is, the Three Affiliated Tribes and other tribes along the Missouri, is pass legislation that creates a joint task force between the Corps and the tribes along the river to address tribal concerns.

No. 2 would be, pass legislation allowing the tribes the opportunity to manage various aspects of the river management system similar to the self-determination action. We are trying to work on

a joint management agreement right now with the Corps, but that has taken many years to get to a point where it seems like there is no end in sight, and again if we have legislation just similar to the 1993 638 piece of legislation of self-determination that allows tribes to help manage, then I think that legislation would help us more quickly.

No. 3, provide the necessary resources to identify, protect, and preserve the cultural and historical sites along the Missouri River that are sacred to the tribes along the river, and there is a need for more than $77 million annually, and this is a figure from the Army Corps of Engineers itself. However, there is only $3 million appropriated for the fiscal year, and some of these sites are the most endangered, and I might add, Mr. Chairman, that as the bicentennial approaches next year, 2003 to 2006, there is a tremendous amount of potential for visitors to come. Unfortunately, many of those sites are flooded and inundated underwater, and the sites that are remaining are being endangered by the droppage of the lake. They say there is between 40 and 80 sites, cultural sites that are lost each year because of the droppage of the river, and only $3 million appropriated, and the unmet need is $77 million.

Our next recommendation would be to strengthen laws that are already on the books for cultural site protection. I believe that the executive orders on consultation are not strong enough. We need legislation to require adequate protection to these sacred sites.

The next recommendation is to pass legislation to provide a joint memorandum of understanding with the Corps and the tribes for policing of Corps lands along the river and the lakeshore. Again, with the bicentennial we feel that there are going to be many visitors. If the lake keeps dropping like it is going to continue to drop, more sites will be exposed, and the Corps does not have the resources to police the shores as it is, and so we are asking for legislation to have a memorandum to have joint policing by the tribes.

Another recommendation we have is to set aside revenue from the WAPA power sales for cultural site preservation. It is my understanding, there are tribes along the Columbia River that are doing it with the Bonneville Power Association, and I would recommend that we look at that for the WAPA power sales to make sure that this legislation does not allow the funds to be used for other purposes. In my understanding there is about $866 million that comes in revenue from the WAPA sales, but if 1 or 2 percent of that could be set aside for cultural site protection, I think that that way we have a guaranteed source of revenue.

Mr. Chairman, I realize my time is up, but these are some of the recommendations that we would strongly ask that your committee and, Mr. Chairman, with your influence to help get that done for the tribes. This affects all the tribes, and as was mentioned from St. Louis to the Pacific Northwest.

So thank you very much for this opportunity.

[The prepared statement of Mr. Hall follows:]

PREPARED STATEMENT OF TEX HALL, CHAIRMAN, THREE AFFILIATED TRIBES, FORT BERTHOLD INDIAN RESERVATION, NEW TOWN, ND

Mr. Chairman, members of the Committee, thank you for the opportunity to present testimony on the management of the Missouri River on behalf of the Mandan, Hidatsa and Arikara Nation.

BACKGROUND

The issue of management of the Missouri River has always been a critical issue to the Three Affiliated Tribes. The Hidatsa call themselves "People of the willows", because in our origin story we emerge from the willows of the river. But all of our three Nations have for countless years lived and thrived along the Missouri River, which we have long called "grandfather". The Missouri River and the history of our peoples are inseparable.

We were the Nations that greeted Lewis and Clark in their famous expedition whose commencement 200 years ago was remembered by President Bush in a White House ceremony just last week. We provided the famous guide, Sakakawea, whose likeness now graces our golden dollar coin. We have always been a peaceful people, traders and agriculturalists. Before Lewis and Clark came upon us, our culture was complex and well suited to our life on the upper Missouri.

Yet today we find ourselves in a vastly different environment than that of our grandfathers and grandmothers. The Missouri River is now controlled by a series of dams, conveniently placed, as a former Chairman of our Tribe, Carl Whitman, noted in his testimony regarding the Equitable Compensation Act in 1991, to have maximum effect on the Indian tribes whose reservations and homelands lie directly upriver from the dams, placed that way primarily because it was easier to condemn Tribal lands than other lands along the river.

As I have testified before, the effects of these dams has been devastating to the cultures, ways of life and the economies of the Tribal Nations along the Missouri River. My Nation is only now beginning to emerge from the long shadow of the devastation of that "great flood" as our elders have called the creation of Lake Sakakawea behind Garrison Dam. This flood took away 156,000 acres of prime bottom land.The reservoir stretches from one end of our reservation to the other. The reservoir also means that we have lost immediate access to the river, as the Corps owns the land adjacent to it, part of what is called the "taken" area.

My Nation was the only Tribal Nation of those affected by dams along the Missouri River to be split in two parts by its dam. In fact, to get from one part of our Nation to another, we must travel outside the boundaries of our reservation. What used to be a close knit community is now split into widely separated towns, with some communities, once a few miles part, separated by 120 miles because of Lake Sakakawea.

We were promised many things by the ACOE at the time we were being asked to leave our ancestral homelands and our largely self-sufficient way of life along the river. For example, we were promised preferential rights to electric power, in fact, many people believe we were promised free electric power, being generated by the Garrison Dam. That preference has never materialized, although we finally have received, along with all other Tribes in the Pick-Sloan Eastern Division area, including those not actually located adjacent to the Missouri River, an allocation of WAPA power at cost, beginning in January, 2001. That helps, but it comes fifty years too late and only provides for one-third of our needs.

In addition to the flooding of our homelands, we, the Mandan, Hidatsa and Arikara (MHA) peoples are doubly affected by the lakes behind those dams, because so much of our history and culture is associated with sites along the Missouri River, well down below the Gavin's Point dam and on up to and past the confluence of the Yellowstone River and the Missouri River. Many of our Mandan, Arikara and Hidatsa village sites were along the river and have been lost forever because of the flooding behind the dam. Those that remain, as I will describe in more detail later, are under continued threat from erosion, unauthorized archaeological digs, tourists and others scavenging for souvenirs and development along the lakes and short sections of river that now make up the Missouri River system.

THE U.S. ARMY CORPS OF ENGINEERS

Since the construction of the Garrison Dam and the other dams along the Missouri River, the fate of my Nation and the fate of other Tribal Nations along the Missouri has been inextricably bound up with the United States Army Corps of Engineers (ACOE or the "Corps"), who decided where the dams would be built, who constructed the dams, and who now, without direct oversight by the affected Tribal Nations, control the flow of the river through the dams.During the past nearly sixty years, since the dams were authorized and constructed, the ACOE has, until recently, paid little attention to the desires of the Tribal Nations along the River. This lack of oversight by the Tribal Nations most affected by the Corps' management of the river is critical: it is like saying that the Rio Grande river along the U.S. border with Mexico only belongs to the United States and Mexico has no right to complain

about how the Rio Grande is managed! The present situation is simply not acceptable.

THE MASTER MANUAL REVISION PROCESS

However, recently, the ACOE has solicited the views of the Tribal Nations along the river because the Corps is now engaged in a process of reviewing how the river's flow is and should be managed, a process known as "Revision of the Master Manual". In developing the revisions to the Master Manual, the Corps has come up with a set of "preferred alternatives", in its Draft Environmental Impact Statement (DEIS) that was produced by the Corps following several years with of effort. This DEIS has a special section in which the comments of the Tribes were collected. We also provided comments on the DEIS. According to the Corps, it must now, following the close of the comment period on the DEIS, choose to determine how to best manage the river to meet the needs of the various groups and people who have an interest in how the river flows.

The preferred alternatives generally provide that the upper river reservoirs, Oahe, Garrison, and Ft. Peck, should be the ones that provide the regulation for the downstream users. This means that these lakes will go up and down depending on the needs downstream, for flood control on the lower Missouri, for barge traffic on the lower Missouri and for protection of the piping plover and the pallid sturgeon, according to the U.S. Fish and Wildlife Service's biological opinion, among other things.

We find these alternatives unacceptable for a number of reasons, summarized below.

1. The alternatives (and the Master Manual) do not provide adequate oversight over river management by the affected Tribal Nations along the Missouri River.

As mentioned, the Tribal Nations along the Missouri River are sovereigns whose concerns about river management must be taken into account as any preferred alternative is considered. Tribal Nations must have oversight over the river management process, as they have a considerable paramount interest in the waters of the Missouri River pursuant to the Winter's Doctrine, which establishes Tribal water rights as paramount to other users.

This means that if a fundamental Tribal interest in the river is at stake in the selection of a preferred alternative, the Tribe's interests should be given preference over other considerations. This may not presently be the law, but it has been the position of the MHA Nation that as the paramount water rights holder, the Tribe's position should be given preference. Legislation should be drafted that would provide for this. We would propose a joint Tribal-ACOE task force be mandated like we now have with trust reform to ensure that the concerns of the Missouri River tribes are fully addressed in the Master Manual.

In addition, and apart from the Master Manual process itself, Tribes should be given opportunities to take over the management of the river itself, which is a trust resource, in a manner similar to self-determination contracts under the Indian Self-Determination and Education Assistance Act, as amended. There are many areas of management of the river that could be subject to such self-determination contracts, some of which are discussed further in this testimony.

2. "Winters Doctrine" water rights are not adequately protected.

In general, the water rights of the Tribal Nations along the Missouri under the Winters' Doctrine have not been adjudicated. The reason for this lack of adjudication of water rights is relatively simple: There has always been enough water in the Missouri to meet Tribal needs.

But occasionally, there are periods of time, such as now, in periods of extreme drought in the upper Great Plains, where water levels are such that Tribal needs for adequate water levels in Lake Sakakawea or in the other reservoirs along the Missouri are not being fully met. Lake Sakakawea alone is a major destination for many who enjoy fishing for walleye and other fish from the lake. At present, in July 2002, water levels are at the point at which many boat docks and boat ramps along Lake Sakakawea do not reach the water.These ramps serve many recreational users and benefit the MHA Nation, which operates several recreational sites along the lake shore, as well as other recreational lessees and the State of North Dakota. Our economy is greatly affected by a water management scheme which does not adequately protect our interests—Tribal members lose jobs, creating hardships for our people, and costs to the Tribal, Federal and state governments increase as well.

If these water levels stay low because enough water is released to service barge traffic on the lower Missouri, the recreational industry for the Tribe is greatly affected. Our revenue at our sites is already down for the summer because of the low water levels. We will provide the Committee with further statistics about the affects

of low water on our recreational efforts. Again, this is unacceptable. The needs of the Tribal Nations must be viewed as paramount, as mentioned earlier.

Even worse is that these water levels may stay low for several years, if the Corps' preferred alternatives are adopted. This does not bode well for the efforts of the Tribe and the State to encourage the several million tourists anticipated to come through North Dakota as we observe the Bicentennial of the Lewis and Clark Expedition over the next few years. Already there are many putrid smelling mud flats along Lake Oahe's shores, some near or on the Standing Rock Sioux Reservation, and we can expect similar problems along Lake Sakakawea in the near future.

We would ask this Subcommittee to seriously consider legislation that would delay the implementation of a new Master Manual by the ACOE until the concerns of the MHA Nation are fully considered by ACOE.

3. The alternatives presented by the Corps result in a wide variation in lake levels that affect many activities and features of Lake Sakakawea and the other upper basin reservoirs.

It has already been noted how the variation in lake levels affects recreational uses of the lake. Aside from the Winters' doctrine issues, it makes no economic sense to punish the Tribal Nations along the river, not to mention the states of South Dakota, North Dakota and Montana, just to benefit downstream barge traffic. The value of the recreational industry to the Tribes and affected states is well over $1 billion.

4. The alternatives do not seriously consider the enormous negative impacts of the preferred alternatives on the cultural and sacred sites identified as belonging to the MHA Nation and other Nations located along the Missouri River.

One of the most serious issues concerning Missouri River management is the fate of the cultural, historical and sacred sites associated with the Tribal Nations along the Missouri River. The vast majority of these sites are associated with the three Nations of the Three Affiliated Tribes, the Mandan, Hidatsa and the Arikara. One reason for this is that the original homelands of our Nations occupied a large portion of the lands adjacent to the entire length of the Missouri River. As the Three Tribes were affected by wave after wave of epidemics of small pox beginning as early as the 17th century,[1] villages were abandoned and the dead left behind. These abandoned villages, had associated with them many sacred sites, and both the village sites and the sacred sites are still honored by our people. Many of these sites are on lands owned and managed by the ACOE.

Yet, precious little has been done to even identify, let alone preserve, these sites, despite the existence of a number of Federal laws which are meant to preserve such areas. These laws include the Native American Graves Protection and Repatriation Act (NAGPRA), the National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA). Archaeological Resources Protection Act (ARPA), and Executive Orders on Environmental Justice and Protection of Sacred Sites. Recently, there was another oversight hearing on whether these laws and Executive Orders are adequately protecting Tribal sites before the Senate Committee on Indian Affairs, and I will not repeat those issues now. But in summary, these laws need to be strengthened to adequately protect Tribal interests in our cultural heritage.

Because of this lack of protection, the National Historic Preservation Trust, which seeks to preserve historic places, has declared, for 2002, the Missouri River one of the eleven most endangered historic properties in the entire United States. This designation provides serious recognition to the problems of stabilizing the shoreline and protecting the sites that remain.

Nor has the Master Manual revision process been very helpful either. The ACOE has told the Tribes that cultural site preservation is an ongoing responsibility that is not really part of the Master Manual revision process. Therefore, scant attention was paid to the effect of the various alternatives suggested for river management on preservation of cultural sites. The information provided about site loss did not provide any meaningful data for the Tribes to use to select among the preferred alternatives the alternative that would be least harmful to sacred and cultural site protection.

However, we know that many cultural sites are affected yearly by the way the river is regulated by the ACOE. As reservoirs go up and down, cultural sites are eroded away or exposed when water levels are low. The ACOE has reported that

[1] Some of the smallpox epidemics were caused intentionally by the U.S. Army and others. Those who lived in earth lodge villages located on the bluffs above the Missouri were especially hard hit, as the smallpox epidemics would kill as many as 95% of those living in villages. Often, several thousand people lived in a single village.

between 40-80 sites are being destroyed every year through erosion and vandalism.[2] The ACOE has recently estimated that at a minimum, $77 million is needed to stabilize the most important known sites. This estimate is very low, we believe, and does not necessarily prioritize sites associated with existing Indian Tribes. Yet, the ACOE has recently announced that it is dedicating only $3 million towards site stabilization, anti portions of that will not go to Tribal sites but to State Historic Preservation Offices (SHPO). We have asked the ACOE to state that it will prioritize the use of the $3 million for identification and stabilization of cultural sites but have not yet received anything in writing.

Still another problem is continued vandalizing of our sites. The sites are located on lands that are largely unpoliced. Yet, these lands are also open to the public; anyone with a boat can get to them, and in many cases they are accessible by land as well. This means that anyone who wants to look for artifacts can easily go onto Corps' land and dig away largely without detection. We need a much more vigorous enforcement mechanism to prevent unauthorized scavenging, or worse yet, unauthorized archaeological digs from taking place that would disturb and damage our sites. This is an example of where either self-determination agreements could be utilized, and where Memoranda of Understanding between the ACOE and Tribal police should be developed and mandated by legislation passed by Congress so that all appropriate laws concerning vandalism of our sites can be vigorously enforced.

Further, we should not have to go to court to force the Corps to do its job. A recent example of this occurred within the reservation of the Yankton Sioux Tribe. The Tribe was forced to take the Corps to court to require the Corps to stabilize a burial site that had been exposed and was subject to vandalism. This should not have to happen. Imagine if a burial site sacred to the United States were vandalized; action would be taken immediately to prevent further vandalism. We expect similar treatment of our burial sites.

SUGGESTED LEGISLATIVE OPTIONS AND OTHER RECOMMENDATIONS

1. Recognize Tribal Concerns

Previously in this testimony I have suggested legislation that would ensure that the concerns of the Tribes along the Missouri about river management are taken into account as the ACOE prepares its Master Manual and goes about the business of managing the river. I believe that it is fundamentally necessary for the Corps to have a direct responsibility to the Tribes that possess paramount water rights (Winters' Doctrine rights) along the Missouri River. The President's Executive Order 13175 which requires consultation with the Indian Tribes by Federal Executive Agencies does not provide nearly enough protection to Tribes in regard to Sacred Sites, nor does Executive Order 13014 which seeks to protect sacred sites on Federal lands.

At a minimum, mechanisms for Tribal consultation need to be improved. Tribal consultation with affected Tribes must be frequent, not just when the Master Manual is being revised, as has been the case over the past two years. We welcome the Corps' efforts to create a manual for consultation with Tribes, but a manual does not replace face to face efforts to consult with all of the affected Tribal Nations. As suggested earlier, we need legislation that will allow Tribes an opportunity to manage, through self-determination contracts, various aspects of river management, and legislation that will require the establishment of a joint ACOE-Tribal task force to ensure that Tribal needs will be met.

2. Improve the Corps' Budget for Cultural Site Preservation

The Corps needs a better budget for cultural protection, not just the $3 million mentioned earlier. The Corps has estimated needs at $77 million, which is most likely a conservative figure, and Tribes believe the amount of the annual appropriation must be higher. Whatever the amount, appropriations must be to identify all still existing cultural sites and to manage and preserve them appropriately, in full consultation with the Tribes with whom such sites are associated. With the loss of sites continuing each year that are not being protected, funds for this purpose must be increased.

We recognize that an authorization for some efforts at historical and cultural site protection is contained within the Water Resources Development Act of 2000. But an authorization is meaningless without an appropriation of actual dollars.

Right now the money for cultural site protection comes out of the operation and maintenance budget for the ACOE. This means that cultural and historical site pro-

[2] The ACOE has amended its report to indicate that it believes 40-80 sites are destroyed every 10 years, but has not yet provided any documentation for that number.

tection competes with all of the other maintenance and operation needs of the Corps. Therefore, when dollars are appropriated for cultural and historical site protection, they must be specifically earmarked for that purpose, not simply put into the operations and maintenance budget in competition with all other needs. The appropriation must be recurring and permanent, as the threat of erosion continues as lake levels go up and down. and the river, where it runs freely, changes course.

We also would note that the Corps has little funds to police its lands against vandals and those who would exploit our sacred sites. This is another reason for increasing the budget for protection of our cultural sites.Another example of the importance of this issue is a change in policy of the Corps regarding camping on ACOE lands.For whatever reason, it is my understanding that the Corps now has reversed its longstanding policy of not allowing camping on its lands, except in designated campgrounds. This reversal threatens many unmarked and marked sites which are not policed, as tourists, unauthorized artifact hunters and others come onto our lands, our historic homelands, and may find and take things that are not theirs to take. If this policy has indeed changed, we should have been consulted because it is often our sites that are affected.

The effort to ensure that our cultural heritage is preserved should begin in this Subcommittee. I encourage Committee members to ensure that appropriations for this purpose are increased so that we will enjoy our cultural and historical heritage for many years to come.

3. Provide adequate funding for protection of Tribal cultural sites by setting aside some of the Western Area Power Administration's (WAPA) income for this purpose.

Presently, the Bonneville Power Administration has an agreement with Tribal Nations along the Columbia River that provides certain funds that are earned from the sale of electricity on the dams along the Columbia River for the purpose of cultural site preservation. This Agreement should be duplicated for the Omaha District. The Western Area Power Administration (WAPA) earns approximately $866 million per year in gross operating revenues. A portion of these funds should be allocated each year to cultural protection in an amount necessary to meet the needs and there should be a mechanism to ensure that funds are spent for those purposes and not for other operation and maintenance tasks of the Corps.

The money taken from WAPA revenues should, like the Equitable Compensation Act that has benefited the Standing Rock Sioux Tribe and our MHA Nation, not raise WAPA rates for electricity. Preferably, this could be done with legislation so that there is no question that the funds will be used for cultural and historical site preservation.

In summary, we believe that Tribes have a lot to say about management of the Missouri River for the benefit of all. Our interests parallel the interests of many who care about preserving the Missouri River as fully as possible. When the dams were built, as Carl Whitman noted, we may have been the path of least political resistance. But fifty years later, we cannot stand silent about management of our "grandfather". We urge the Corps and this Committee to work towards constructing a management river plan that fully takes our views into account, and that recognizes our paramount rights to the waters of the Missouri River.

Senator DORGAN. Mr. Hall, thank you very much for your testimony.

We are joined by Senator Carper, who I assume is joining us in support of the upstream States' interests in the Missouri River, coming from the State of Delaware. Maybe Senator Carper does not want to choose sides here, but I in any event very much appreciate his work.

Senator CARPER. If I can avoid a fight today, I am going to do that.

Senator DORGAN. Well, we very much appreciate Senator Carper's work on the Energy Committee and this subcommittee, and appreciate him being here.

Let me just ask a couple of brief questions. First on behalf of Senator Johnson, he apologized for having to leave for another hearing, but Mr. Hofer, he wanted us to ask, you mentioned 13 of the 31 primary boat ramps at Lake Oahe that are out of service. You talked about the potential closure of all 31 primary boat ramps

by next June. What would be the economic impact on South Dakota's recreation and tourism economy? Have you quantified that?

Mr. HOFER. Part of it we have, just on the fishing side, and that is kind of the driver as far as why most people come to Lake Oahe to visit for recreational purposes. Our agency has quantified the fisheries side of it as about $20 million a year. If you add in recreational boating, it could even be more than that.

Senator DORGAN. When would the State decide it costs more to maintain these facilities than is generated by these operations? Is there a point at which that would occur?

Mr. HOFER. Well, we have already reached that point with some of them. Of those 13 that the primary ramps have been closed, we have come up with low water ramps and extended ramps, and done things to keep some of those in service in a less than ideal situation. There are others where we have reached that point where it is just not any longer economically feasible to keep the areas open.

Senator DORGAN. Mr. Hall, you mentioned the creation of the Rhode Island-sized flood in the middle of our State. A half-million acres were actually flooded. Part of that flood covered a town called Elbow Woods, which you are well familiar with. That is within the boundaries of your reservation, I believe.

My father as a young boy rode horses on Elbow Woods, herded cattle for a number of years, so he spent a lot of time in Elbow Woods. Just prior to its being flooded he took me up to Elbow Woods and I saw that little town. That town, of course, has been under water for a half century now, and your people were moved to higher ground. Because of my father having worked in Elbow Woods I fully understand what you talked about with respect to the displacement, and that is what makes it ever more important as we go through this process with the master manual, and thinking through all of the difficult and sometimes controversial issues, that there be close consultation with the tribal leaders.

Let me just ask of you, I know your testimony reflected part of your answer, but do you feel the conservation has been adequate? How could it be improved? You talked about having an Indian desk at the Corps, but just describe for me generally the consultation process as you see it, and give me your analysis of it.

Mr. HALL. Well, thank you for that question. The tribes feel that consultation should not just be with the master manual. It is a much bigger issue. It goes before even the flood, you know, so consultation should be meaningful, it should be actively engaged. That directly affects those tribes, and of course in this particular issue there are six dams along the river, and all of those tribes are directly affected, and they all have a legal trust asset in that river, and to have little to no consultation—there has been some consultation, but it is just on the preferred alternative. It is not really on the Winters doctrine. I have not found it, Mr. Chairman, in the master manual in the reading that I have taken. I have not seen the Winters doctrine referenced in there, and we all know that it is a trust asset, the river.

The Winters doctrine in the thirties set aside reserved water rights for Indian tribes, and so now when that water level is dropped an inordinate amount of feet like that without meaningful consultation, that is a legal matter, and tribes are really looking

at their legal options that they have right now. They are watching this whole process, and we were greatly disappointed that no decision was made.

But on the term of consultation, I think there needs to be legislation that strengthens and mandates consultation, because it is good to hear, well, we are one of our three criteria is that when we are making decisions that we look at our trust responsibility to Indian tribes, but we would like to see it beyond the master manual, and we want the Corps to recognize in their proceedings the Winters doctrine.

Senator DORGAN. That is a good point, and let me say that my colleagues and I on this committee recognize that there are a couple of important issues with respect to tribes. One is sovereignty, and that renders tribal governments in a slightly different way to expect closer consultation. The other is a trust responsibility, so we recognize there is a special responsibility here because of sovereignty and trust responsibilities.

Let me ask Mr. Frink, if I might, some say, well, the whole problem here is that there is not enough water in the system, and so because there is not enough water in the system, that is what causes these tensions, but is it not the case that at times when there is enough water or not enough water, the issue is how that water is managed, and for whose benefit? Is that not the issue?

Mr. FRINK. Mr. Chairman, I think it is, and trying to find a balance is really the key. In regard to that, the MRBA I think really needs—Missouri River Basin Association—really needs to be commended for what they have accomplished. The eight States used to be split four and four, four upstream and four downstream on the major issues, and we actually have gotten to a point now where we have got one alternative where seven out of the eight support this one alternative.

Senator DORGAN. Which is the eighth that did not?

Mr. FRINK. Eighth is Missouri, and even Missouri, they offered good input, and a lot of their ideas have been incorporated, but in the end they feel that they have to vote against it, but we got to that point where seven out of the eight would support it by asking the States like Nebraska and Iowa and Kansas what they could live with, and what they could not live with, and clearly one of the keys is, they need water supply, adequate water supply for their cities and the industries, and so the MRBA plans that we are recommending provide adequate water supplies for those.

Senator DORGAN. And quickly, Mr. Wells, the Missouri River Basin approach attempted to develop a consensus, has done so with every State save Missouri. Can you tell me why Missouri does not feel that the Missouri River Basin approach that has been a consensus approach is not adequate for Missouri?

Mr. WELLS. Yes, sir, Senator Dorgan. If you look at the actual numbers that were presented by the MRBA, and look at where—two things really concern Missouri, and one is we do not think that the Mississippi River impacts have properly been taken into consideration. You talk about a vote of 7 to 1. Well, they did not allow the Mississippi River States to vote, and they are significantly impacted, but just to back up to the numbers, the MCP, the modified conservation plan that the MRBA that seven out of eight of the

States supported, call for shortening the navigation season by almost a month, when the reservoir levels, the total system levels are 59 million acre feet.

That is 2 million acre feet up into the annual pool. We have analyzed that to see that in over 100 years of analysis, some years we would be shortening the navigation season, penalizing navigators in the month of November, which is one of our big months, especially on the Mississippi, when our grain is being shipped south, and then we looked at the following year, and we actually had a flood, so just looking at 100 years of records, we just thought that was not a reasonable approach.

And also just to have like a drop-dead target of 59 million acre feet, the target today under the current water plan is 41 million acre feet. You see the difference between 41 and 59. It is hard for us to realize, or to surmise that this is a compromise that anybody went half-way or anything like that. This is a total shift of water, we think, out of the Lower Basin.

Senator DORGAN. I guess I understand now what you are saying. You are concerned about the Mississippi, among other things, and I suppose one could extend that to the Mississippi, and the Gulf of Mexico, and the earth, but the Missouri River Basin is a basin represented by States that share the Missouri River, and share a concern about how that river is managed for the benefit of the Missouri River Basin States.

But at any rate, Senator Carper, do you have any questions?

Senator CARPER. No. I learned more in the last 15 minutes that I learned in the last 15 years of my life. We thank you for being here and enlightening me, and hopefully some others on the committee, and our staffs. Thank you.

Senator DORGAN. I think the statements that have been made and the testimony given will help complement a record that has existed now for some many years. Today's hearing is an attempt to see if we cannot stimulate further action that will reach some kind of a conclusion about the management of this important river.

When I started this morning, I pointed out, or some of my colleagues did, this is the river that Lewis and Clark trekked up in order to complete one of the great expeditions in the history of America. It is a great river. It, as Senator Daschle indicated, in my judgment and in the judgment of many, has been horribly mismanaged and has been injured dramatically in many, many ways, and it begs for a new management plan, and better—well, better stewardship, I should say, by those who are required to be involved in it, and I think this hearing will contribute to applying pressure at appropriate points to see if we cannot reach a conclusion.

Let me thank this panel for your testimony, and this subcommittee is adjourned.

[Whereupon, at 12 noon, the hearing was adjourned.]

APPENDIXES

APPENDIX I

Responses to Additional Questions

DEPARTMENT OF THE ARMY,
NORTHWESTERN DIVISION, CORPS OF ENGINEERS,
Omaha, NE.

Hon. BYRON L. DORGAN,
Chairman, U.S. Senate, Committee on Energy and Natural Resources, Washington, DC.

Re: Missouri River Water Management Division

DEAR SENATOR DORGAN: Thank you for your letter of July 16, 2002 in which you submitted follow-up questions to the July 10 hearing before the Subcommittee on Water and Power of the Committee on Energy and Natural Resources.

My responses to your questions are enclosed.

If you have any additional questions or would like to discuss this issue, feel free to contact me. The project manager for the Missouri River Master Manual Review and update is Rosemary Hargrave. Your staff may contact her anytime at 402-697-2527. Copies of this correspondence have been provided to the Committee by fax and e-mail as indicated in your letter.

Sincerely,

DAVID A. FASTABEND,
Brigadier General,
U.S. Army Division Engineer.

[Enclosure.]

RESPONSES OF BRIGADIER GENERAL FASTABEND TO QUESTIONS FROM SENATOR DORGAN

Question 1. Do you plan to comply with the requirements of the Biological Opinion? How?

Answer. The Corps intends to comply with the Endangered Species Act (ESA). There is a high level of agreement between the Corps and the U.S. Fish and Wildlife Service (Service) regarding the biological attributes necessary to ensure the survival of the interior least tern, piping plover, and pallid sturgeon, three species provided protection under the ESA. In their November 2000 Final Biological Opinion to the Corps (BiOp), the Service concluded that our current operation of the Missouri River Mainstem Reservoir System jeopardizes the continued existence of these three species. The Service also provided a Reasonable and Prudent Alternative to jeopardy (RPA) that included the following elements:

Adaptive Management
Intrasystem Unbalancing
Prescribed Release Modifications from Gavins Point Dam and Fort Peck Dam
Habitat Creation, Restoration and Acquisition
Species Specific Measures

The Corps is in agreement with all elements of the RPA as described by the Service in the BiOp with the exception of release modifications from Gavins Point Dam. In May of 2002 the Corps provided the Service supplemental biological and engineering analyses of the prescribed Gavins Point Dam release modifications. We also presented the Service with a Preferred Alternative (PA) that takes a scientific based approach to flow changes from Gavins Point Dam, The Corps believes that this PA

would ultimately result in an ecologically improved hydrograph for the Missouri River that accomplishes the attributes that the Corps and the Service have agreed are necessary to ensure survival of the three listed species.

It should be noted that more stringent drought conservation measures that would conserve more water in the upper three lakes (Ft. Peck, Lake Sakakawea, and Lake Oahe) early in a drought were not included in the BiOp RPA, but have been incorporated into modeling of all alternative flow plans provided to the Service.

Question 2. Has a recommendation been made to your Headquarters regarding a PA? If so, what is it? Does it comply with the BiOp?

Answer. Yes, a recommendation for a PA was made to the Headquarters of the Army Corps of Engineers and to the Assistant Secretary of the Army for Civil Works. While the PA proposes an alternative strategy for Gavins Point Dam release modifications than that prescribed in the BiOp, the Corps believes that a scientific approach to Gavins Point Darn release changes included in the PA will ultimately result in the attributes necessary to ensure survival of the three listed species. The Corps believes the PA complies with the ESA.

Question 3. When do you expect to announce the PA? What are the reasons for delaying this announcement?

Answer. The Corps and the Service have entered into informal consultation under Section 7 of the ESA. During the informal consultation, the two agencies are working cooperatively to assess available scientific and technical information, and explore a range of possibilities regarding operation of the Missouri River Mainstem Reservoir System. Both the Corps and the Service agreed to delay announcement of a PA. The agencies believe that the informal consultation will be much more effective to the extent that it can be protected from the public controversy associated with Missouri River water management decisions. We believe the public will be much better served by a product that reflects the coordinated position of the entire Executive Branch. The Corps will use the results of the consultative process as we complete the Final Environmental Impact Statement (FEIS) for the Master Manual Review and Update. The FEIS will include a description of the environmental and economic impacts of the PA. A 30-day comment period will follow release of the FEIS to provide public and Congressional review of the PA before a Record of Decision is signed.

Question 4. Do the Corps and the Service disagree over what a PA should be? Describe the differences in opinion.

Answer. The Corps will not speak on behalf of the Service regarding their conclusions about the PA. However, it may be premature for the Service to have formed an opinion on a PA prior to completion of the consultation process.

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, DC, September 30, 2002.

Hon. BYRON L. DORGAN,
Chairman, Subcommittee on Water and Power, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your July 16, 2002, letter and additional questions from the Subcommittee on Water and Power concerning your July 10, 2002 hearing on the operation of the Missouri River by the Army Corps of Engineers. Enclosed with this letter are our responses to your questions.

If you have further questions, please contact me or have your staff contact Gary Frazer, Assistant Director for Endangered Species at (202) 208-4646.

Sincerely,

DAVID P. SMITH,
Deputy Assistant Secretary for Fish and Wildlife and Parks.

[Enclosure.]

REPONSES OF DAVID P. SMITH TO QUESTIONS FROM SENATOR DORGAN

Question. What will happen if the Corps does not modify its Missouri River operations by 2003 as required by the Biological Opinion?

Answer. The reasonable and prudent alternatives set forth in the U.S. Fish and Wildlife Service's November 2000 Biological Opinion was based upon a spring rise being provided once every three years, on average, beginning in 2003. Therefore, the Corps could provide for a spring rise in 2004 or 2005, if conditions allow.

To answer your question much more generally, absent any other mitigating factors, if an action agency does not implement the reasonable and prudent alter-

natives set forth in a U.S. Fish and Wildlife Service Biological Opinion, the action agency may not be able to demonstrate compliance with section 7(a)(2) of the Endangered Species Act. An agency could violate section 9 of the ESA if noncompliance results in take of a listed species. Either situation could subject the agency to potential third party litigation.

Question. Are you aware of any alternatives that do not include flow modification from Gavin's Point Dam that would meet the requirements of the ESA?

Answer. The Service continues to work with the Corps to identify and evaluate potential alternatives. The Corps and the Service have entered into informal consultation and are working at multiple levels to address issues related to ongoing operations of the Missouri River system and to address how best to proceed from here. Both agencies are considering all of the conservation tools available to us and we are committed to exploring a variety of approaches towards meeting our obligations to conserve the listed species. These discussions are continuing.

RESPONSES OF DOUGLAS HOFER TO QUESTIONS FROM SENATOR JOHNSON

Question 1. Mr. Hofer, the Corps of Engineers is considering an alternative management plan that gradually reduces Gavins Point Dam releases from 25,000 cfs to 21,000 cfs during the months of June, July, and August. Can you speak to the benefits of reducing releases during the summer months for the mainstem reservoir system?

Answer. A 4,000 cfs reduction in summer releases from the Missouri River reservoir system in South Dakota would have a positive effect on recreation, especially on Lake Oahe (and the two mainstem reservoirs north of South Dakota in North Dakota and Montana). The primary benefit relates to boating access. The lower releases would sustain the reservoirs at higher elevations during the summer months when recreational boating use is the heaviest. During drought years especially, such as we are experiencing now, boat ramps go out of service when water levels fall too far. At some sites, extending the bottom of the ramp (at a significant cost) is feasible. At other sites, the topography of the lake bottom doesn't allow extension and the ramp is lost to service until the water level rises.

A second problem associated with maintaining functional boat ramps during low water, is siltation. With expansive areas of erodable shoreline exposed, wind driven waves cause silt to buildup on boat ramps rendering them unusable. Silt buildup of 18 inches on a ramp can occur overnight when water is low and the wind is right. Mechanical removal, the only solution to the problem, is both costly and time consuming and causes temporary ramp closures. Lowering summer releases and therefore maintaining the reservoir water levels at a higher elevation would increase boating access.

The same benefits, to a lesser extent, would be realized on Lake Sharpe, Lake Francis Case and Lewis and Clark Lake. These smaller reservoirs are currently managed by the Corps at more constant water levels throughout the summer. However, because they are shallower reservoirs, boat ramps have a shorter usable range. Minor fluctuations can cause access problems. Maintaining more water in the reservoir system in June, July and August, would benefit recreation use in the entire system.

Question 2. This past spring, the Corps of Engineers reduced water levels at Lake Francis Case and Lake Sharpe to maintain a navigable channel in the lower Missouri River Basin. At one point this spring, Lake Sharpe dropped several feet in a few days. These reductions killed millions of rainbow smelt eggs in these two reservoirs. Can you explain how these reductions impact fish who feed off of these prey fish populations? How does a reduction in the availability of prey fish ultimately impact recreation?

Answer. A gradual reduction in Gavins Point Dam releases from 25,000 cfs to 21,000 cfs during the months of June, July and August would have many benefits to mainstem reservoirs as listed below:

- Most importantly it would conserve water in the reservoirs preventing increased reduction in fisheries habitat. For example, declining water levels during 2002 in Lake Oahe have reduced the volume of coldwater habitat required by prey fish such as rainbow smelt by 35%. This means that Lake Oahe can now support 1/3 as many prey fish as it could during a normal year. Additionally, more water conserved in all the mainstem reservoirs would enhance sport fisheries through increased habitat availability.
- A reduction in flows during summer months would enhance survival of young fish in all reservoirs by reducing the potential of them being flushed from the reservoir. Rainbow smelt are most susceptible to being flushed from a reservoir

from mid-June to mid-September, therefore reduced flows during these months would lessen the impacts of entrainment. In excess of 430 million rainbow smelt were lost from Lake Oahe from June through September of 1997, a period of higher water releases, which wreaked havoc with Lake Oahe's sport fisheries and the industry they support.
- More stable lake elevations would lessen the impacts of shoreline erosion.

The reduction in water levels in Lake Francis Case and Lake Sharpe to maintain a navigable channel in the lower Missouri River Basin had the following potential negative impacts:

- Walleye populations could have been impacted through the loss of a large portion of this year's production of young fish. The annual production of walleyes in these reservoirs is important because these reservoirs are intensively fished and therefore require consistent replacement of the most popular sport fish.
- Self-sustaining populations of rainbow smelt only exist in Lake Sakakawea and Lake Oahe because of their need for coldwater habitat, which these two reservoirs provide during warm summer months. A reduction of rainbow smelt eggs or any fishery through mismanagement of water levels can have serious impacts on a fishery and the economy it supports. For example, in Lake Oahe rainbow smelt, a prey fish, had been relatively abundant prior to 1998. Abundant rainbow smelt supported a walleye fishery in Lake Oahe, which from 1991-1998 provided an average annual economic impact of almost $20 million economic impact. The smelt population crashed due in part to the flushing of in excess of 430 million smelt from Oahe Dam in 1997. Subsequently, the walleye fishery, which rainbow smelt had supported also suffered and resulted in a loss of almost $12 million in economic impact to north-central South Dakota in 2000.

Portions of these statements can be referenced in affidavits of Wayne Nelson-Stastny in the Case of STATE OF SOUTH DAKOTA and WILLIAM J. JANKLOW, GOVERNOR OF SOUTH DAKOTA, PLAINTIFFS, v. LT. COLONEL KURT F. UBBELOHDE, DISTRICT ENGINEER, OMAHA DISTRICT, UNITED STATES ARMY CORPS OF ENGINEERS and GENERAL DAVID A. FASTABEND, NORTHWEST DIVISION COMMENDER, PORTLAND, DEFENDANTS United States District Court, District of South Dakota Central Division.

[Note: Responses to the following questions submitted to the Department of Agriculture and the Bureau of Reclamation were not received at the time the hearing went to press.]

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC, July 16, 2002.

THE HONORABLE BILL HAWKS,
Under Secretary of Agriculture, Marketing and Regulatory Programs, U.S. Department of Agriculture, Washington, DC.

DEAR UNDER SECRETARY HAWKS: I would like to thank you for appearing before the Subcommittee on Water and Power of the Committee on Energy and Natural Resources on July 10. As a follow-up to our hearing, I am attaching additional questions to be submitted for the record. We request your response to these questions.

Please review the questions and return your answers to us by July 24 so that they may be added to the record.

Due to the current delay in receiving mail, please provide us with your answers by faxing them to the Committee on Energy and Natural Resources, Democratic Staff at (202) 224-9026 or (202) 224-4340. You may also provide us with your answers via e-mail to Malini—Sekhar@energy.senate.gov. Should you have any questions, please contact Malini Sekhar (202) 224-7934 of the Committee staff.

Sincerely,

BYRON L. DORGAN,
Chairman, Subcommittee on Water and Power.

QUESTIONS FOR THE DEPARTMENT OF AGRICULTURE (UNDERSECRETARY BILL HAWKS)

1. What role has the Department of Agriculture been taking in the review and revision of the Master Manual?

2. According to a report ("Does Barging on the Missouri River Provide Significant Benefits?" 1999) by two agricultural transportation economists, Michael W. Babcock of Kansas State University and Dale G. Anderson of the University of Nebraska

Lincoln, the amount of commerce shipped on the Missouri River is "both low and declining."

- Does that continue to be the trend?
- What percent of grain tonnage produced in the Missouri River Basin is hauled by barge on the Missouri?
- What percent is transported by rail?
- By truck?

3. According to the Corps of Engineers, the actual direct economic benefit that comes from transporting goods on the Missouri River amounts to less than $6.97 million per year.

- Do you have any figures with respect to the cost of maintaining these navigation channels on the river?
- What are the costs to recreation and fish and wildlife that result from maintaining navigation?

4. In addition, pro-navigation interests argue that there are significant competitive rate benefits with respect to rail and trucking rates that result from having competition from barge shipping. However, two studies ("Does Barging on the Missouri River Provide Significant Benefits?" Michael W. Babcock and Dale G. Anderson, 1999; and "The Competitive Benefit of the Missouri River? A Review of 'Rail Rates and the Availability of Barge Transportation on the Missouri River,'" Philip C. Baumel, 1998) undertaken by leading agricultural transportation economists in the region (at the University of Nebraska Lincoln, Kansas State University, and Iowa State University) have rejected the existence of any significant competitive rate benefits resulting from navigation on the Missouri.

These studies indicate that the methodology underlying the Corps' conclusions of competitive rate benefits is flawed.

- What is your response?

The studies conclude that other competitive factors such as multiple rail shippers and Mississippi navigation rather than the existence of barge shipping on the Missouri play a much larger role in affecting rates.

- Do you agree or disagree and why?

5. Some have raised concerns about the effects of proposed Gavins Point Darn releases on flood control.

- However, I understand that the Biological Opinion provides that these proposed releases would be made only once every three years and that the releases would not be made in potential flood situations when runoff is predicted to be high.
- Isn't this correct?

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC, July 16, 2002.

MARGARET SIBLEY,
Director of Policy, Bureau of Reclamation, Washington, DC.

DEAR MS. SIBLEY: I would like to thank you for appearing before the Subcommittee on Water and Power of the Committee on Energy and Natural Resources on July 10. As a follow-up to our hearing, I am attaching additional questions to be submitted for the record. We request your response to these questions.

Please review the questions and return your answers to us by July 24 so that they may be added to the record.

Due to the current delay in receiving mail, please provide us with your answers by faxing them to the Committee on Energy and Natural Resources, Democratic Staff at (202) 224-9026 or (202) 224-4340. You may also provide us with your answers via e-mail to Malini—Sekhar@energy.senate.gov. Should you have any questions, please contact Malini Sekhar (202) 224-7934 of the Committee staff.

Sincerely,

BYRON L. DORGAN,
Chairman, Subcommittee on Water and Power.

QUESTIONS FOR THE BUREAU OF RECLAMATION (MARGARET SIBLEY)

1. I understand that the Bureau of Reclamation does not operate any of the mainstem dams on the Missouri. However, you do operate Canyon Ferry Dam on the Upper Missouri, and have responsibility for facilities on the tributaries.

- What efforts do you make to coordinate your operations with the Corps?
- Are there measures that the Bureau can take to address issues of riverine habitat and flows in the Missouri River?

2. Do operations on the tributaries affect the upper lake levels in the Missouri River system?

APPENDIX II

Additional Material Submitted for the Record

June 27, 2001.

Hon. JOANN EMERSON,
U.S. House of Representatives, Cannon Building, Washington, DC.

DEAR REPRESENTATIVE EMERSON: We are writing concerning an important provision in the fiscal year 2002 Energy and Water Appropriations bill.

Section 106 of H.R. 2311 stipulates that changes in the management of the Missouri River cannot be made to allow for alteration in river flows during springtime. Removing this provision would not only affect farmers in Missouri, Nebraska, Iowa and Kansas by potentially flooding their land, but also affect barge traffic movements on the Missouri and Mississippi Rivers. Without proper management of river flows over the course of the year, transportation movements could be hampered by insufficient water levels on the Missouri River and the Mississippi River between Memphis, Tennessee and Baton Rouge, Louisiana.

If an amendment is offered to strike Section 106, we urge you to vote against it. Removing this provision would have significant impacts on productive agricultural lands as well as the movement of agricultural commodities and input supplies along the Missouri and Mississippi Rivers.

Sincerely,

Agricultural Retailers Association; American Farm Bureau Federation; American Soybean Association; Midwest Area River Coalition (MARC 2000); National Association of Wheat Growers; National Corn Growers Association; National Council of Farmer Cooperatives; and National Grain and Feed Association.

FRIENDS OF LAKE SAKAKAWEA,
July 2, 2002.

Senator BYRON DORGAN,
Subcommittee on Water and Power, Washington, DC.

SENATOR DORGAN AND MEMBERS OF THE SUBCOMMITTEE: Thank you for this opportunity to relay our concerns about the lake level fluctuations in Lake Sakakawea and the need for release of a Missouri River Master Water Control Manual.

In plain and simple terms—we're dying without better management of Lake Sakakawea. Although we often talk about the smelt population and the environmental impact of low water levels, all of that translates into tourism. Without tourism, our businesses will die. We no longer can count on the farm economy to sustain our existence. Tourism is a growing and necessary industry in our state; we need to have a Master Water Control Manual that recognizes the significant economic impact of recreation.

Members of Friends of Lake Sakakawea own and manage businesses in communities near Lake Sakakawea. Here are some of the quotes some of them gave the last time the lake hovered this low:

> We opened doors in 1988, we were here for six years with no water. We changed from a marina to a restaurant. It was pretty tough. You might as well close up shop if you're only a marina and people can't get to your place.
>
> —Owner, Lund's Landing Resort

> We had virtually five years of no income. If it would have been private enterprise, we would have been bankrupt. Next year could be the first year since taking it over in 1987 that we will break even. It took a while to get clientele back, we needed to make repairs, we lost at least half of our tenants. It was the first full year we had. When we bought into the business,

I was too cocky. I thought it was too big of a lake to ever go dry. I was dead wrong. Now I'm gun shy. I'm afraid to plan on a good next year because I figure there's a 50% chance we'll be on dry ground.

Investor in Dock Owners Inc.—own all the docks

I was a casualty of the Corps. The problem is we're not talking about recreation, it's tourism. It's an industry, it's not just people out having fun. Businesses like ours closed up and down the lake. Restaurants, clothing stores, grocery stores, one after another, after another. We were a family that lost everything we had financially. Look at the lake now—it's gross mismanagement. The Corps pulled the plug last year and forgot to put it back in.

Owner that closed supper club in Garrison in 1990

In the 1980s we had 20 big boats in our bay. Now we have three. The three salmon fishing charters are gone. Most of the boats have been sold. During the late 80s our marina was virtually out of business. We moved ramp five times and delivered gas. 1998, on the other hand, was phenomenal. The revenue was what it should have been eight years ago. We're just recovering from the bad years.

Owner Indian Hills Resort

My parents owned the business until 1990 when they said to hell with it and went bankrupt. I bought it at the sheriffs sale. Business has increased 500 percent since then. But it could happen again. Absolutely. I was here the last time and it was ugly. The Tourism Business has such a trickle down affect, it touches everyone. It's a total crime to have the lake at the level it's at now. It's pretty scary where it could be by next spring.

Owner, Watford City sporting goods store

It's time for a Manual that puts navigation in the back seat and allow us to put recreation where it belongs. In one lake community alone, sales fluctuate $4 million a year based on the level of the lake.

Please give this your immediate attention. Without some change . . . we're dying.

Sincerely,

JILL DENNING GACKLE,
Member.

July 8, 2002.

SENATOR Byron Dorgan,
Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

Re: Hearing on Missouri River Master Water Control Manual

SENATOR DORGAN: I'm writing on behalf of the North Dakota Association of Rural Electric Cooperatives to provide input for the hearing you'll be holding on Wednesday, July 10, as part of your work as Chairman of the Subcommittee on Water and Power.

First, we want to commend you for holding this hearing and calling attention to a critical issue facing states in the Upper Basin of the Missouri River. We have participated in hearings on this subject here in North Dakota and our view remains much the same: the water management issues and needs of the 21st century are markedly different from the needs of the 20th century. It is time for the Corps to accept their responsibility to issue the new Master Water Control Manual. In so doing, we would support a water management plan that better recognizes the needs of the upper basin states, especially in times of drought and low water supplies as we are experiencing this year.

Second, we would ask that any revision to the Master Water Control Manual continue to treat hydropower production as a critically important function of the Pick Sloan plan. The cost-based hydropower marketed to our members (RECs) is an important part of the foundation that allows cooperatives to offer affordable, dependable power supply to their members. In our view, affordable, dependable power continues to be a contemporary need for our member consumers.

Again, Sen. Dorgan, thanks for your leadership in calling attention to this critical issue. The Corps of Engineers has had more than ample time to study a revision to the Master Water Control Manual.

Sincerely,

DENNIS HILL,
Executive Vice President and General Manager.

STANDING ROCK SIOUX TRIBE,
Fort Yates, ND, July 9, 2002.

Hon. BYRON L. DORGAN,
Chairman, Subcommittee on Water and Power, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

On behalf of the Standing Rock Sioux Tribe submitted herewith is the written testimony for the Subcommittee's hearing on Wednesday, July 10, 2002, regarding water management on the Missouri River, including the effects to revise the Missouri River Master Manual Water Control Manual.*

As indicated in your letter of June 28, 2002, due to time constraints you are unable to accommodate an oral presentation from the Standing Rock Sioux Tribe at the July 10, 2002 hearing.

However the Standing Rock Sioux Tribe would want to be afforded the opportunity to discuss this very critical issue with you, and we hope that this can take place as soon as possible.

Should you have any further questions regarding this matter please contact me or should your Committee staff require any additional assistance please contact Gary J. Marshall, Director, Department of Land Management at (701) 854-7579 directly.

Respectfully submitted,

CHARLES W. MURPHY,
Chairman.

NEBRASKA FARM BUREAU FEDERATION,
Lincoln, NE, July 9, 2002.

Hon. CHUCK HAGEL,
Rusell Senate Building, Washington, DC.

DEAR SENATOR HAGEL: As President of Nebraska's largest farm organization, I am writing to ask that you convey the following comments to the Water Power subcommittee of the Energy and Natural Resources Committee during its July 10, 2002 hearing on Army Corps of Engineers management of the Missouri River.

For the record, Nebraska Farm Bureau Federation is strongly opposed to the flow changes currently under consideration with the Army Corps of Engineers—particularly the proposals that contain a "spring rise" and the low summer time flows. We strongly support the current water control plain and efforts by the Corps to balance all the competing interests on the river. The impact these proposal would have on farmers along the river will be devastating due to additional flooding and inland drainage problems. In addition, the low summer flow will prevent season-long commercial navigation on the Missouri which is important for movement of grain to export and for prices farmers receive at their local elevators.

Several times during the 1990s, Nebraska producers were unable to plant significant portions of their bottomland acres because of flooding of the Missouri River tributaries and poor drainage problems. Larger than normal spring releases by the Corps to address endangered species habitat concern created even more of a problem with flood water drainage at that time. Also, drainage and tile systems along levees and other streams were backed up or inoperable creating a situation where even more land was left idle. The spring rise flow regime that the U.S. Fish and Wildlife Service is proposing would make those problems for farmers even worse. It is estimated that up to 1.4 million acres of farmland in Nebraska, Iowa, Kansas and Missouri could be damaged due to flooding and poor drainage as a result of the proposed spring rise.

Several special interest groups supporting the high spring-low summer time flows suggested by the U.S. Fish and Wildlife Service opinion seem to view navigation has insignificant on the Missouri River. At a time when consolidation and concentration issues are causing a great deal of concern in agriculture, the last thing producers need is for the federal government to change the management of the river in a way that would negatively impact navigation. While shipments of grain and farm inputs on the Missouri River may not be huge compared to other rivers, it does provide another option to rail and truck transportation, which is essential for keeping transportation, costs competitive and low. Also, it is important to note that the Missouri River provides, at tunes, up to one-half of the Mississippi River flow where the two rivers join. The Mississippi River carries more than 60 percent of our nation's export

*The written testimony has been retained in subcommittee files.

grain products and the Missouri River summer time flow is critical for the overall efficiency of our nation's navigation system.

Farmers tend to develop solutions in a plain and simple way and we believe the Fish and Wildlife Service is making the management of the Missouri River too complicated. Congress has a law in place that states flood control and other purposes should be balanced in the management of the Missouri River system. Listings under the Endangered Species Act have placed more focus on one of the eight purposes of mainstream reservoir system.

It would seem logical to us that some effort should be made to establish a baseline to accurately assess where we are now in terms of the condition and situation of the protected species of concern. For example, the International Piping Plover Census found that plover numbers have increased 470 percent along the Missouri River in the past five years and now just over a thousand plovers are found there. Susan Haig, director of the census and a U.S. Geological Survey scientist, said recent favorable habitat conditions along the river may have spurred the increase. In other words the birds found and used the riverine habitat.

However, despite these facts and other reasonable approaches to protect endangered species, just last Friday the Corps was barred from relocating the nests and eggs of endangered species to a safe location as a part of its plan to increase of water flows necessary to support river navigation. At what point are we at in society today when the federal government sacrifices the needs of humans to the rigid interpretation of the Endangered Species Act by bureaucrats trying to protect two endangered birds. A realistic approach was being implemented by the Corps to protect the species while supporting navigation and it economical benefits. However, the Endangered Species Act seems to be the "trump card" that defies all logic and common sense in the federal governments effort to balance the interests of society.

If it is determined that more habitat is needed along the Missouri River for certain species, modifications should be taken first to improve existing habitat by pursuing more enhancements of oxbow lakes, wetlands and other natural habitats along the river and in the reservoirs. We strongly believe that there would be landowner support for fish and wildlife habitat enhancement along the river as long as those approaches are voluntary and incentive-based.

If it is determined that more needs to be done to improve the habitat by altering the river flows, gradual changes could be examined within the framework of the current water control plan. At the same time, social/economic analysis evaluations should be conducted to coincide with any flow changes made solely due to a species habitat issue.

In conclusion, Nebraska Farm Bureau Federation believes that future management decisions for the river should not ignore the primary purpose of the mainstream dam system of flood control and other important benefits it provides such as hydropower, and navigation. Moreover, those decisions should not threaten the people and communities along the river and they should not forget and place undue harm on individual farmers along the river who are a part of the foundation of our nation's food and fiber system. Therefore, we strongly support the current water control plan on the Missouri River, which attempts to balance all interests as opposed to placing additional weight on endangered species.

Sincerely,

BRYCE P. NEIDIG,
President.

AMERICAN RIVERS,
July 18, 2002.

Hon. BYRON L. DORGAN,
Chairman, Subcommittee on Water and Power, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

DEAR CHAIRMAN DORGAN: Thank you for holding the hearing on July 10 regarding water resource management on the Missouri River. I appreciate the opportunity to submit written testimony for the record.

During the hearing, I noticed that concerns were raised related to hydropower production on the Missouri River and its relationship to potential flow changes on the river. The previous day, July 9, American Rivers and Environmental Defense released a report by energy economist David Marcus on this very subject.* I think this report will be most useful to you as you further consider these matters, and

*The report has been retained in subcommittee files.

I submit it now for official entry into the hearing record in addition to my previous written testimony.

If you have any questions, do not hesitate to contact me by phone at 402-477-7910 or by e-mail at csmith@amrivers.org. Thank you for your consideration.

Sincerely,

CHAD SMITH,
Director, Nebraska Field Office.

CROW CREEK SIOUX TRIBE,
Fort Thompson, SD, July 22, 2002.

Hon. BYRON DORGAN,
U.S. Senate, Committee on Energy and Natural Resources, Subcommittee on Water and Power, Dirksen Senate Office Building, Washington, DC.

Attention: Melanie Shaker

Re: Testimony for Record on July 10, 2002 Hearing on the Army Corps of Engineers Missouri River Master Water Control Manual

DEAR SENATOR DORGAN: I serve as Chairman of the Crow Creek Sioux Tribe. I respectfully submit this letter as the Tribe's Testimony for the July 10, 2002 Water and Power Subcommittee Hearing on the Army Corps of Engineers Missouri River Master Water Control Manual. I appreciate the inclusion of my Testimony in the written record for this hearing.

The Crow Creek Reservation is comprised of approximately 240,000 acres of rolling farm land and pasture along the Missouri River, in central South Dakota. The Missouri dominates the Reservation landscape.

The impact of the Missouri River Basin Pick-Sloan Program on the Crow Creek Indian Reservation has been devastating. Two Pick-Sloan dams, Fort Randall and Big Bend, inundated the Reservation's bottomlands. The Corps of Engineers began construction of the Fort Randall dam and reservoir in 1946.

Twelve years later, the Congress enacted Public Law 85-916 (72 Stat. 1766, September 2, 1958), authorizing payment for the "Tribal land taken for the project. The Tribe lost 9,154 acres of rich bottomland, over one-third of which was forested. Eighty-four families, constituting 34 percent of the Tribal membership, were relocated against their wishes. The project flooded Fort Thompson, the Reservation's largest community, and the BIA relocated the agency headquarters to Pierre, South Dakota, thirty miles from the Reservation. Likewise, the Indian Health Service hospital was moved twenty miles south to Chamberlain. The resources of the bottomlands, and the subsistence economy based on those resources, were gone forever. The relocated families received the nominal payments authorized under P.L. 85-916 four years after the relocation.

In September, 1959, the Corps began work on the Big Bend project. In 1962, the Congress enacted Public Law 87-735 (76 Stat. 704), providing for the purchase of 6,179 acres of remaining bottomland. Twenty-seven more families were relocated.

Thus, the federal government took from our Tribe over 15,000 acres of land from our Tribe, for the site of these projects. This land was valuable Missouri River bottomlands. They had the most fertile soils and valuable timber on the Reservation. Over the loss of land and natural resources and the relocation of our Tribal communities in the late 1950's and early 1960's had a devastating effect on the Crow Creek Sioux Tribe.

On-going COE operations at the Missouri River dams under the Master Water Control Manual substantially affect the Crow Creek Indian Reservation. Our cultural resources get unearthed and destroyed by wave action from fluctuations in the water level of Lake Oahe. COE operations impact Missouri River water levels and water quality on the Reservation. During periods of drought, water quality deteriorates, due to low water levels. The intentional flushing of sediment from below Oahe Dam exacerbates the documented water quality problems facing Lake Sharpe on our Reservation. In addition, peak power flows at Oahe Dam intensifies the erosion of Tribal land and causes property damage to valuable Tribal farmland, and the unearthing of artifacts and cultural objects.

These sacred cultural resources are afforded protection under numerous federal laws, such the Native American Graves Protection and Repatriation Act (NAGPRA) 25 U.S.C. § 3001, National Historic Preservation Act (NHPA), 16 U.S.C. § 470a and the Archaeological Resources Protection Act (ARPA) 16 U.S.C. § 470aa. The Corps of Engineers activities under the Master Water Control Manual are "agency actions" for the purpose of NAGPRA, and accordingly, this statute forbids the Corps from

operating the dams in a manner that unearths and destroys them. *Yankton Sioux Tribe* v. *Army Corps of Engineers.* 83 F. Supp. 2d 1047 (D.S.D. 2000).

Yet the Corps continues to operate the dams in a manner that results in the exposure and destruction of cultural resources. There is nothing in the Revised Draft Environmental Impact Statement to remedy this. Consequently, the RDEIS results in serious violations of federal historic preservation law.

The Corps of Engineers has failed to consult with our Tribe, on the detrimental impact of the Corps' Missouri River operations, on our Reservation. This is required in Executive Order 13175. Both the National Advisory Council on Historic Preservation and the Environmental Protection Agency have questioned the lack of consultation on the part of the Corps of Engineers with the Tribes, and the impacts of COE operations on our historic properties and Reservation environment.

The Corps of Engineers estimates that its regulation of Missouri River water flows produces National Economic Development (NED) benefits to the U.S. of $1.8 billion. (RDEIS, Executive Summary, p. 14-18). The NED benefits outlined by the Corps in the RDEIS were derived through a computer model, in which the Corps traced the water flows for each year it has operated the system, under the operational scheme for numerous proposed management alternatives.

The Crow Creek Sioux and other Tribes possess substantial water rights to the Missouri. However, Indian water rights were not considered in this computer model used by the Corps. The impacts of alternative on Native American cultural resources are not properly provided in the model. There is no mention of the economic losses on our Reservation, in the determination of economic development gains off of the Reservation.

Instead of engaging in the analysis required under the National Environmental Policy Act (NEPA), the Corps has delegated to the states and the special interest groups they represent the task of allocating water in drought years. There is unused water in the system that the Federal government should not allocate for any other than Tribal uses, but the Corps has washed its hands of its Trust responsibility to the Tribes, and instead defers to water negotiations amongst the states. We object to the higher level of consultation afforded to the Missouri Basin states, than it afforded to our Tribe.

Under the National Environmental Policy Act, the Corps must compile and analyze the history, socioeconomic conditions, cultural resources and environmental baseline conditions of the affected Indian Tribes, including the Crow Creek Sioux Tribe. The Environmental Impact Statement should survey the impacts of Big Bend and Fort Randall dams on plants and wildlife along the Missouri River. There must be compliance with Section 106 of the National Historic Preservation Act in the operation of Oahe, Big Bend and Fort Randall Dams.

Under the Executive Order 12868 on Environmental Justice, the Corps must propose plans to mitigate the impact of its operations on the Tribes, because of the disproportionate impact of its operations on Native American communities. There is no question that mitigation of the detrimental impacts of Pick-Sloan is required at Crow Creek. This must be outlined in the Environmental Impact Statement.

The Revised Draft EIS Violates the National Environmental Policy Act, National Historic Preservation Act, Executive Order 13175 on Consultation with Indian Tribes and Executive Order No. 12898 on Environmental Justice, and common sense. The Corps of Engineers has proven that it shall violate the rights of our Tribe in its past and current operations, and in its planning process for future operations.

I understand that the main issues surrounding the Master Manual Review and Update involve upper basin recreation and downstream navigation. We respect these legitimate interests.

However, the rights of the Tribes are Treaty rights. We also enjoy rights under federal laws designed to protect our Reservation land and our cultural heritage. These issues are important to the Indian people. They have been ignored during the current debate between the lower basin and upper basin states of the Missouri River. The Corps of Engineers has made it clear that it shall ignore the rights of the Indian Tribes, in the Master Manual Review and Update process. I hope that the Water and Power Subcommittee considers appropriate legislation to ensure that our water rights, Reservation lands and cultural resources are protected from the bureaucratic malfeasance of the Corps of Engineers.

Sincerely,

DUANE BIG EAGLE,
Tribal Chairman.

NATIONAL WATERWAYS ALLIANCE,
Washington, DC, September 1, 2000.

Hon. CHRISTOPHER S. BOND,
Russell Senate Office Building, U.S. Senate, Washington, DC.

DEAR SENATOR BOND: On September 5, 2000, the Senate is scheduled to begin consideration of H.R. 4733, the Energy and Water Development Appropriations Bill for FY 2001. We are writing to express our strong opposition to any efforts to strike Section 103, which prohibits implementation of a "spring rise" on a portion of the inland navigation system.

A recent directive issued by the U.S. Fish and Wildlife Service to implement a "spring rise" immediately on the Missouri River is a reversal of water resource policy without appropriate public review, independent scientific validation, Congressional debate or endorsement. For decades, every Congress and Administration has endorsed a policy of water resource development that was designed to protect communities against natural disasters and serve efficient and environmentally friendly river transportation, reliable low-cost hydropower and a burgeoning recreation industry.

The "spring rise" demanded by the Fish and Wildlife Service is based on the premise that we should "replicate the natural hydrograph" that was responsible for devastating and deadly floods as well as summertime droughts and even "dust bowls." For decades, we have worked to mitigate the negative implications of the "natural hydrograph" with multiple-purpose water resources management programs, including reservoirs storing excess flood and snow-melt waters in the spring and releasing those waters in low-flow periods. These efforts have protected communities from floods, enabled the safe and efficient movement of a large percentage of the Nation's intercity freight by a mode that results in cleaner air, safer streets, and a higher quality of life and also provided hundreds of thousands of family-wage jobs in interior regions.

Retaining Section 103 will allow National Environmental Policy Act (NEPA) compliance and provide time for Congress to adequately consider whether reversing proven water resources policy makes sense and whether a "spring rise" is scientifically supported. We urge you to keep the existing language in H.R. 4733 and oppose any efforts to strike or unnecessarily amend it.

Sincerely,

NATIONAL WATERWAYS ALLIANCE.

STATEMENT OF BILL GRAVES, GOVERNOR, STATE OF KANSAS

I appreciate the opportunity to provide written testimony to the Committee on behalf of the State of Kansas. The Missouri River is certainly one of the nation's most important waters from many standpoints. It is rich in history from the Lewis and Clark expedition to the present and provides invaluable water for many beneficial uses.

However, the focus of our comments at this time is on the Kansas River rather than on the main stem Missouri. The Kansas River and associated reservoirs is a unique and valuable system in its own right. The Kansas River system provides drinking water to one third of the population of Kansas in addition to the industrial users and power plants that rely on the water stored in the reservoirs as their sole source of water. In addition we have our own important natural resource and listed species issues. Water-based recreation, fishing and hunting are important to our economy and a quality of life issue for our citizens.

My concern is the Kansas River system is currently being used to supplement navigation flows on the Missouri River through water releases from Milford, Tuttle Creek and Perry reservoirs. By this fall the Corps of Engineers intends to draw down these reservoirs as much as six feet below conservation, or normal pool level, to provide navigation flows. The risk to our water supplies in a time of drought impacts to fish and wildlife management and water-based recreation from this action are real.

While I understand the difficulty of managing a river system for a variety of beneficial uses, I cannot support the Corps decision to use the Kansas River reservoirs to provide navigation flows on the Missouri Rivet at this time. My reason is very simple: I do not believe there is any real benefit to navigation from these releases. Yes, there is additional water in the Missouri River. But, State water engineers believe the change in stage is only between one and two inches of depth on the Missouri River. That is less than the waves on the water from a moderate breeze.

For the past two years the State of Kansas has worked closely with the Kansas City District of the Corps of Engineers to jointly study the Kansas River basin to resolve this matter. While the State has completed its work on this, the Corps of Engineers efforts are still underway. We urge the Senate to direct the Corps of Engineers to cease releases of water from all Kansas basin reservoirs for navigation purposes at least until this study is completed.

Thank you for your consideration of our concerns.

STATEMENT OF CHAD SMITH, DIRECTOR OF AMERICAN RIVERS, NEBRASKA FIELD OFFICE

Mr. Chairman and members of the Subcommittee, thank you for the opportunity to present testimony on management of the Missouri River. I am Chad Smith, Director of the Nebraska Field Office for American Rivers, a national conservation organization dedicated to protecting and restoring the nation's rivers. American Rivers has over 30,000 members across the country, and works in partnership with over 4,000 river and conservation organizations. American Rivers, through its *Voyage of Recovery*^{SM} campaign, is working with dozens of groups in the Missouri River Basin through the Missouri River Coalition to: 1) establish a string of restored natural areas along the Missouri; 2) reform dam operations that sustain fish and wildlife and boost recreation and tourism opportunities; and 3) revitalize riverfronts in Missouri River communities to improve quality of life.

MISSOURI RIVER MASTER MANUAL REVISION

Like all rivers, the driving force behind the mighty Missouri River was its "natural hydrograph"—the seasonal rise and fall of water. The Big Muddy experienced rising flows in the spring and early summer from melting snow and rain. Higher flows were followed by declining flows during the late summer and throughout the fall.

Today, these seasonal fluctuations are gone, replaced by stable flows to support commercial barge traffic. Fish and wildlife, people, and local communities have paid the price. Three native Missouri River species are on the brink of extinction, and more than 50 native species are listed by basin states or the federal government as rare, threatened, or endangered. Recreation on the river is given little priority in management decisions.

But the approaching bicentennial of Lewis and Clark's "Voyage of Discovery" affords us the chance to help the Missouri again function like a river. The U.S. Army Corps of Engineers (Corps) will soon decide on a new plan for operating the Missouri's six big dams, which control the river's flow. A change in operations now will help restore some of the Missouri's important natural functions, making it a better place for native species. And the Missouri River will become a recreation and tourism destination.

In November 2000, the U.S. Fish and Wildlife Service (Service) released its Final Biological Opinion on Missouri River dam operations. The biological opinion concludes that the least tern, piping plover, and pallid sturgeon are likely to go extinct on the Missouri River if the Corps fails to change dam operations. The Service proposed several elements of a "reasonable and prudent alternative" intended to assist the recovery of those species. Key elements include:

- Increasing flows from Gavins Point Dam and Fort Peck Dam in the spring ("spring rise") when water conditions permit, and reducing Gavins Point Dam flows each summer ("split navigation season") to provide a semblance of the Missouri's natural rise and fall of water levels.
- Restoration of river and floodplain habitat.
- Reservoir unbalancing.
- Adaptive management of the river system.
- Intensive biological monitoring.

The Service's recommended changes are designed to prevent the extinction of three endangered and threatened species, but would also benefit all native Missouri River fish and wildlife and consequently the many outdoor enthusiasts wanting to enjoy the river.

According to river biologists, the recommended flow changes mimic key elements of the Missouri's historic flow patterns, including higher flows through mid-June and lower flows from mid-July through August. The biologists note that this time frame encompasses the spawning period of most Missouri River native fishes, including pallid sturgeon, smallmouth bass, channel catfish, and paddlefish, and nest initiation by interior least terns and piping plovers.

While the recommendations contained in the Service's biological opinion do not constitute a "silver bullet" solution for Missouri River fish and wildlife, they do represent the best science-based options available for restoring the form and function of the Missouri River. And they will significantly improve the ability of native Missouri River species to survive. Flexibility in river management options, as guided by biological monitoring through an adaptive management approach, is also key to ensuring the best results for fish and wildlife.

The time is now for change on the Missouri River. Some key facts that support this statement:

- The science is solid. In January, the National Academy of Sciences released a three year study of the science along the river, concluding that "degradation of the Missouri River ecosystem will continue unless the river's natural water flow is significantly restored," and that restoring riparian habitat in the absence of dam reforms will be insufficient to halt the river's decline. In addition, natural resource professionals working for all the states along the river have concurred with the scientific foundation for the flow targets set by the U.S. Fish and Wildlife Service.
- The law is clear. Unless the Corps adopts the Service's flow targets by the spring of 2003, the agency will be in violation of the Endangered Species Act. The Corps has been on notice since 1990 that its current plan jeopardizes the continued existence of at least three native river species. Today's decision sets the stage for further efforts in Congress to create legal exemptions for politically influential economic interests—and to undermine the fair and consistent implementation of the law.
- The economy will benefit. The National Academy of Sciences concluded that Missouri River dam reforms will "enhance the valuable fishery resources . . . increase waterfowl populations . . . increase the abundance of largemouth bass . . . attract more anglers to the region . . . and result in marked increases in user-days for recreational fishing, commercial fishing, and hunting" and therefore may be "justifiable solely on the grounds that it represents an economic improvement" over current dam operations. Already, these activities amount to $85 million industry each year, in sharp contrast to the barge industry which has dwindled to less than $7 million each year.
- The public supports change. Of the 55,000 comments submitted to the agency on its dam guidance, 54,000 called on the Corps to restore more natural flows to the Missouri. Since January, eight Missouri River basin newspapers have editorialized numerous times in favor of restoring more natural flows to the Missouri. Six of the eight governors in the Missouri River basin have formally recommended experimenting with flow changes to restore the river.

Thus, we urge the Corps to immediately comply with federal law by ending dam operations that jeopardize the existence of federally endangered and threatened species and by implementing dam operations that will lead to the recovery of these species. In particular, we urge the Corps to immediately implement the alternative identified as "GP2021" (the so-called "Flexible Flow" alternative), as this is the only alternative subjected to detailed analysis by the Corps in the RDEIS that fully captures all the elements of the Reasonable and Prudent Alternative (RPA) recommended by the Service in the Final Biological Opinion on Missouri River dam operations.

Specfically, the Corps should gradually increase releases from Gavins Point Dam to 17,500 cubic feet per second (cfs) over full service navigation levels for a maximum of 30 days between May 1 and June 15 once every three years. The Corps should also implement an annual summer low flow period on the lower river by gradually reducing Gavins Point Dam releases down to 25,000 cfs between June 21 and July 15, reducing releases further to 21,000 cfs until August 15, then gradually increasing releases back to 25,000 cfs between August 15 and September 1. These are the minimum dam reform steps necessary to help recover federally-listed species and help prevent the continued degradation of the Missouri River ecosystem.

Almost 200 years ago, the explorers Lewis and Clark traveled up the Missouri River, and their journals describe an abundance of fish and wildlife in and along the river that is unimaginable today. The once dynamic and meandering river has been subdued by dams and levees and many of the species found by the explorers along the river are slowly disappearing.

According to the Corps' own detailed analysis, moderate changes in dam operations can be made that would improve the river's health and boost local economies through increased recreation and tourism, while protecting "traditional" uses of the river like hydropower, navigation, floodplain farming, and flood control.

The Corps' ultimate decision, which will be "green-lighted" by the White House, will be a clear indication of whether science and economics will rule the day, giving recreation and fish and wildlife interests equal treatment in river management, or whether a dwindling barge industry on the lower river will retain its stranglehold on the nation's longest and arguably most historic river.

Economic Issues

These long overdue dam reforms will not only avoid the extinction of three listed species and reverse the decline of many other species native to the Missouri but will also meet the long-term economic and environmental needs of Missouri River communities.

As the Corps' RDEIS demonstrates:

- GP2021 will create new opportunities for recreation and economic development in riverside communities.
- GP2021 supports Missouri River barge navigation in the spring and fall, when more than 80 percent of farm-related is shipped.
- GP2021 will enhance Mississippi River barge navigation.
- GP2021 will not increase the risk of flooding.;
- GP2021 will provide benefits to production agriculture in the Missouri River floodplain through enhanced groundwater levels and improved drainage in the summer months.

Recreation

The Missouri's native fish and wildlife species are not only a critical part of America's natural heritage, but are also the foundation of a growing river-recreation industry. More than 4 million people annually spend more than 10 million "visitor days" at developed recreation sites along the Missouri River, generating at least $84.7 million in annual economic benefits, according to the RDEIS.[1] Actual visitation and spending is actually much higher, but the RDEIS fails to measure recreation at undeveloped sites, underestimates spending on Missouri River recreation, excludes spending on food and lodging, and uses an improper methodology that narrowly links recreational use to river elevations.

Corps estimates of recreational use are based on visits to developed recreation sites such as marinas and ignores recreation at undeveloped sites, including bank fishing, sight-seeing, river festivals, private hunting clubs, fishing tournaments, and commercial boat tours. The Corps excludes the enormous economic benefits of the upcoming Lewis and Clark Bicentennial, and the role a healthy river can play in regional celebrations, including opportunities for hunting, fishing, camping, and sight-seeing. Federal, state, and private officials preparing for the bicentennial estimate that more than 10 million Americans will retrace the steps of Lewis and Clark between 2003 and 2006.

The Corps also underestimates the amount visitors spend when utilizing the Missouri River by underestimating daily spending, and by excluding spending on lodging and food. The Corps estimated more than a decade ago that visitors spend $32 per day while visiting the Missouri, but state estimates are significantly higher. A 1990 study of Missouri River recreation in Montana concluded that per-day spending ranged between $40 and $66. A similar survey of Missouri River recreational use in North Dakota found that per-day spending ranged from $49 to as much as $117 for out-of-state visitors. Studies also suggest that the daily value of fishing is species-dependent: visitors spend more to catch walleye than they spend to catch catfish.

States have concluded that Missouri River recreation generates substantially more annual economic benefits than the Corps' analysis:

- Missouri River recreation and tourism in South Dakota generated $53.9 million in annual economic benefits in 1993, according to state officials.
- Missouri River recreation and tourism generated $165 million in annual economic impacts in North Dakota, according to state officials.
- Use of the Missouri River in Nebraska generates as much as $364.5 million in annual economic benefits, according to state officials.

Recreational opportunities on the lower river would be greatly increased. Exposed sandbars and shallower, slower water, coupled with restored habitat, would make the lower Missouri River much more inviting and accessible for fishing, camping, birding, recreational boating, and other forms of recreation.

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[1] U.S. Army Corps of Engineers. 2001. *Missouri River Water Control Manual Review and Update: Revised Draft Environmental Impact Statement.* Northwestern Division. Portland, OR.

Lower summer flows also mean higher water levels in the reservoirs—benefiting anglers, boaters, and recreation-dependent businesses in the upper basin. And, releasing more water from Gavins Point and other Missouri River dams in the spring and less in the summer would improve the fisheries and the natural habitat of the free-flowing river sections below the dams.

Recreation already generates at least $90 million in annual economic benefits for the basin, but a restored Missouri River would boost that figure significantly. Revitalizing the Missouri River would provide additional outlets for recreation and tourism and would create many new economic opportunities in places like Bismarck, North Dakota; Yankton, South Dakota; Nebraska City, Nebraska; and Boonville, Missouri.

Navigation

GP2021 will also support Missouri River navigation during the spring and fall—when more than 80 percent of farm-related cargo is shipped—and will enhance navigation on the Mississippi River. Marginally reducing the meager amount of Missouri River barge traffic will not impact highway and rail transportation costs. Even the Corps concedes the marginal economic benefit of Missouri River barge navigation—less than $7 million annually, according to the RDEIS—although the National Academy of Sciences found that actual benefits are closer to $3 million annually and that net benefits are eliminated when flows reach 30,000 cfs.[2]

By contrast, the RDEIS estimates that hydropower generates $741 million in annual economic benefits, water supply generates $610 million in annual economic benefits, and flood control generates $410 million in annual economic benefits. Nevertheless, the Corps has consistently managed the Missouri's mainstem dams primarily to benefit barge navigation—at the expense of every other economic and environmental use of the Missouri. Even recreation produces at least 12 times as many economic benefits as navigation despite historic river management that has decimated the river's flora and fauna and limited access to boat ramps. Recreation between Sioux City and St. Louis alone produces twice as many economic benefits as Missouri River barge navigation, according to the RDEIS. Only 1.5 million tons of commercial cargo was shipped annually on the Missouri during the 1990s, far less than the 15 million tons predicted by the Missouri River Navigation Commission in 1929 and just three-tenths of 1 percent of the grain harvested each year in Nebraska, Iowa, Kansas, and Missouri.

Despite the insignificance of Missouri River navigation, GP2021 would provide sufficient flows for commercial navigation between April 1 and mid-June, and from early September through November. The Corps estimates that under GP2021, barge navigation would continue to generate $4.75 million in annual economic benefits. Less than 20 percent of farm-related cargo is shipped in July and August, according to the Corps. In essence, the Missouri River already operates in a "split navigation season" format—fertilizer is moved upstream during spring, and grain is shipped downstream in the fall, and the amount of grain shipped downstream is fixed by the amount of fertilizer moved upstream.[3] The presence of empty fertilizer barges from spring hauls is the only factor that makes shipping some corn and soybeans on the river economically viable.[4] There is no evidence presented in the RDEIS that formal implementation of this informal custom would jeopardize Missouri River navigation.

GP2021 would have no impact on highway and rail rates, and the RDEIS does not reflect on the Corps' flawed 1994 competitive rate study. Agricultural economists from Iowa State University, the University of Nebraska, and Kansas State University concluded that the competitive rate study is "likely meaningless" and "suffer(s) from several defects."[5,6] Low levels of Missouri River barge traffic have no measurable impact on transportation rates in the region, and the Corps has provided no evidence in the RDEIS that suspending summer barge navigation would impact transportation rates or threaten the long-term prospects of commercial navigation on the Missouri.

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[2] National Research Council. 2002. *The Missouri River Ecosystem: Exploring the Prospects for Recovery.* National Academy Press. Washington, DC.

[3] Baumel, P. 1998. *The Competitive Benefit of the Missouri River? A Review of "Rail Rates and the Availability of Barge Transportation: The Missouri River Region".* Environmental Defense Fund. Washington, DC.

[4] Ibid.

[5] Ibid.

[6] Babcock, M. and D. Anderson. 1999. *An Evaluation of the U.S. Army Corps of Engineers' Measurement of the Economic Benefits of Missouri River Navigation.* Environmental Defense Fund. Washington, DC.

GP2021 would also enhance Mississippi River barge navigation between St. Louis and Cairo, a historic "bottleneck" that naturally suffers from low fall water levels. Many factors contribute to "lost navigation efficiency," including shallow water forcing operators to spread their cargo across more tows. The Corps estimates in the RDEIS that "lost navigation efficiency" between St. Louis and Cairo annually costs the barge industry $45.3 million.

Increasing the Missouri River's contributions to the Mississippi River during the fall would allow barge operators to put heavier loads on fewer barges and move through locks more quickly. Under the CWCP, constant amounts of water are released for a small amount of barges on the Missouri River for the entire 8-month navigation season. Thus, little water is available to the Mississippi when that river needs it most.

By contrast, reducing summer flows increases the water available for fall flows into the Mississippi, which supports Mississippi River navigation. GP2021 cuts Mississippi River congestion losses by more than 16 percent—saving an estimated $7.3 million each year.

This savings for the Mississippi River barge industry is greater than the annual economic benefit of the entire Missouri River barge industry. In addition, Mississippi River barge traffic, unlike Missouri River barge traffic, has an economic impact on truck and rail shipping rates.

The tradeoff between Missouri River barge support and Mississippi River barge support has long been known. Agricultural economists from the basin continue to point out that particularly in droughts, managing flows on the Missouri River more naturally—which better supports Mississippi River navigation—could result in "substantial benefits for agriculture in (the form of) lower rail rates."[7]

Flooding and Interior Drainage

GP2021 will not increase the risk of flooding, and will provide benefits to production agriculture in the Missouri River floodplain through enhanced groundwater levels, in the spring and fall, and improved drainage in the summer months due to lower flows in the Missouri River.

According to the RDEIS, GP2021 will provide $407.7 million in annual flood control benefits, or 98.9 percent of the benefits now provided by the current water control plan.[8] As the RDEIS states, the impacts of GP2021 on overall flood control benefits are "insignificant."[9] The RDEIS fails to note that from a flood control perspective, only lands located between the river and the levees lining the Missouri River would be impacted by dam releases. And, the RDEIS fails to note that the Reasonable and Prudent Alternative proposed in the Service's Final Biological Opinion would only be implemented, on average, once in every three years. The Final Biological Opinion provides the Corps ample flexibility to postpone spring dam releases if weather conditions would increase the risk of flooding.[10]

The RDEIS incorrectly suggests that GP2021 will have only negative impacts on the drainage of most floodplain farmland and groundwater levels. Both the RDEIS summary and main report fail to highlight the potential benefits of elevated groundwater levels in the spring and fall for crop growth, and fail to highlight the benefits of low summer flows on the drainage of floodplain farmland. The RDEIS instead focuses on the tiny fraction of farmland negatively impacted by higher groundwater levels in the spring and fall, and fails to note that farmland impacted by higher groundwater levels is typically farmed sloughs, chutes, and oxbow lakes that suffer from poor drainage regardless of river conditions. Less than 200 acres of the six levee districts analyzed by the Corps would be negatively impacted by higher spring and fall releases, increasing flood damages by approximately $650,000 a year.[11] By contrast, the potential benefits of higher groundwater levels in the spring and fall and improved drainage conditions in the summer on a much greater number of farmland acres in the Missouri River floodplain are not calculated. The Corps' failure to document these benefits makes this analysis irrelevant and violates the purposes of the National Environmental Policy Act (NEPA).

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[7] Ibid.

[8] U.S. Army Corps of Engineers. 2001. *Missouri River Water Control Manual Review and Update, Revised Draft Environmental Impact Statement.* Northwestern Division. Portland, OR.

[9] Ibid.

[10] U.S. Fish and Wildlife Service. 2000. *Final Biological Opinion on the Operation of the Missouri River Main Stem Reservoir System, Operation and Maintenance of the Missouri River Bank Stabilization and Navigation Project, and Operation of the Kansas Reservoir System.* Regions 6 and 3. Denver, CO and Ft. Snelling, MN.

[11] This number is inflated by the Corps' analysis, which can not segregate groundwater impacts and interior drainage impacts.

The RDEIS also fails to consider alternatives that will offset the drainage impacts on the acres of land modestly impacted by GP2021, such as the installation of pumps, the acquisition of easements, or conversion to water-tolerant crops like trees and hay production. In particular, the RDEIS ignores the high likelihood that floodplain farmland impacted by dam reforms would be acquired from willing sellers through programs like the Corps' Missouri River Fish and Wildlife Mitigation Project. In fact, the Corps has not determined whether any of the land potentially impacted by higher spring and fall releases has already been acquired, leased, or converted to other uses. Finally, the Corps has not explored whether increasing dam releases after the harvest of floodplain crops can be accomplished without increasing the likelihood of ice damage. Again, the Corps' failure to assess these alternatives and to adequately forecast future conditions renders this analysis irrelevant and is a violation of the purposes of NEPA.

Hydropower

GP2021 provides a 2% increase in the total economic hydropower benefits over the CWCP, according to the RDEIS. GP2021 also increases marketable capacity for the Western Area Power Administration (WAPA) in both the summer and winter seasons. Thus, in general, restoring more natural flows to the Missouri River will result in an overall positive impact on the production of hydropower on the Missouri River system. This conclusion was found to be accurate in a recent report on Missouri River hydropower by noted hydropower economist David Marcus.[12]

However, the RDEIS goes on to suggest that lower summer flows might result in a loss of firmpower revenue on the Missouri River system of up to $29.7 million is inaccurate. Those numbers are based on an analysis completed by WAPA, and are based on energy prices from January 2001, when energy prices were at an all-time record high due to the California energy crisis.[13] Using more typical current prices from June 2002, the prediction of revenue loss falls from roughly $30 million to around $3 million for the GP2021 and GP 1521 alternatives.[14]

Even for customers who buy all of their electricity from WAPA, GP2021 would only increase costs from 1.7 cents per kwh to 1.74 cents, or about 2 percent.[15] Customers buying only 10 percent of their electricity from WAPA might experience a 0.1 percent increase.[16]

The price of retail electricity also includes the cost of transmission, distribution, marketing, metering, and billing, none of which would be affected by Missouri River flow changes. This means that retail price increases due to flow changes would be even less that for WAPA firm power customers. Without factoring in the positive impacts of increased capacity, the average rate increase for the region if GP2021 was implemented would be about 1.5 cents per month for a typical residential customer.[17]

The original WAPA analysis ignores the value of increased marketable capacity on the Missouri River system that would come from restoring more natural flows to the river. If this were factored in, it is likely that flow changes could result in positive economic impacts of $8 million to $16 million annually.[18] Also, the RDEIS fails to discuss the fact that under an alternative like GP2021, the loss of hydropower during extreme drought and flood events is reduced as compared to the CWCP. Not factoring this "insurance value" during extreme events into the analysis likely contributes to an overestimation of the negative impacts of implementing GP2021.

The estimated revenue loss resulting from the implementation of GP2021 can also be mitigated by opportunities to increase summer revenues at other Missouri River projects such as Ft. Peck Dam. For example, flat releases out of Ft. Peck during the summer of 2001 were marketed to offset power shortages due to drought in the Columbia Basin, generating substantial revenue for WAPA. This occurred while average releases during the summer of 2001 out of Gavins Point Dam were 23,000 cfs. This type of intra-system activity can be used to help offset any potential negative impacts of restoring more natural flows to the Missouri.

Another issue related to power production is the presence of generating plants along the lower river, both nuclear and coal-fired. In both cases, the generating plants have maximum ambient temperature requirements for river water intake, as

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[12] Marcus, D. 2002. *Energy impacts of re-operating the Missouri River dams.* American Rivers/ Environmental Defense. Berkeley, CA.
[13] Ibid.
[14] Ibid.
[15] Ibid.
[16] Ibid.
[17] Ibid.
[18] Ibid.

well as maximum temperature requirements for discharge of thermally-heated water back into the Missouri River. Power plant representatives have indicated that low summer flows are not necessarily an operational problem, but that high summer flows, which are a byproduct of current operations, create more of a problem than low flows.

Nevertheless, power plant representatives do voice a concern with low summer flows relating to the constraints of current National Pollution Discharge Elimination System permits. To avoid violating the requirements of these Clean Water Act permits, generating plants along the river must avoid releasing water back into the river at too high of a temperature. In the RDEIS, the Corps asserted that Gp1521 and GP2021 have the "potential" to limit the output of downstream powerplants by an average of up to 278 Mw in July.

Further study shows this estimate is not accurate. According to the Corps, 9 percent of the alleged impact is upstream of Gavins Point Dam, which would in reality not be affected by low summer flows out of Gavins Point Dam. More importantly, the Corps apparently ignored the actual permits for the downstream power plants.[19] A vast majority of the impacts reported in the RDEIS stem from operations at the Neal power station in Iowa. A review of the permit for this power station shows that discharges would not violate heat limits even if river flows reached 10,500 cfs, much lower than the 21,000 cfs flows required by GP2021.[20]

Research done by the Nebraska Game and Parks Commission, the University of Nebraska, and others in the 1970s determined that existing thermal discharges in the summer were not having significant biological impact on the Missouri River.[21] This suggests that even if low flows did result in some thermal impacts, current temperature limits on return water could potentially be modified, or permit variances could be granted, allowing power plants to operate fully without causing significant negative impacts on the ecology of the Missouri River. However, this situation warrants further analysis through updated monitoring in an adaptive management process on the Missouri. The RDEIS also fails to explore other means of dealing with thermally-heated return water, like pumping this water first into created wetlands where temperature problems could be abated.

Environmental Issues

High spring flows provide spawning cues for manly fish species found in the Missouri, including the endangered pallid sturgeon. These high flows also build new sandbars on the river and scour vegetation from existing sandbars. High flows also wash vegetation and other organic matter into the Missouri, forming much of the river's food base. Low flows are also critical for fish species like sturgeon. Recently spawned fish are poor swimmers and are easily carried by water currents. Many larval fish depend on easy access to shallow, slower-flowing areas where they can feed and avoid predators. And, low flows expose the sandbars created and cleaned during the high-flow period to make them useable as nesting habitat for birds like the endangered interior least tern and the threatened piping plover.

Current Missouri River dam operations fail in two ways: 1) by failing to provide sufficiently high spring releases to create adequate sandbar habitat or to serve as a reproductive cue for native fish species, and 2) by failing to provide sufficiently low summer flows to expose sandbars and to provide suitable shallow-water habitat for larval fish species, including larval pallid sturgeon.

As the Final Biological Opinion notes, the availability of habitat and the health of Missouri River fish and wildlife populations are shaped by the timing, variability, and amplitude of the natural hydrograph, and dam releases continue to serve as a master variable.[22] The annual rise and fall of the Missouri River is essential to the health of large floodplain river ecosystems like the Missouri, according to the National Academy of Sciences' recent report, *The Missouri River Ecosystem: Exploring the Prospects for Recovery*. The river's "flood pulse" adds organic matter and nutrients to the river; fuels the production of floodplain plants, and resets plants succession; and provides a reproductive cue for many species adapted to the river's fluc-

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[19] Ibid.

[20] Ibid.

[21] Hesse, L., G. Hergenrader, H. Lewis, S. Reetz, and A. Schlesinger. 1982. *The Middle Missouri River: A Collection of Papers on the Biology with Special Reference to Power Station Effects.* The Missouri River Study Group. Norfolk, NE.

[22] U.S. Fish and Wildlife Service. 2000. *Final Biological Opinion on the Operation of the Missouri River Main Stem Reservoir System, Operation and Maintenance of the Missouri River Bank Stabilization and Navigation Project, and Operation of the Kansas Reservoir System.* Regions 6 and 3. Denver, CO and Ft. Snelling, MN.

tuations, according to the Academy report. "Fish spawning, insect emergence, and seed dispersal are commonly triggered by rising waters," the Academy wrote.[23]

Pallid Sturgeon

GP2021 would improve river conditions for the Missouri's native fish species, preventing the extinction of the pallid sturgeon and reversing the decline of many other native fish species.

In particular, GP2021 would provide a "spawning cue" approximately once in every three years, according to the RDEIS. By contrast, the current water control plan provides a spawning cue less than once in every ten years.

Sturgeon reproduction is closely tied to rising flows in the late spring and early summer—a pattern that has been eliminated to provide steady flows for barge traffic. Sturgeon were once plentiful in the Missouri River, growing to lengths greater than six feet, weighing more than 80 pounds, and supporting a robust commercial fishing industry. The have occupied the Mississippi and Missouri River basins for more than 300 million years, according to some estimates. But, the Missouri's sturgeon population has been nearly driven into extinction in less than 50 years.

Since 1990, there has been no documented evidence of natural recruitment of pallid sturgeon on the Missouri River, meaning no new young sturgeon are surviving to become members of the reproductive adult population. Most of the sturgeon remaining in the Missouri are mature adults and may only have a few more opportunities to spawn. Because sturgeon only breed occasionally and only under optimal conditions, the chances of natural reproduction decline each year that dam reforms are delayed and the reproductive cues provided by rising spring flows are postponed. The Missouri's few remaining female sturgeon may only produce eggs during one or two more spawning events.

Ongoing delays by the Corps steadily reduce the likelihood that the Missouri's few remaining sturgeon will successfully reproduce. Current dam operations provide suitable spawning conditions only once every 10 to 11 years above Kansas City and only once every 5 to 6 years below Kansas City. Although the fish have long life spans, they have relatively low capacity for population increases.

The absence of low flows is also a serious threat to the existence of the pallid sturgeon. Once spawned, fish larvae drift in search of suitable shallow water habitat. In the past, roughly 100 acres of shallow-water habitat was available in each river mile during the summer months, providing habitat for larval sturgeon. Today, about 1 acre is available in each river mile. Reducing summer dam releases, as has been proposed by the Service, would increase shallow water habitat to about 8 acres per mile, providing critical habitat for larval pallid sturgeon.

A common claim made by advocates of status quo Missouri River dam operations is that even if dam release are modified to provide higher flows in the spring to serve as a spawning cue, pallid sturgeon will not reproduce because of the lack of appropriate gravel substrates for spawning in areas such as the National Recreational River stretch below Gavins Point Dam or the lower river. First, there is no documented, definitive scientific information that supports the notion that pallid sturgeon spawn exclusively on gravel substrates. Second, exhaustive research done through the river-wide Benthic Fish Study completed in 2001, Population Structure and Habitat Use of Benthic Fishes Along the Missouri and Lower Yellowstone Rivers, shows that there is indeed gravel substrate below both Ft. Peck Dam and Gavins Point Dam, which are priority reaches for the pallid sturgeon. The Benthic Fish Study shows that in fact, there is a greater abundance of gravel in the Missouri River below Gavins Point Dam (7.1%) than below Ft. Peck Dam (5.1 and that there is a comparable amount of gravel in the lower river below Sioux City (5.0%).[24]

In addition to providing sturgeon a chance for survival, GP2021 would also reverse the decline of many of other native fish species. Paddlefish, blue sucker, shortnose gar, and a variety of chubs and shiners considered rare by state officials would benefit from restoration of some semblance of the river's natural hydrograph. GP2021 would also provide significantly greater benefits to Missouri sportfishing. For example, GP2021 would significantly improve reservoir fish production, and would greatly improve sportfishing options on the lower river.

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[23] National Research Council. 2002. *The Missouri River Ecosystem: Exploring the Prospects for Recovery.* National Academy Press. Washington, DC.

[24] Galat, D., M. Wildhaber, and D. Dieterman. 2001. *Spatial Patterns of Physical Habitat: Volume 2: Population Structure and Habitat Use of Benthic Fishes Along the Missouri and Lower Yellowstone Rivers.*

Interior Least Terns and Piping Plovers

GP2021 is necessary to avoid the extinction of the endangered interior least tern and the threatened piping plover. In the Final Biological Opinion, the Service concluded that current dam operations "jeopardize the continued existence of the endangered interior least tern and threatened piping plover because (dam) operations eliminate essential nesting habitat."[25] This conclusion was made previously by the Service in both a 1990 Final Biological Opinion and a 1994 Draft Biological Opinion.

Sandbars free of vegetation provide critical nesting habitat for least terns and piping plovers, and the reproductive success and failure of these rare shorebirds is directly correlated to the abundance or absence of sandbar habitat. The amount and availability of sandbar habitat in the summer is directly linked to high spring dam releases and low summer dam releases. Sandbars are created when dam releases are increased in the spring, scouring the river's bottom and banks. As dam releases decline during the summer, the sandbars remain exposed, and the shallow water near sandbars provides important feeding habitat for nesting birds and chicks.

The Service listed the interior population of the least tern as an endangered species in 1985. Least terns were once a common species along the Missouri River. During their exploration of the Missouri River, Lewis and Clark found the birds nesting frequently, particularly along the lower river. Today, terns breed primarily on the relatively free-flowing river stretches that remain. According to Corps data on terns compiled since 1986, over 90% of terns on the Missouri River nest on riverine sandbars.

Interior least tern reproduction is closely tied to the spring rise and subsequent lowering of summer flows that used to characterize the Missouri River. Least terns prefer to nest on sandbar islands that are largely free of vegetation that can hide predators. High spring flows are necessary to build new sandbars to scour existing sandbars of vegetation. Because least terns nest close to water, rising water levels after nest initiation will destroy the nests. The Service has consistently found that existing Missouri River water management has resulted in the loss of thousands of acres of sandbar habitat, significant vegetative encroachment on remaining sandbars, and direct flooding of tern nests in a manner that kills eggs and chicks.

Least terns also depend on productive foraging habitats, both immediately prior to breeding and within a short distance of the nest. Good foraging habitat is critical to the energy reserves needed for successful nesting. Sloughs, side channels, tributaries, and other shallow water habitats "produce the fish and benthic invertebrates that terns and plovers, respectively, depend on for food."[26] Fish and invertebrate reproduction also depends on a more natural river flow pattern.

Like the least tern, the piping plover received federal protection in 1985. Naturalists once found the piping plover common in the central United States. Since that time, the population has decreased over most of its range, and the plover has vanished as a nesting species in many areas. Because a critical source of the plover's ongoing decline is the loss of essential habitat, the failure to protect and restore nesting habitat will contribute the species' extinction.

Piping plover nesting behavior is similar to the least tern. Like the tern, the plover relies on sparsely vegetated sandbars and nests in virtually the same areas as the tern. The impacts of current Missouri River dam operations on piping plovers are therefore largely identical to those identified for the least tern. Current operations of the Missouri River system have destroyed much of the piping plover's essential nesting habitat. According to the Service, these losses "are significant and threaten the survival and recovery of the plover."[27]

In the early 1990s, the Service established reproductive goals necessary to restore stable populations of terns and plovers on the Missouri River system. Recovery fledge ratios of 0.7 for terns and 1.44 for plovers were established to provide guidance on the status of the two birds on the Missouri River. Prior to 1998, the Corps consistently failed to meet these reproductive goals. Between 1986 and 1999, for example, the average fledge ratio (the number of chicks fledged per adult pair) for the least tern was 0.65 and for the piping plover was 0.80. Nest success for terns during that same time was only 43.3 percent and was only 43.6 percent for plovers.

Unusually high dam releases in 1997 established the clear connection between the presence of clean sandbars and successful tern and plover reproduction. Until dam releases were increased and adequate sandbar habitat created, the Corps had never

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[25] U.S. Fish and Wildlife Service. 2000. Final Biological Opinion on the Operation of the Missouri River Main Stem Reservoir System, Operation and Maintenance of the Missouri River Bank Stabilization and Navigation Project, and Operation of the Kansas Reservoir System. Regions 6 and 3. Denver, CO and Ft. Snelling, MN.

[26] Ibid.

[27] Ibid.

met legally-mandated reproductive goals for the least tern and piping plover. During 1997, the Missouri River system experienced record runoff, resulting in sharply higher flows on the river at critical periods. The following summer (1998), more normal flows revealed a dramatic increase in the availability of clean, high-elevation sandbars in some of the river's more natural segments like the National Recreational River stretch below Gavins Point Dam for nesting by terns and plovers. That summer, for the first time on record, both the interior least tern and the piping plover met their recovery fledge ratios. Many of those sandbars have persisted on the river's more natural segments, and as a result, terns have met their recovery fledge ratio every year since, and plovers have met their recovery fledge ratio two out of four years.

However, the sandbars created by the high runoff of 1997 are continually eroding and being covered by vegetation. Although the terns and plovers have continued to meet their recovery fledge ratios, the numbers are slowly declining as the sandbars disappear or become unusable. For example, the least tern fledge ratio declined from 1.73 in 1998 to 1.06 in 2001, and the plover fledge ratio declined over the same period from 1.61 to 1.38.[28] With reproductive success declining, and since the CWCP does not provide rising flows in the spring to build and scour sandbars or lower flows in the summer to expose sandbars, the Corps will soon once again fail to meet the required reproductive goals for both birds unless dam releases are increased and new sandbars established.

The GP2021 alternative increases tern and plover nesting habitat on the Missouri River by 74% over the CWCP, according to the RDEIS. This is the largest increase in tern and plover habitat among all of the modeled alternatives in the RDEIS. In particular, this alternative includes increased habitat below Garrison, Ft. Randall, and Gavins Point Dams, which have been identified by river biologists as the priority reaches for terns and plovers on the Missouri River.

General Considerations

The Corps must immediately implement dam reforms to avoid the extinction of three federally protected species and to reverse the decline of more than 70 other species native to the Missouri River. The Final Biological Opinion anticipates immediate implementation of dam reforms. The Opinion states on p. 243 that the Corps should "implement components of recommended flows (e.g. spring rise only, summer low flow only, modified rise, or low flow) as quickly as possible." And the recent National Academy of Sciences report on Missouri River science calls for "decisive and immediate management actions" to restore the river's pattern of high and low flows.

Despite this scientific consensus, the Corps continues to delay dam reforms despite ongoing violations of the Endangered Species Act and overwhelming evidence of the economic benefits of dam reforms for riverside communities. As the Service noted on p. 234 in the Final Biological Opinion, "the primary elements necessary to avoid jeopardy have not substantially changed since they were first outlined in the 1990 biological opinion and later refined further in the 1994 Draft Biological Opinion."

Unfortunately, this pattern of delay by the Corps has a long history:

- The Corps consistently refused to enter into formal consultation with the U.S. Fish and Wildlife Service to address the needs of the pallid sturgeon.
- The Corps failed to include alternatives in a 1994 EIS and a 1998 EIS that adequately addressed the needs of endangered species.
- The Corps proposed dam operations in 1994 and 2000 that would not comply with the ESA.
- The Corps consistently delayed completion of the Master Manual Review.
- The Corps refused to implement interim conservation measures to recover listed species, including habitat restoration and modest dam reforms.
- The Corps announced in June of this year that they were forcing the Fish and Wildlife Service back into consultation on endangered species issues, and that final decisions on a revised Master Manual would be "indefinitely delayed."

The Corps has a legal duty to immediately implement dam reforms. Congress enacted the Endangered Species Act to provide a means "whereby the ecosystems upon which endangered and threatened species depend may be conserved." Section 9 of the ESA makes it illegal for the Corps to "take" protected species, and the term "take" is broadly defined to include actions which "harm" or "harass" the species and their habitat, including habitat impacts that significantly impair essential behavior, including breeding, feeding, and sheltering.

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[28] U.S. Army Corps of Engineers. 2001. *Results of Monitoring of Interior Least Tern and Piping Plover Nesting on the Missouri River system, 1986-2001.* Omaha District. Yankton, SD.

Section 7 of the ESA requires that federal agencies ensure that agency actions are not likely to jeopardize the continued existence of any listed species; that is, not reasonably expected to reduce appreciably the likelihood of both the survival and recovery of a listed species by reducing the reproduction, numbers, and distributions of that species. Section 7 also requires the Service to consult with the Corps and to suggest reasonable and prudent alternatives that, if implemented, would prevent actions likely to jeopardize the continued existence of the species.

The Corps has ample flexibility to implement the Reasonable and Prudent Alternatives proposed in the Final Biological Opinion. In fact, according to the Congressional Research Service, there is "no statutory mandate for any particular flows, levels of navigation depth, or for length of season of operations, etc. in the principal legislative authorizations."[29] Indeed, Section 1(b) of the Flood Control Act of 1944 suggests that Congress did not intend for navigation to be conducted in a way that impairs other project purposes, and the 1958 Fish and Wildlife Coordination Act ensures that fish and wildlife (an authorized project purpose) must "receive equal consideration with other project purposes."[30] Thus, the Corps has tremendous discretion in how it manages Missouri River flows and navigation seasons, and this management must be carried out in a way that gives equal weight to all the authorized project purposes of the Missouri River system, including fish and wildlife and recreation.

The Corps has not identified other alternatives that would lead to the recovery of listed species and reverse the decline of the Missouri's other troubled wildlife. In particular, expansion of the Missouri River Fish and Wildlife Mitigation Project, or other measures that restore habitat, are not by themselves measures that avoid jeopardy. In light of the historic destruction of Missouri River habitat by the Corps,[31] we support proposals to accelerate the restoration of floodplain and aquatic habitat, including the expansion of the Missouri River Fish and Wildlife Mitigation Project. We urge the Corps to quickly expand the Mitigation Project, and to expand the project's focus on aquatic habitat restoration. However, habitat restoration alone will not meet the Corps' legal duties under the ESA. The National Academy of Sciences concluded that current habitat restoration efforts on the river are "insufficient to noticeably recover ecological communities and fundamental physical processes in the Missouri River ecosystem.[32] Further, the Academy went on to conclude the following:

> "Degradation of the Missouri River ecosystem will continue unless some portion of the hydrologic and geomorphic processes that sustained the pre-regulation Missouri River and floodplain ecosystem are restored—including flow pulses that emulate the natural hydrograph . . . The current dam and reservoir operation . . . to provide a steady and reliable 9-foot deep navigation channel . . . run(s) counter to established river science, in which a large degree of natural hydrograph variability is essential to biological productivity and species richness."[33]

Without flow restoration, physical habitat restoration efforts will fail to achieve a meaningful level of ecosystem health, according to the Academy report. As the Final Biological Opinion and the Academy report repeatedly demonstrate, the availability of habitat and the health of Missouri River native species are shaped by the frequency, duration, magnitude, timing, and variability of the natural hydrograph, and dam releases are a driving variable controlling flows on the river. Until dam operations are reformed to include higher spring dam releases and lower summer dam releases, listed species will creep inexorably closer to extinction and additional species will be listed as endangered and threatened.

Except for GP2021, the GP or "environmental" alternatives receiving detailed analysis in the RDEIS all fail to fully capture the elements of the RPA in the Service's Final Biological Opinion. The RPA recommendations have been described by the Missouri River Natural Resources Committee as "biologically sound and scientif-

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[29] Congressional Research Service. 2000. *Duties of the Army Corps of Engineers Regarding Missouri River Flows and the Endangered Species Act.* Washington, DC.

[30] Ibid.

[31] The Corps' channelization of the Missouri eliminated nearly all of the river's sloughs, side channels, and sandbars, including more than 90 percent of the Missouri's islands and adjacent wetlands and 97 percent of the Missouri's sandbars between Sioux City and St. Louis. Corps channelization cut off most of the lower Missouri from the river's floodplain, contributed to an 80 percent decline in the vegetation and insects available to aquatic life, and helped reduce suspended sediment loads by more than two-thirds.

[32] National Research Council. 2002. *The Missouri River Ecosystem: Exploring the Prospects for Recovery.* National Academy Press. Washington, DC.

[33] Ibid.

ically justified."[34] According to the RDEIS, the GP2021 alternative outperforms all of the other GP alternatives in nearly all of the analyzed environmental categories. From a biological perspective, GP2021 is the alternative that will lead to the most meaningful restoration of the Missouri River's form and function.

The GP2021 alternative provides substantial environmental, recreation, and economic gains for the Missouri River basin in comparison to the CWCP. This compromise alternative combines sound and, in some cases, legally required fish and wildlife objectives with improvements in the economies of both the Missouri River basin and the nation. Traditional uses of the river will remain intact, yet the Missouri will more adequately support native fish and wildlife, a variety of recreational opportunities, and economic growth, and will better balance the needs of the upper basin and lower basin states.

We therefore urge the Corps to adopt GP2021 as the Preferred Alternative in the Final Environmental Impact Statement for the Missouri River Master Water Control Manual and implement that alternative as soon as possible.

LONG-TERM MONITORING ON THE MISSOURI RIVER

American Rivers fully supports the efforts of Senator Dorgan of North Dakota and Senator Johnson of South Dakota to introduce the "Lewis and Clark Voyage of Scientific Discovery Act" in the Senate. This bill would establish the Missouri River Environmental Assessment Program, a long-term environmental monitoring program that would help to coordinate river research and provide information crucial to making management decisions on the Missouri. This program, developed cooperatively by the basin state fish and wildlife management agencies, key federal agencies, and numerous Missouri River scientists and fish and wildlife managers, is critical for implementing sound, long-term management practices on the Missouri River.

MISSOURI RIVER FISH AND WILDLIFE MITIGATION PROJECT

Earlier this year, the Corps delivered a report to Congress detailing the need for up to $1.3 billion over the next 30-35 years to restore one-quarter of the habitat along the lower Missouri River lost to channelization. This funding would be for the Missouri River Fish and Wildlife Mitigation Project, the primary habitat restoration program along the lower Missouri River from Sioux City, Iowa to St. Louis. Assuming the Corps will partner closely with the state fish and wildlife management agencies in Nebraska, Iowa, Kansas, and Missouri to design and build appropriate aquatic and terrestrial habitat restoration projects along the lower river, American Rivers fully supports this major increase in funding for the mitigation project.

Construction and operation of federal water projects on the Missouri River have nearly eliminated the spawning, nursery, and foraging habitat critical for the survival of the river's native fish and wildlife. The river between Sioux City and St. Louis, channelized to one-third of its original width to support barge traffic, has lost more than 90 percent of its wetlands, islands, chutes, and sandbars. Consequently, dozens of the species native to the Missouri River and its floodplain have declined and are now considered endangered, threatened, or of special concern by federal and state experts. The loss of habitat also threatens a growing recreation industry along the Missouri.

The Missouri River Fish and Wildlife Mitigation Project was created in the 1986 Water Resources Development Act to reverse the impacts of lower river channelization and bank stabilization through land acquisition from willing sellers. The mitigation project restores chutes, side channels, and other off-channel floodplain habitat important for river wildlife. It has been very popular among citizens and public officials in the region and has been strongly supported by numerous Missouri River Basin members of Congress.

In the Water Resources Development Act of 1999, Congress authorized an 118,650-acre increase in the amount of land that could be purchased from willing sellers and restored under the mitigation project. In addition to the amount of habitat restored under the original authorization, when complete this would amount to the restoration of roughly one-quarter of the 500,000 acres of habitat lost along the lower Missouri to channelization. Since both flow changes and habitat restoration are necessary to help ensure the long-term health of the Missouri River, it is imperative that Congress provide the funding necessary to implement the Missouri River Fish and Wildlife Mitigation Project.

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[34] Missouri River Natural Resources Committee. May 21, 2001. Letter to Interior Secretary Gale Norton.

CONCLUSION

I'd like to thank the Committee for this opportunity to provide written testimony on Missouri River management. If any Members of the Committee have questions, I'd be happy to respond in writing, or I may be reached by telephone at (402) 477-7910 or e-mail at csmith@amrivers.org.

STATEMENT OF JONATHAN BRY, CONSERVATION COORDINATOR, DACOTAH CHAPTER OF THE SIERRA CLUB

The Missouri River desperately needs our attention. The 200 year anniversary of the expedition of Lewis and Clark and their Corps of Discovery is approaching so now is the perfect time to restore some of the natural characteristics of the Missouri River.

The flow of Missouri River is currently being managed for barge interests below Sioux City Iowa, yet the most spectacular stretches of the river, like the Garrison Reach, are upstream. The shipping industry and the Bush administration seem to view the Missouri River as nothing more than a source of water to float a few barges while most Americans are aware that the river is much more valuable than that. The value of the Missouri River can not be truly appreciated when it is managed to push freight, rather than for habitat and recreational opportunities. According to the Army Corps, allowing more natural flows in the spring and summer will not affect flood control and they will actually increase hydro power.

We are engineering the Missouri River to death by attacking the river on several fronts. It seems that we have not learned from the mistakes of allowing the wishes of a politically influential industry to be placed above the needs of fish, wildlife and people. The downstream reach of the Missouri River has been entirely stabilized with absolutely no consideration for aesthetic qualities, or for fish and wildlife habitat. If we are not careful, most of our rivers may one day resemble shipping channels. The decisions that we make now will affect the way we perceive the Missouri River and other rivers in the future.

It may be difficult to completely restore the dynamics of the free-flowing, pre-dam Missouri River, but it is possible to mimic natural flows by timing dam releases to accommodate the seasons. A spring rise and lower summer flows will help to ensure the survival of the endangered interior least tern, the threatened piping plover and the endangered pallid sturgeon. It will also benefit fishing and other recreational opportunities in states like North Dakota. The economic benefits of recreation exceed that of the barge industry by at least a factor of 10 and is growing fast. Practically all residents of North Dakota support more natural flow changes for the Missouri River.

The expense of maintaining the Missouri River to accommodate an insignificant amount of barge traffic does not justify the financial benefits that the barge industry generates. The expense of managing the Missouri River mainly for this relatively small industry and the environmental cost that we must all pay are very high.

The barge industry claims that you don't have to radically alter the flow of the river to create wildlife habitat. First of all, the river has already been radically altered to provide a steady flow of water to support the dwindling barge industry. Managing the river using the recommendations of the U.S. Fish and Wildlife Service should not be considered a radical alteration since it brings us closer to living with a more natural river. A more natural hydrograph needs to be reinstated.

The Army Corps of Engineers is required by law to insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species.

Modifying the Final Biological Opinion of the U.S. Fish and Wildlife Service so that the Army Corps of Engineers does not violate the Endangered Species Act of 1973 is not an option. Modifying or rewriting a scientific report will not change the original findings that were based on solid science. The National Academy of Sciences two year study concludes that the degradation of the Missouri River ecosystem will continue unless the river's natural water flow is significantly restored. It states that just restoring riverside habitat, in the absence of dam reforms, will be insufficient to halt the river's decline. We strongly agree with both the National Academy of Sciences and the U.S. Fish and Wildlife Service's water flow recommendations.

The Army Corps of Engineers has received about 55,000 comments on the various options for reforming how the agency manages its six big dams on the Missouri River. There are six alternatives to the Master Water Control Manual in the Missouri River Revised Draft Environmental Impact Statement. Over 50,000 of those

comments are in favor of restoring more natural flows to the river. If changes in flow are not implemented, the comments of the public will have been completely ignored. We strongly support the GP2021 option.

President Bush recently signed a proclamation designating 2003 through 2006 as the Lewis and Clark Bicentennial. He asked all Americans to observe this event with appropriate activities that honor the achievements of the Lewis and Clark Expedition. He also directed Federal agencies to work in cooperation with each other, States, tribes, communities, and the National Council of the Lewis and Clark Bicentennial to promote educational, cultural, and interpretive opportunities for citizens and visitors to learn more about the natural, historical, and cultural resources that are significant components of the Lewis and Clark story. I can not think of a better way to commemorate the Lewis and Clark Bicentennial, than to restore the Missouri River by allowing it to flow more naturally as it did during the expedition of the Corps of Discovery nearly 200 years ago.

After twelve years of study costing millions of dollars, the U.S. Army Corps of Engineers has not yet released a preferred alternative to the Master Water Control Manual. The U.S. Fish and Wildlife Services deadline of implementing a better flow plan by March 2003, is approaching fast. If the Army Corps keeps the status quo, they will be in violation of the Endangered Species Act. They may also be contributing to a growing list of new endangered species on the Missouri River.

The needs of upstream states like North Dakota have been ignored for too long. It is time to update the master manual for the Missouri River by selecting the GP2021 alternative, over the current water control manual. The quality of life for those living in the Missouri River basin will be diminished if the longest river in the United States is not restored and preserved for future generations. The Missouri River enhances our quality of life and it gives young people another good reason to stay in North Dakota.

STATEMENT OF RICHARD H. OPPER, EXECUTIVE DIRECTOR OF THE MISSOURI RIVER BASIN ASSOCIATION, LEWISTOWN, MT

My name is Richard Opper, and I am the Executive Director of the Missouri River Basin Association (MRBA), P.O. Box 301, Lewistown, Montana 59457. On behalf of MRBA, I thank you for the opportunity to provide testimony to this hearing.

The MRBA is a coalition of eight states (Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, and Wyoming) and the Indian tribes of the Missouri Basin. MRBA has been working with the Corps of Engineers and other federal agencies since 1989 to revise the Missouri River Master Water Control Manual (Master Manual).

In 1995, the Corps of Engineers asked MRBA to develop aspects of a river operating plan that would be acceptable to the basin's states and Indian tribes, and MRBA accepted the challenge, Initially, MRBA focused on developing recommendations to improve the overall economic and environmental health of the river basin. This work culminated in the April 1998 publication of MRBA's recommendations, a document that continues to serve as a planning guide for the association.

Next, MRBA turned its attention to the two most complex and contentious issues in the basin: drought flow management and recovery of the basin's threatened and endangered species. MRBA spent nearly two years in discussions about these two subjects with the Corps of Engineers, the U.S. Fish and Wildlife Service, and other agencies. It organized several basinwide conferences to talk with key stakeholders throughout the basin and held dozens of internal negotiation sessions to develop the following recommendations in November 1999 (Appendix A).*

The recommendations made by MRBA included operating criteria which would retain approximately two million more acre-feet of water in the reservoirs and avoid back-to-back years of minimum service navigation in the lower river in another drought of the duration and intensity as the one that hit the Missouri River Basin in the late-1980s.

In terms of Endangered Species Recovery, MRBA recommended the following:

1. Habitat: MRBA supported a much more aggressive approach to habitat acquisition and enhancement activities in the basin. There are several good programs currently in place to do this, such as the Missouri River Fish and Wildlife Mitigation Project, but they need to be greatly enhanced with expanded authorities and funding.

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*The appendixes have been retained in subcommittee files.

2. Monitoring: MRBA urged the immediate establishment of a Missouri River monitoring program. Such a program would determine if species recovery efforts are on track, thus saving money in the long run.

3. Recovery Committee: MRBA recommended the formation of a Recovery Committee that would allow the basin's stakeholders to participate in river management decisions. Such a committee would help basin stakeholders work more effectively with the federal agencies on recovery issues and facilitate the concept of adaptive management to the river system.

4. Flows: MRBA recommended that the Corps run a trial spring rise out of Fort Peck Reservoir to measure the benefits to the pallid sturgeon, least terns, and piping plovers in the 188 mile stretch of river between Fort Peck Dam in Montana and Lake Sakakawea in North Dakota. It also recommended that the Recovery Committee continue to investigate the success and adverse impacts of flow adjustments out of Gavins Point Dam to benefit the fish and wildlife in the lower river.

5. Other: MRBA recommended unbalancing the water releases from the upper three reservoirs to benefit sport fisheries, recreation, and endangered species; developing a mechanism to determine how to equitably distribute the pain and benefits of future depictions throughout the basin; and releasing excess summer and fall storage to meet the needs of downstream uses.

All MRBA member states except Missouri supported this November 1999 proposed plan. The tribes abstained from voting, and the state of Missouri said it could not support certain elements of the plan.

At the same time that MRBA finished its work on the agreement, the U.S. Fish and Wildlife Service was in Section 7 consultation with the Corps of Engineers on the Corps' existing operations of the Missouri River. This was followed by the publication of the Fish and Wildlife Service's Final Biological Opinion. The Service generally endorsed MRBA's recommendations, but it concluded that a more aggressive approach was needed to avoid jeopardy to the three threatened and endangered species in the basin—the least tern, the piping plover, and the pallid sturgeon. Specifically, it said that changes to the flows below Gavins Point Dam in the lower river were essential to the recovery of these species.

Then, in August 2001, the Corps released its Revised Draft Environmental Impact Statement (EIS) that contained six possible alternatives, one of which was the current water control plan. The Modified Conservation Plan (MCP) alternative was similar to MRBA Plan. The four other alternatives were modifications of the MCP plan with various levels of downstream spring rises and low summer flows added to it.

In February 2002, MRBA decided to expand its November 1999 recommendations in order to avoid what the Fish and Wildlife Services' Biological Opinion determined would lead to a jeopardy opinion. Specifically, MRBA recommended that the Corps implement a demonstration project which would increase spring releases from Gavins Point Dam by 15,000 efs above full navigation flows approximately once every third year, when additional downstream flooding risks are minimal. MRBA also recommended that as part of the demonstration project, the Corps should reduce flows in the lower river to minimum navigation service levels for two-and-a-half months each summer. The demonstration project should be conducted only if certain criteria, such as restrictions on the use of water from the Kansas River Reservoir system, are met. These restrictions and limitations are outlined further in the letter in Appendix B. MRBA suggested that the demonstration project continue for roughly three cycles of the spring rise, or approximately ten years. If the flow changes appear at the end of that time to help recover the basin's threatened and endangered species while minimizing impacts to river users, then the Corps should consider maintaining these flow changes as part of its new Master Manual.

Kansas, Montana, Nebraska, North Dakota, South Dakota, and Wyoming supported these new recommendations. The state of Missouri opposed them. The state of Iowa also opposed these changes while reiterating its support for MRBA's original November 1999 recommendations. The Tribes again abstained from voting. The Tribes requested that the revised Master Manual include a general operations plan for mitigation of environmental damages due to the fluctuation of water levels proposed by the Corps' Revised Draft Environmental Impact Statement alternatives. The Tribes are concerned that unbalanced water levels in the upper flood control system promote bank erosion and expose cultural resources to environmental damage.

The Corps of Engineers provided considerable support and encouragement to assist MRBA with four basinwide stakeholder meetings and many negotiation sessions on proposed Master Manual changes. MRBA's goal was to provide comprehensive recommendations that would recover the basin's threatened and endangered species while minimizing adverse impacts to river users. Now the Corps must decide upon

and announce a new Preferred Alternative for the Missouri River. Those of us in the basin have been waiting with varying degrees of patience for thirteen years to hear how the Corps intends to manage the Missouri River for the next several decades. The basin was assured repeatedly that the Corps would announce a new Preferred Alternative by the end of May 2002. However, more than a month has passed since that deadline and the Corps has not announced its decision. We are concerned that continued delays in announcing the new Preferred Alternative may prevent the implementation of the revised Master Manual by the 2003 deadline.

Regardless of which Preferred Alternative is ultimately selected, we still need accurate scientific data to assist in the management of the river. MRBA would like to see Congress authorize and appropriate funds for a comprehensive Missouri River monitoring program, which will be an important step towards encouraging cooperative scientific decision-making approaches to managing the Missouri River. MRBA has long supported the need for monitoring in our basin and stands ready to assist the Senate Energy and Natural Resources Water and Power Subcommittee as monitoring bills are drafted and moved through Congress.

I thank you for the opportunity to provide testimony to this hearing, and please let me know if MRBA can be of further assistance.

STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION

The American Farm Bureau Federation is a 5.1 million member general farm organization representing farmers and ranchers in all 50 states and Puerto Rico. American Farm Bureau policy, as approved by our delegates supports retention of the current Water Control Plan for the Missouri River. Our policy states:

> We believe the Corps should maintain the current Master Water Control Manual as is and should nor deviate from the standards set forth therein. We are opposed to the Corps requiring a spring rise on the Missouri River.

This policy reflects concern about the potential for flooding of agricultural lands below Gavins Point and the harm to navigation on the Missouri and Mississippi Rivers if a "spring rise" is allowed.

Altering the management of the Missouri River by allowing for a "Spring rise" would not only affect farmers in downstream states (Missouri, Nebraska, Iowa and Kansas) by potentially flooding their land, but also affect barge traffic movements on the Missouri and Mississippi Rivers. Without proper management of river flows over the course of the year, transportation could be hampered by insufficient water levels on the Missouri River and on the Mississippi River between Memphis, Tennessee, and Baton Rouge, Louisiana.

A "spring rise" would have significant harmful impacts on productive agricultural lands as well as the movement of agricultural commodities and input supplies along the Missouri and Mississippi Rivers. Flooding and impaired drainage would impact over 1 million acres of productive farmland. River transportation for the efficient and cost-effective transportation of agricultural commodities is of paramount importance to the agricultural economy of the Midwest and our nation. The prices farmers receive for commodities will decrease and the prices they pay for inputs such as fertilizer will rise if barge transportation is disrupted and more expensive transportation modes are utilized. Efficient and effective transportation is one of the United States' major competitive advantages in world grain trade.

The National Academy of Sciences, in its recent report on the Missouri River, called for a moratorium on changes to the manual while the Corps, in consultation with other agencies and stakeholders. including landowners and agriculture, works to improve the Missouri River environment.

In May 2002 the Eighth Circuit Court of Appeals in St. Louis stayed lower court rulings that prohibited the Corps of Engineers from managing water levels on the river according to the current manual. This action allows the Corps to maintain consistent water levels for the river for navigation and recreation.

The Corps of Engineers is to be commended for its persistence in seeking to find a balance among the many interests in the Missouri basin. Measures that increase flooding or reduce the efficiency of navigation should not be adopted. Flood protection and reliable commercial navigation on our waterways will be maintained by continuing to operate under the Current Water Control Plant for the Missouri River.

STATEMENT OF DAVE KOLAND, DEPUTY MANAGER, GARRISON DIVERSION CONSERVANCY DISTRICT

Mr. Chairman and members of the Subcommittee, my name is Dave Koland, Deputy Manager for the Garrison Diversion Conservancy District in North Dakota. Thank you for this opportunity to provide testimony on this issue, which is critical to the State of North Dakota. My message is the same distinct and unwavering one that we in North Dakota and most other Missouri River basin states have been stating for many years. The Missouri River Master Manual (Master Manual) of the U.S. Corps of Engineers must be changed to meet the contemporary needs of the basin.

The Flood Control Act of 1944 promised many benefits and for many, those ideas were realized. The problem is that time and uses have changed the need for those benefits.

Power generation, flood control and water supply benefits have occurred as originally envisioned and have provided hundreds of millions of dollars in benefits and prevented many personal losses.

On the other hand, irrigation development and downstream Missouri River navigation have not even accomplished a small percentage of what was originally envisioned. North Dakota was promised in excess of one million acres of federal irrigation to offset our loss of more than 500,000 acres of prime bottom land. That level of irrigation was never realized and, in fact, more acres of irrigated land were flooded by the dams in North Dakota than have ever been developed through the Pick-Sloan Plan. The Dakota Water Resources Act of 2000 further reduced the acreage of potential irrigation to less than 76,000 acres. That legislation also recognized the need for water in Eastern North Dakota, additional municipal water for rural North Dakotans and fish and wildlife and recreation benefits. We need to be assured that North Dakota's sovereign rights to all of our natural resources are recognized by the Corps and Bureau of Reclamation. This should be spelled out in the new Master Manual.

Downstream navigation benefits were projected by the Corps to exceed 20 million tons of goods annually. The present navigation only moves an insignificant 1.5 million tons of goods annually.

In contrast, recreation benefits in the upper basin have far exceeded the 1944 projections. Water-based recreation in North Dakota today is big business along the Missouri River. Lakes Sakakawea and Oahe provide diverse recreation opportunities to residents and nonresidents alike. The Corps estimated the national economic benefits derived from recreation at $84.7 million per year, while the total navigation benefits were only $6.9 million. That is a significant difference and only emphasizes how poor the Corps' projections originally were and how times have changed in the way the public uses our water resource and allocates their recreational dollars.

The present Master Manual is out of date and needs to be changed. It predates federal laws such as NEPA, the Threatened and Endangered Species Act, the Clean Water Act and many other laws which Congress has enacted to protect our natural resources.

The five alternatives that the Corps is considering to the old Master Manual are a step in a new direction. All five conserve water during drought periods, which improves our fish survival and provides our recreation benefits. It also increases federal hydopower generation. During the late 1980s, North Daktoa experienced a severe drought. If any one of the new alternatives had been in place, Lake Sakakawea would have been four to six feet higher, thus, improving our fish habitat, more efficient hydopower generation and an overall benefit to our economy along the Missouri River.

Over the years, the Missouri River Basin Association (MRBA) has worked long and hard to reach agreement on changes to the Master Manual. In November 1999, seven of the eight member states agreed to support a revised plan, which included drought conservation measures for the mainstem reservoirs, increased monitoring and the formation of a recovery committee to facilitate the concept of adaptive management of the river system. This plan is similar to the Corps' Modified Conservation Plan alternative. In February 2002, the MRBA agreed to expend its November 1999 recommendations in light of the U.S. fish and Wildlife Service's recommendation that spring release below Gavins Point be increased to help recover certain threatened and endangered wildlife species. This is similar to the Corps' GP 15/28 alternative. It is important to recognize that six of the eight states supported this recommendation.

We, in North Dakota, are extremely concerned that the Corps has chosen to not identify a preferred alternative. This only confuses the public and other agencies as to the Corps' intent. We disagree with the Corps "go slow" approach. It is bureau-

cratic and non-responsive to everyone's needs. Any one the alternatives, if implemented, would be a significant improvement over the current Master Manual.

All states in the Basin depend upon the river and reservoirs, and North Dakota relies on a responsible operation of those waters for our future. The future needs were evaluated by the MRBA and, after considerable deliberation, most agreed to support the ultimate recommendation. As good neighbors, both the upstream and downstream states must work together to assure that the good of the people is met and none of us suffer at the hands of another in the management of this important resource.

In conclusion, I must strongly recommend that the Corps of Engineers stick to its current schedule for completing the Master Manual revision process. All states in the Basin must be able to realize the positive benefits and also suffer the negative ones during times of drought and low water. Implementation of any of the five alternatives would be an economic improvement to our depressed economy. This action needs to happen now so that our citizens, both old and young, can enjoy the fruits of work.

The five main stem dams authorized in the 1944 Flood Control Act were constructed in 18 years. Why should revisions to the Master Manual take more than 14 years. It is time to say enough and get about the job of meeting the contemporary water needs of the entire Basin and not just those of a few. Thank you for your time Mr. Chairman.

STATEMENT OF JOHN STEELE, PRESIDENT, OGLALA SIOUX TRIBE

Good Morning Mr. Chairman:

Thank you for the opportunity to present testimony on the proposed management plan for the Missouri River. The Missouri River and its surrounding shores are of extreme importance to the Oglala Sioux Tribe.

The Oglala Sioux Tribe was a party to the Fort Laramie Treaty of April 29, 1868. This Treaty established the Great Sioux Reservation and recognized that the Oglala Sioux Tribe and the other signatory tribes held recognized legal title to the following area:

> Commencing on the east bank of the Missouri River where the forty-six parallel of north latitude crosses the same, thence along low-water mark down said east bank to a point opposite where the northern line of the State of Nebraska strikes the river, thence west across said river, and along the northern line of Nebraska to the one hundred and fourth degree of longitude west from Greenwich, thence north on said meridian to a point where the forty-sixth parallel of north latitude intercepts the same, thence due east along said parallel to the place of the beginning, and in addition thereto, all existing reservations on the east bank of the said river shall be, and the same is, set apart for the absolute and undisturbed use and occupation of the Indians herein named . . .

Also, the Oglala Sioux Tribe currently holds unextinguished aboriginal title to the Great Sioux Reservation (including the entire Missouri River within South Dakota) based on its use and occupation of the territory since time immemorial.

While the boundaries of this Great Sioux Reservation have never been diminished, the United States has chosen to flagrantly violate our treaty rights in a number of ways. First, in 1877, it illegally confiscated the western end of the reservation, including the 7.3 million areas in and around the Black Hills. Then, former U.S. President Benjamin Harrison purported to claim U.S. ownership of an additional 18 million acres of Great Sioux Reservation land through the use of an illegal 1890 Presidential Proclamation, which wrongfully alleged that the Sioux had ceded this land to the United States even though no such legal session had occurred. Then, in 1944, the United States placed the Army Corps of Engineers in charge of constructing six dams on the main stem of the Missouri River under the Missouri River Pick-Sloan Program. Four of these dams, the Lake Oahe, Lake Sharpe, Lake Francis Case and Lewis and Clark are located within the Great Sioux Reservation. All four were constructed in blatant disregard for the Fifth Amendment rights of the Oglala Sioux Tribe and the other tribal signatories of the 1868 Treaty. To make matters worse, the Corps has maintained 123 acres of shoreline around these four dams. These areas have been open to the free use and enjoyment of the American public even though both federal and private studies have documented that these properties contain religious and cultural items and human remains which are the property of the Oglala Sioux Tribe and the other 1868 Treaty tribes. All are items

are protected by the provisions of the 1868 Treaty and the Native American Graves Protection and Repatriation Act.

As if this were not bad enough, with the enactment of the Water Resources Development Act of 2000 (WRDA 2000), the United States initiated the transfer and long term lease of in excess of 90,000 acres of shoreline from the Army Corps of Engineers to the State of South Dakota and the transfer and long term lease of addition lands around the four dams to the Lower Brule and Cheyenne River Sioux Tribes without the consent of the Oglala Sioux Tribe. Because this transfer is in flagrant disregard for our treaty rights, as well as numerous federal environmental, historic preservation and cultural protection statutes, the Oglala Sioux Tribe has filed suit in the U.S. District Court for the District of Columbia to enjoin these transfers. This case is on going.

Any adjustments to the levels of the Missouri River will have a direct impact on these shoreline properties and the items they contain. For this reason, the Oglala Sioux Tribe and the other tribal signatories to the 1868 Treaty must be a party to any decisions which impact the levels of the Missouri River at those locations.

The Oglala Sioux Tribe has reviewed the Master Plan proposed by the Army Corps and objects strongly to a number of its proposals. Our objections and the justification for them are detailed in the following text entitled "Comments of the Oglala Sioux Tribe Missouri River Master Manual RDEIS."

On behalf of the Oglala Sioux Tribe, I would like to thank you for this opportunity to present our views on this important issue.

COMMENTS OF THE OGLALA SIOUX TRIBE MISSOURI RIVER MASTER MANUAL RDEIS

The Oglala Sioux Tribe rejects the Master Manual revision and update and the RDEIS. Both propose to make irretrievable commitments to (1) navigation in the lower basin, (2) maintenance of reservoir levels in the upper basin and (3) fish, wildlife and endangered species throughout the upper and lower basins. These commitments are violations of the constitutional, civil, human and property rights of the Tribe.

The RDEIS improperly treats Indian water rights as follows:

> The Missouri River basin Indian tribes are currently in various stages of quantifying their potential future uses of Mainstem System water. It is recognized that these Indian tribes may be entitled to certain reserve or aboriginal Indian water rights in streams running through and along reservations. Currently, such reserved or aboriginal rights of tribal reservations have not been quantified in an appropriate legal forum or by compact with three exceptions. . . . The Study considered only existing consumptive uses and depletions, therefore, no potential tribal water rights were considered Future modifications to system operation, in accordance with pertinent legal requirements, will be considered as tribal water rights are quantified in accordance with applicable law and actually put to use. Thus, while existing depletions are being considered, the Study process does not prejudice any reserved or aboriginal Indian water rights of the Missouri River basin Tribes. (PDEIS 3-64)

This treatment violates the trust responsibility of the United States to the Oglala Sioux Tribe and other 1868 Treaty tribes. The Oglala Sioux Tribe was a party to the Treaties of 1851 and 1868. The 1868 treaty established the Great Sioux Reservation from the easterly bank of the Missouri River throughout all of the area to the West that is now embraced by the State of South Dakota. The area was set aside by the Treaty of 1868 for the exclusive, "undisturbed use and occupation" of the 1868 Treaty tribes. The Oglala Sioux Tribe reserved rights to the use of water in the Missouri River, its tributaries and its aquifers for present and future generations from time immemorial. The water rights are prior and superior to all subsequent uses of water. The water rights were reserved by the Tribe for all purposes necessary for the pursuit of the arts of civilization. The water rights of the Oglala Sioux Tribe are not federal rights, reserved by the United States, but were reserved by our forefathers in our Treaties for our use. Our water rights are not subject to sensitivity, primary and secondary purposes nor are they limited to minimal amounts necessary for the purposes of a federal reservation of water rights for a national forest, a national monument, an Air Force Base or other federal reservations.

The Oglala Sioux Tribe proclaims its continued dominion over all of the lands within the boundaries of the Pine Ridge Indian Reservation and throughout the Great Sioux Reservation of 1868 as reserved from time immemorial including but not limited to rights, jurisdictions, privileges, prerogatives, liberties, immunities, and temporal franchises whatsoever to all the soil, plains, woods, wetlands, lakes,

rivers, aquifers, with the fish and wildlife of every kind, and all mines of whatsoever kind within the said limits; and the Tribe declares its water rights to the amounts necessary to supply water for irrigation and all irrigable acreage within the boundaries of the Great Sioux Reservation; and all municipalities, commercial and industrial purposes and rural homes with water for all future persons; to supply livestock of every kind on the ranges having an annual water requirement necessary for that purpose; and for other purposes, such as oil, gas, coal or other minerals, forests, recreation, and all other purposes consistent with the arts of civilization and the maintenance of a permanent and viable homeland as guaranteed by the 1868 Treaty.

The RDEIS is also supported by a flawed biological opinion, which, among other things, failed to consider the proper analysis of Indian water rights. The biological opinion failed to give any consideration to the water rights on the Oglala Sioux Tribe in the definition of the environmental baseline. Even the Working Group on the Endangered Species Act and Indian Water Rights, Department of Interior, published recommendations for consideration of Indian water rights in Section 7 Consultation, for undertakings such as the Master Manual, as follows:

> The environmental baseline used in ESA Section 7 consultations on agency actions affecting riparian ecosystems should include for those consultations the full quantum of (a) adjudicated (decreed) Indian water rights, (b) Indian water rights settlement act, and (c) Indian water rights otherwise partially or fully quantified by an act of Congress. . . . Biological opinions on proposed or existing water projects that may affect the future exercise of senior water rights, including unadjudicated Indian water rights, should include a statement that project proponents assume the risk that the future development of senior water rights may result in a physical or legal shortage of water. Such shortage may be due to the operation of the priority system or the ESA. This statement should also clarify that the FWS can request reinitiation of consultation on junior water projects when an agency requests consultation on federal actions that may affect senior Indian water rights.

The Working Group recommendations improperly failed to address unadjudicated Indian water rights, such as those in the Missouri River Basin. Not even this flawed and minimal guidance was taken into account.

It is unthinkable that the United States would proceed with water resource activities, whether related to endangered species, water project implementation or Missouri River operation in the absence of properly considering Indian water rights that are not part of an existing decree—presuming, in effect, that the eventual quantification of Indian water rights will be so small as to have a minimal impact on the operation of facilities in a major river, such as the Missouri River, or so small as to be minimally impacted by assignment of significant flow to endangered species, navigation and other state purposes. The flows required to fulfill or satisfy Oglala Sioux water rights are, in fact, neither small nor minimal but are significant. For the biological opinion or the RDEIS to proceed without properly addressing the magnitude of Indian water rights is a severe breach of trust responsibilities by the United States and its agents.

The approach of the United States and its agent in the biological opinion and RDEIS is clear. The concept is to allow sufficient time to pass after a federal decision on the future operations of the Missouri River on behalf of the states, endangered species and other special interests to leave the Oglala Sioux Tribe without a will for political or judicial remedy:

> "After thirty-five years of actual possession, after twenty-five years of possession solemnly guaranteed . . ., after innumerable leases and releases, mortgages and devises, it was too late to search for flaws in titles. Nevertheless something might have been done to heal the lacerated feelings and to raise the fallen fortunes . . ." [1]

While the foregoing was written in England from a Nineteenth Century perspective about the colonization of Ireland and the taking of native Irish land by the English, it effectively describes federal policy toward Indian water rights in the Missouri River Basin.

The unwritten policy of the Corps of Engineers and the U.S. Fish and Wildlife Service in the RDFIS and biological opinion, respectively, is to ignore Indian water rights in the Missouri River Basin and to await the outcome of extrajudicial and immoral state adjudication processes, such as the recent Arizona Supreme Court

[1] Sir Thomas Macaulay, 1848, *The History of England,* Penguin Classics, pp 149-151.

opinion (Issues 3) on the quantification of Indian water rights. The arguments against Indian water rights quickly unfold in the opinion as set forth below:

> ". . . There can be little doubt that the PIA standard works to the advantage of tribes inhabiting alluvial plain or other relatively flat lands adjacent to stream courses. In contrast, tribes inhabiting mountainous or other agriculturally marginal lands are at a severe disadvantage when it comes to demonstrating that their lands are practicably irrigable. . . ." citing Eluid Martinez v. Lewis (861 P 2nd 253).
>
> ". . . Another concern with PIA is that it forces tribes to pretend to be farmers in an era when "large agricultural projects . . . are risky, marginal enterprises. This is demonstrated by the fact that no federal project planned in accordance with the Principles and Guidelines . . . has been able to show a positive benefit/cost ratio in the last decade (1981 to 1991). . . ."
>
> ". . . Limiting the applicable inquiry to PIA analysis not only creates a temptation for tribes to concoct inflated, unrealistic irrigation projects, but deters consideration of actual water needs based on realistic economic choices . . . they may be irrigable academically, but not as a matter of practicality. . . ."
>
> ". . . The PIA standard also potentially frustrates the requirement that federally reserved water rights be tailored to minimal need. . . . The court's function is to determine the amount of water necessary to effectuate this purpose, tailored to the reservation's minimal need. We believe that such a minimalist approach demonstrates appropriate sensitivity and consideration of existing water user's water rights, and at the same time provides a realistic basis for measuring tribal entitlements . . ." [2]

Perhaps hostile state courts can find specious mechanisms for denigrating Indian water rights in the Missouri River Basin in the manner proposed by the Arizona Supreme Court, thereby justifying the treatment of Indian water rights by the Corps of Engineers and the U.S. Fish and Wildlife Service and the RDEIS and the supporting biological opinion. The Oglala Sioux Tribe strongly disagrees and condemns the Master Manual and the supporting NEPA compliance documents. We ask that the Congress of the United States honor the 1868 Treaty, and the vested property rights that the treaty created under the Fifth Amendment.

STATEMENT OF WILLIAM G. SCHUBERT, MARITIME ADMINISTRATOR, DEPARTMENT OF TRANSPORTATION

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to submit testimony on water management issues on the Missouri River and the status of efforts to revise the Missouri River Master Water Control Manual.

MARAD has been actively engaged in discussions with the Army Corps of Engineers (Corps) and other stakeholders for many years on the effort by the Corps to consider changes in the way in which it operates the Missouri River. The alternatives discussed in the Revised Draft Environmental Impact Statement (RDEIS) may have adverse impacts on waterway commerce on the Missouri River.

The RDEIS lists five alternatives to the Current Water Control Plan. Four of the alternatives would involve an increase in spring flows in order to protect the Pallid Sturgeon, Interior Least Tern, and the Piping Plover. In some years, this proposed "spring rise" could reduce the amount of water in the main stem reservoirs that is potentially available later in the year to supplement releases from Gavins Point to support commercial navigation.

The fifth alternative would involve both a spring rise and a split navigation season. For a period of time during the early summer, the river would be drawn down. While the regulation of the navigation pools on the Upper Mississippi River for environmental enhancement has been successfully implemented in a similar fashion in recent years, there is a significant difference between the two programs. The drawdown of the navigation pools on the Upper Mississippi River was designed so as not to have a detrimental effect on commercial navigation. The navigation pool drawdowns were limited to certain river stages and water flow rates, and problem areas in the navigation channel were dredged to ensure that towboats could continue to operate during the drawdowns. By contrast, the fifth alternative in the Mis-

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[2] 39 P. 3rd (Ariz. November 26, 2001).

souri River RDEIS would lead to a cessation of commercial navigation during the drawdown.

Thank you for the opportunity to provide a statement for the record on this issue.

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