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THE MISSOURI RIVER AND ITS SPRING RISE: SCIENCE OR SCIENCE FICTION

HEARING

BEFORE THE

SUBCOMMITTEE ON RURAL ENTERPRISES, AGRICULTURE & TECHNOLOGY

OF THE

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WEDNESDAY, MARCH 15, 2006

HOUSE OF REPRESENTATIVES
SUBCOMMITTEE ON RURAL ENTERPRISES, AGRICULTURE AND TECHNOLOGY
COMMITTEE ON SMALL BUSINESS
Washington, DC

The Subcommittee met, pursuant to call, at 10:00 a.m., in Room 2360 Rayburn House Office Building, Hon. Sam Graves [Chairman of the Subcommittee] presiding.

Present: Representatives Graves, King, Barrow.

Chairman GRAVES. I'll go ahead and call this meeting to order. Good morning and welcome to this hearing of the Subcommittee on Agriculture, Rural Enterprises and Technology. We're here today, obviously, to have a hearing on the Missouri River and the science used by the U.S. Fish and Wildlife Service to mandate management of the Missouri River by the Corps of Engineers. And I want to thank everybody for their participation. Obviously, all statements made by the witnesses and the Members will be placed in the record, in their entirety.

It's no secret that I am adamantly opposed to the spring rise. First, this policy is based on unproven science. According to the Fish and Wildlife Service, a spring rise might increase the spawning habits of the endangered pallid sturgeon, might is the key word. In accordance with this theory and the Endangered Species Act, the Corps of Engineers has mandated to implement an artificial, man-made spring rise. However, many, including the Missouri Department of Natural Resources, dispute that the spring rise will cause the pallid sturgeon to spawn. In fact, many say that the spring pulse could further harm the piping plover and the least tern, which are two birds which are also endangered on the river.

Second, the spring rise, which according to the Army Corps of Engineers, will occur in May pending sufficient water levels in the upper basin reservoirs, will happen at a time when spring rise already occurs naturally. A combination of a naturally occurring rise and a man-made spring rise can create significant problems and flooding. In a State with a history of floods, as well as many acres and livelihoods in the flood plain, a flood could have a devastating impact on the economy and public safety.

In 2003, the Missouri River flooded and its impact was devastating. Most people outside of Missouri have probably forgotten this, but for the citizens of Missouri, it is embedded in their memo-

ries. This flood cost 48 people their lives. It cost $15 billion in damages, and damaged some 72,000 homes. Now our Government wants to play Russian Roulette with the same river through a man-made flood.

To add insult to injury, we all were informed late last year by the USDA that a farmer's crop insurance will not cover any destruction caused by a spring rise. The USDA reasons that crop insurance only covers crops destroyed by a "natural occurring event." The USDA goes on to explain that a federally-mandated spring rise will not be covered because it's man made, not naturally occurring. As I understand it, the Government is mandating a flood that could impact over 1 million Missourians in the Missouri River flood plain, but the Government will not cover the flood costs associated with its own policies. I think that is absolutely ridiculous.

As a farmer, I understand the risks associated with my business. It is my job to prepare and reduce as much risk as I possibly can. However, we have an instance where the Government is coming in and throwing us a pitch we have never seen before. This seems counter-productive. Farmers themselves are becoming an endangered species.

There are other alternatives that will protect these threatened species without threatening the livelihoods of farmers and others who depend on the Missouri River.

Again, I want to thank everybody for their participation for coming here today and I'll now turn to Ranking Member Barrow, for his opening statement.

[Chairman Graves' opening statement may be found in the appendix.]

Mr. BARROW. Thank you, Mr. Chairman. Good morning. My name is John Barrow and I represent Georgia's 12th District in the Congress. The purpose of this hearing is to discuss the impact and change in water levels of the Missouri River, and in a broader sense to help protect the property rights in small businesses, including small farmers. I commend Chairman Graves for using this hearing to find ways to properly manage our rivers without infringing on the rights of local landowners. I understand this is a major local issue for Missourians, but how it's resolved in this case will have nationwide consequences.

Since I'm here with a bunch of Missouri folks, I think I should put in a word for a good friend of mine, Armed Services Committee Ranking Member Ike Skelton. Ike has been a strong supporter of agricultural interests along the Missouri River and he's always worked both sides of the aisle to ensure that the river's management is fair to Missouri agribusiness. He formerly served as a Member of the Small Business Committee and he's the former Chairman of the Subcommittee on Procurement, Tourism and Rural Development.

Ike would have been here himself to give a statement, but he's committed to preside over an Armed Services Committee hearing regarding Iraq and Afghanistan, so he can't be here. Since he can't be here to submit a statement, Mr. Chairman, I ask unanimous consent to enter Ike's statement into the record.

Thank you, Mr. Chairman.

[Ranking Member Barrows' opening statement may be found in the appendix.]

[Congressman Skelton's (MO-4) opening statement may be found in the appendix.]

Chairman GRAVES. Absolutely. We're now going to move on to our first witness. Senator, you have a very busy schedule, but we appreciate you being here. Senator Talent used to be the Chairman of the overall Small Business Committee. His painting is on the wall back behind. It's got to be a good feeling to come to a room where your likeness is hanging on the wall.

Senator TALENT. I remember the day I was hung, Mr. Chairman.

[Laughter.]

Chairman GRAVES. Well, thanks for being here, Senator.

STATEMENT OF THE HONORABLE JIM TALENT, SENATOR (R-MO), U.S. SENATE

Senator TALENT. Well, I appreciate it and thanks for—I didn't realize I was a couple of minutes late. It's extremely kind of you and the Ranking Member to wait for me and good of you to hold this hearing. It's an important hearing and you know, Mr. Chairman, I just think people who are not familiar with this issue are not going to believe what the Government is doing. It's incredible, as you know, and the Ranking Member mentioned Mr. Skelton. We have been fighting on a bipartisan basis for years in Missouri for sanity in river management. And really, that's what I think this amounts to.

We fought the spring rise. We fought the Government's attempt to withhold water in the late summer. Sometimes I get in front of audiences of people who really don't have anything to do necessarily with agriculture or the river and I say to them now if you were managing the Missouri River and the reservoirs upstream and you had a choice of releasing water in the spring when it's rainy or in the late summer when there isn't as much rain, what would you do? I have never had anybody say as a matter of common sense that we ought to release water in the spring, much less twice in the spring and then withhold it in the late summer. I mean even people who don't understand hydrology and river management get this because it's a matter of common sense.

Mr. Chairman, you know that the Missouri River is the longest river in the United States. The Corps of Engineers operates the Missouri River to serve a number of congressionally-authorized purposes including flood control, navigation, irrigation, hydro power, water supply, recreation and fish and wildlife. It's supposed to be a balance. That's how they're supposed to manage the river.

It's complicated to manage, even when water is plentiful. It's very complex when flows are limited. I mean nobody is saying that this is easy.

So the debate has spawned many Court cases and legislative battles for decades. I, and the whole delegation, and those my predecessors and everybody in the House has been fighting on behalf of Missouri farmers against the spring rise and that's the issue that brings us here today.

The spring rise is extremely dangerous, Mr. Chairman. Water is released from the lowest reservoir at Gavins Point. It takes only

about 10 days to go from there to the confluence within the Mississippi River because between the release point in St. Louis, there are no locks and dams that can slow the water's progress. In fact, twice in June of 2005, which was a terrible drought season, the Missouri River rose nine feet in a period of 18 hours because of rains.

During spring months, the lower basin receives significant rainfall and the additional flows reduce drainage from highly productive crop land and therefore increase the probability of flooding.

The flood plain, the area that would be affected by this decision includes 1.4 million acres of farm land, 30,400 homes and 5,345 buildings worth an estimated $17 billion. That's what's at risk with this decision.

Additionally, Mr. Chairman, I question the science behind the spring rise. Even the USGS admits that little is known about the essential life history needs of the pallid sturgeon. And water flow is just one of the many factors that impact spawning. Other stimuli thought to be associated with the spawning event include temperature, photoperiod and physiological conditions.

Clearly, the spring rise is unjustified and premature. We need more time to evaluate alternative measures which are already underway and more time is necessary for the USGS and other agencies to form a baseline of analysis to evaluate biological response to the various approaches.

Why have they chosen an method of helping to promote spawning of the pallid sturgeon, the one method which is the most destructive to the economy and dangerous to the lives of farmers in Missouri? I've always opposed the spring rise. Under the 2006 operating plan, recently released by the Corps of Farmers are now facing not one, but two spring rises, a March rise and a May rise.

For generations, local farmers, residents and businesses have depended on the river for their lives and livelihoods. The two spring rises proposed by Fish and Wildlife put that livelihood at risk. Missourians understand they have a special responsibility to be good stewards of the river and to use its resources in an environmentally-sensitive way. We all agree with that. Who can we trust with the land and the resources, if not the farmers who live off it?

But I don't believe that the needs of Missouri farmers and the Missouri economy should place second fiddle to a fish.

Furthermore, as you mentioned, Mr. Chairman, the Risk Management Agency recently announced that those land owners flooded under this proposed plan will not be eligible for crop insurance benefits because the flood would be a man-made disaster, rather than a naturally-occurring event. It's outrageous that producers wouldn't get the compensation that they need and deserve.

I'm going to continue to work with you and the delegation on both sides of the aisle, as well as other groups to ensure that farmers who do fall victim to spring rise flooding are compensated.

Mr. Chairman, I continue to oppose a management policy of the river which has shifted the primary purpose of the upstream dams and reservoirs away from a balance of the congressionally-mandated interests towards almost exclusive representation of recreational and environmental goals at the expense of other interests

such as flood control, navigation, water availability, public water supply and power generation.

This dangerous alignment of priorities on the river will also have an immediate impact on the livelihood of farmers and land owners along the river, as well as the economy of the State of Missouri.

I thank you for your interest, Mr. Chairman. This is an important hearing. We need to keep doing everything we can to reverse this and I'm pleased to be here. I know Senator Bond, as you know, feels exactly the same way. I don't know of a public official on either side of the aisle who has not felt the way we felt about this.

So thank you for holding the hearing.

Chairman GRAVES. Thank you, Senator. I appreciate you being here.

We're now going to seat the second panel, if you want to go ahead and come forward.

[Pause.]

We have a full complement of witnesses on this panel and on the third panel, so I have to ask everyone to be mindful of the clock and try to keep your comments to five minutes. There's a light up there. When you have one minute left I think it turns yellow and then red. But I do appreciate everyone being here. Again, as the Senator pointed out and Ranking Member Barrow and myself, we think this is a very important issue and we're looking forward to hearing from everybody.

We'll start out with General Gregg Martin, who is Commander and Division Engineer of the Northwestern Division with the U.S. Army Corps of Engineers.

General, I appreciate you being here. Thank you very much. I look forward to your testimony.

STATEMENT OF BRIGADIER GENERAL GREGG F. MARTIN, U.S. ARMY CORPS OF ENGINEERS

General MARTIN. Mr. Chairman and distinguished Members of the Subcommittee, I am honored to be testifying before your Subcommittee today. My name is General Gregg Martin, Commander of the Northwestern Division of the U.S. Army Corps of Engineers. The operation of the Missouri River Mainstem Reservoir System is under my command.

The Corps operate the Missouri River Mainstem Reservoir System to serve the congressionally-authorized purposes of flood damage reduction, commercial navigation, hydropower, irrigation, recreation, water supply, water quality, and fish and wildlife. The Corps' goal is to best serve these authorized purposes while complying with all applicable laws, including the Endangered Species Act, and while fulfilling our responsibilities to federally recognized Native American Indian Tribes.

The Corps has been consulting with the U.S. Fish and Wildlife Service under the ESA since the early 1990s on the operation of the Missouri River Mainstem Reservoir System, the Bank Stabilization and Navigation Project, and the Kansas River projects. In November 2000, U.S. Fish and Wildlife Service provided the Corps a biological opinion which concluded that the Corps' operation of these projects jeopardized the continued existence of the interior

least tern, piping plover, and pallid sturgeon, three species protected under the ESA.

In 2003, as a result of additional information, including the listing of critical habitat for the piping plover, the Corps and the Service re-initiated ESA consultation. In their 2003 Amended BiOp, the Service concluded that the Corps' actions still jeopardized the continued existence of the three listed species. However, in the 2003 Amended BiOp, the Service provided a revised Reasonable and Prudent Alternative, to jeopardy. The RPA includes a requirement for a bimodal spring pulse form Gavins Point Dam for the benefit of the endangered pallid sturgeon.

Intense efforts continue by the Corps, with assistance from the USFWS, the U.S. Geological Survey, States, and other natural resource experts, to restore physical habitat for the three listed species including the pallid sturgeon in the watershed of the Missouri River. The restoration work for the pallid sturgeon is intended to provide the habitat for young sturgeons to develop and survive. We also have a significant research program underway with the U.S. Geological Survey to determine the facts that may be limiting pallid sturgeon spawning and recruitment, as well as an aggressive pallid sturgeon propagation program. However, under the 2003 Amended BiOp, these efforts, although beneficial, do not substitute for changes in river management to provide the flow conditions that the Service has indicated promote sturgeon reproduction.

The 2003 Amended BiOp requires the Corps to implement the bimodal spring pulse releases no later than the spring of 2006. However, the BiOp also allows for consideration of existing hydroclimatic conditions, such as drought, in the decision on whether and how to implement the bimodal spring pulse in any given year.

The Missouri River basin is currently experiencing an extended drought, and system storage is at unusually low levels. The Corps has taken these low levels into account in developing the technical criteria for a bimodal spring pulse release plan included in the Missouri River Mainstem Reservoir System Master Water Control Manual, the Master Manual, along with public input regarding any potential risks associated with the spring pulse releases. Consistent with the Master Manual technical criteria, the plan for this year is presented in the Corps' 2005-2006 annual Operating Plan for the Missouri River Mainstem System.

The technical criteria and AOP were developed through a collaborative process and were based on the requirements of the 2003 Amended BiOp; analysis of hydrologic data; input from the Spring Pulse Plenary Group, which was compounded of more than 50 Basin stakeholders, Tribal meetings and consultations; and public comments received on the draft AOP. This process was facilitated by the U.S. Institute for Environmental Conflict Resolution and included representatives from the Service, the Corps, Tribal representatives, basin states, and a wide range of stakeholders. These discussions were key in the identification of Master Manual technical criteria for the bimodal spring pulse and the 2006 AOP.

The technical criteria greatly reduce the potential for negative impacts as compared to the plan identified in the 2003 Amended BiOp. One key change was a reduction of the peak of the spring

pulses from one to two weeks down to two days. This not only saves water in System storage, which is important during the drought, but also reduces the duration of the higher river stages.

The Plenary Group discussions, and extensive discussions with the Service, also helped the Corps identify criteria for adjusting the magnitude of the May spring pulse in response to hydroclimatic conditions. During drought, these adjustments substantially reduce or eliminate the spring pulses. The Service informed us that the draft technical criteria for the bimodal spring pulse plan, when implemented in conjunction with the comprehensive adaptive management program to address future operational flexibility will meet the intended purposes outlined in the 2003 Amended BiOp for 2006 and beyond. These criteria were then incorporated into the Master Manual Revision of 1 March 2006.

The Corps understands farmers' concerns over the potential for flooding of cropland during the bimodal spring pulse releases. The bimodal spring pulse plan includes criteria specifically designed to minimize the risk of downstream flooding and crop damage. First, the established downstream flow limits have not been changed in the revised Manual, and thus provide similar downstream flood control during the spring pulse releases as in previous years' operations. Second, the Corps has agreed, at the request of downstream farmers, to integrate the National Weather Service precipitation forecasts into its daily Missouri River operational forecasts during the pulse period, and will adjust releases accordingly. And third, the Corps will integrate estimated actual rainfall derived from weather radar information into its forecasts.

These measures, along with the reduced duration and magnitude of the pulses, will reduce the potential for downstream flooding. It is also important to know that as provided in the Master Manual spring rise technical criteria, that because the system storage was below 36.5 million acre- feed on March 1st of this year, March pulse was not implemented. We'll check storage again on May 1st to determine if the May pulse will be implemented. System storage must be above 36.5 million acre-feed for the May pulse to be implemented this year. Also, due to the current extended drought, releases for navigation in 2006 will be 6,000 cubic feet per second lower than normal, thus resulting in lower peak flows if the May pulse is implemented.

In conclusion, sir, the Corps remains committed to operate the Missouri River Mainstem System to serve the congressionally-authorized project purposes, fulfill our Tribal Trust and Treaty obligations, and comply with all applicable laws, including the Endangered Species Act. We're convinced this can be best accomplished in a sustained collaborative process that includes the entire spectrum of Basin interests. Working together as a team, Federal, Tribal, State, local agencies and stakeholders, we can identify solutions that benefit the Basin as a whole.

Thank you for the opportunity to testify. I'll be happy to answer any questions.

[General Martin's testimony may be found in the appendix.]

Chairman GRAVES. Thank you, General.

Next, we're going to hear from Mitch King, who is the Regional Director of the Mountain-Prairie Region with U.S. Fish and Wild-

life Service, Department of the Interior. I thank you for being here and look forward to your testimony.

STATEMENT OF MITCH KING, U.S. FISH AND WILDLIFE SERVICE

Mr. KING. Thank you, Mr. Chairman, and Members of the Committee. As the Chairman mentioned, my name is Mitch King. I am the Regional Director for the U.S. Fish and Wildlife Service's Mountain-Prairie Region in Denver, Colorado. I really appreciate this opportunity to provide testimony on behalf of the Department of the Interior. I've provided more extensive comments that are in front of you right now and in the interest of time, I'll focus my oral comments on the pallid sturgeon in the spring rise.

First, let me emphasize that large rivers like the Missouri River and their associated fishery habitat, like the pallid sturgeon, have evolved over thousands of years, so it stands to reason that if you make major changes to a large river system, you will invariably result in changes to the fishery that have evolved with that river system. The construction of dams and the regulation of the Missouri River for flood control and navigation capture the spring runoff flows in the reservoir for release during the late summer and early fall when conditions are drier and river flow is naturally lower.

While these management actions have provided tremendous economic and social benefit to the nation, these benefits have come at a cost. One of those costs is the pallid sturgeon fishery whose numbers are now so low that it has been listed under the Endangered Species Act as endangered. Recognizing this impact, the Corps and the Service, have worked with our State partners, and I think we've developed reasonable solutions that facilitate navigation, facilitate flood control and other important interests, while working to restore the pallid sturgeon fishery. The Corps is combining physical habitat restoration, hatchery management and measured hydrological improvements to address the impacts to the pallid sturgeon fishery.

It's these hydrologic impacts, the spring rise, particularly, that seem to be getting most of the attention. Therefore, I'll focus the remainder of my testimony on that.

Let me start by assuring you that there is a mountain of science supporting the importance of spring rise when it comes to restoring pallid sturgeon fishery. While scientists may express opinions on the magnitude or the timing, there are literally hundreds of articles in the published scientific literature related to large river ecology and recognize the importance of the native fisheries in restoring some semblance of the natural hydrograph.

The National Research Council, a subcommittee of the National Academy of Sciences stated it best by saying the "degradation of the Missouri River ecosystem will continue unless some portion of the hydrologic and geomorphic processes that sustain the pre-regulation Missouri River are restored, including ... flow pulses that emulate the natural hydrograph. [Without them] the ecosystem faces the prospect of irreversible extinction of species."

Very definitive quotes, just like this come from very well-respected river ecologists, and they're found throughout the published literature.

Even with this volume of science supporting the position that we're taking, the Corps and the Service, along with our partners like the U.S. Geological Survey, are constantly seeking more knowledge about the pallid sturgeon. The USGS is working to better understand pallid sturgeon in the river. At the same time, the Fish and Wildlife Service is working to improve our hatchery management capabilities regarding pallid sturgeon, and undoubtedly, this new science will improve our knowledge base regarding the pallid sturgeon and help the Corps make even better management decisions in the future.

Setting aside science for a moment, the Service is sensitive to the concerns of the users and stakeholders of the Missouri River Basin. The Service and the Corps have worked together over the past year with travel representatives, Basin States and a wide range of stakeholders. The spring rise in this year's annual operating plan, which incorporated input from State, Tribal and Federal agencies, as well as stakeholders, complies with the requirements of the Endangered Species Act, while being responsive to the hydroclimatic conditions in the Basin and the potential impacts to people.

Through this collaborative process, the spring rise was reduced in duration from roughly two weeks to two days. In addition, the magnitude of the pulses were reduced to the point that if water storage levels had been sufficient to support this year's March pulse, the magnitude of that pulse would have been very near the same level of flow that the Corps has released at this same time in previous years and water levels that allowed them to provide full service navigation level.

I'd like to call your attention briefly to the graph that I've provided you and make a few points there because I think it says anything about this better than I possibly could. On that graph, there are several different colored lines. The first line is the large blue one, is sort of the natural hydrograph. That's the system that the pallid sturgeon was developed under. The flatter blue line is what the Corps of Engineers refers to as their normal navigation line. The orange line on that graph is what the biological opinion called for when it called for spring pulses and flow changes and the yellow line is what actually resulted after this year-long discussions that I talked about earlier and has the two-day spring pulses that I talked about.

This graph shows you three really important points. First, you can see the river's natural hydrograph where the pallid sturgeon evolved under. Second, you can see that the Service and the Corps have taken into account the potential impacts of our actions on the river community. That's the difference between the orange and the yellow line. And third, and I think most important in this discussion, you can see that the water level impacts from the spring pulse plan are similar, if not less than those that would have been in place under normal navigation conditions.

Mr. Chairman, I think that when you review the facts, you will see that the Service and the Corps have gone the extra mile to formulate an alternative that takes a positive step towards recovery of the pallid sturgeon and is sensitive to concerns of those who depend upon and live along the Missouri River.

Thank you for this opportunity to comment. This concludes my prepared remarks and I'll answer any questions.

[Mr. King's testimony may be found in the appendix.]

Chairman GRAVES. Thank you, Mr. King.

Susan Haseltine is here to just answer questions. She's Associate Director for Biology, U.S. Geological Survey, and I appreciate you being here and we'll probably depend on you quite a little bit here in questions.

The next testimony is going to come from Mike Wells, who is the Deputy Director and Chief of Water Resources with the Missouri Department of Natural Resources.

Thanks for being here.

STATEMENT OF MIKE WELLS, MISSOURI DEPARTMENT OF NATURAL RESOURCES

Mr. WELLS. Good morning, Mr. Chairman. My name is Mike Wells, and I am the Deputy Director for the Missouri Department of Natural Resources and Chief of Water Resources for the State of Missouri. As Chief of Water Resources, I represent the state in all interstate water issues. I want to thank Chairman Graves for inviting me to give testimony on this very important issue.

Let me begin by saying that the State of Missouri is truly concerned about protecting endangered species and natural habitat along our rivers. In fact, we have been a strong advocate of the research efforts being conducted to determine more about the life requirements of the pallid sturgeon. However, we are extremely disappointed to see the Federal Government move forward with a man-made spring rise on the Missouri River that intentionally increases the risk of flooding.

The Federal Government has characterized the spring rise as an experiment to learn more about the pallid sturgeon. It is disheartening to know that the welfare of our citizens is being threatened by an experiment. Especially, when Federal scientists have publicly acknowledged that very little is known about the ecological needs of the pallid sturgeon and the basic research questions that they hope will be answered by the spring rise experiment have yet to be studied under existing conditions. It is apparent from the limited research that has been conducted to date that there is a lack of scientific evidence to justify a man-made spring rise.

In the U.S. Fish and Wildlife Service's 2003 Amended Biological Opinion, the Service indicated that a "spring rise" was needed as a spawning cue to ensure the continued survival of the pallid sturgeon. Yet, in all but less than 100 miles of the river immediately below Gavins Point Dam, the Missouri River already experiences a natural spring rise or many spring rises, actually. Just as an example, and Senator Talent has already alluded to this, but in 2005, there were five natural rises on the Missouri River between the months of March and June, the period we're talking about on the lower Missouri River near Boonville. These rises exceeded the man-made rises mandated in the Service's Biological Opinion. More than 800 miles of free-flowing river below Gavins Point Dam should provide researchers with ample opportunities to conduct experiments on flow changes without putting downstream farmers and riverside communities at an increased risk of being flooded.

As was mentioned earlier, the Missouri River's flood plain encompasses approximately 1 million acres in Missouri, much of which is prime farmland. With spring time being the time of year when Missouri flood plain farmers are already at greater risk of being flooded, artificially adding even more water to the river in the spring only intensifies the flood risk.

Regardless of the precautions that the U.S. Corps of Engineers takes to minimize the risk of downstream flooding that would result from a manmade rise, they cannot ensure that the added water will not cause flooding. Water released from Gavins Point Dam takes five days to reach Kansas City, and approximately 10 days to travel to the Missouri River's confluence with the Mississippi River at St. Louis. Once water is released from Gavins Point Dam, it cannot be retrieved. Given that local rainfall events can cause the Missouri River to rise by more than 10 feet in less than 24 hours, a planned spring rise experiment that would increase river levels from 1 to 3 feet would increase interior drainage and flooding problems for farmers and riverside communities.

Last spring, we had a perfect example of how quickly water levels can change on the lower Missouri River. During the week preceding May 12, 2005, the level of the Missouri River at St. Joseph, Missouri was considered low, with stage readings of around 8 feet. With these low river levels, it would have appeared that conditions were right for the Corps to implement a man-made spring rise without causing flooding. However, from noon on May 12th until mid-day on May 13th, the Missouri River at St. Joseph rose over 10 feet to a stage reading of 18 feet. This is one foot above flood stage. Local drainage districts begin to have problems with interior drainage around St. Joseph at 12 feet. With water released from Gavins Point Dam taking about 4 days to reach St. Joseph, it is easy to see that if the Corps had implemented the man-made spring rise in mid-May of last year, the additional water would have increased the level of flooding and compounded interior drainage problems in Missouri.

The Federal Government should not be conducting experiments that threaten people's livelihoods, especially when more reasonable courses of action are available. The range of the pallid sturgeon includes over 1,600 miles on the lower Missouri and Mississippi River, as well as a significant reach of the Yellowstone River in Montana, all of which have natural spring rises. By focusing research and recovery effort on these reaches, the Service and the Corps could take advantage of reaches of rivers that have more natural hydrographs. This would avoid contentious issues related to flow while providing ample opportunities to study the pallid sturgeon. The prescriptive and inflexible manner in which the Endangered Species Act is being applied in the management of the Missouri River is threatening many of the cooperative efforts being pursued with private landowners to recover the pallid sturgeon. Federal agencies should be working to find common sense ways to protect the species without harming citizens who live and farm along the Missouri River.

I want to thank you for this opportunity to testify today, Chairman Graves. And I'd be glad to answer any questions.

[Mr. Wells' testimony may be found in the appendix.]

Chairman GRAVES. Thank you, Mr. Wells. Mr. King is gone so I guess I get to dominate all the questions. I was born in 1963. When were the reservoirs put into place? When did we start putting all the reservoirs in South Dakota and beyond and what was the original purpose of installing those reservoirs and managing the river?

General MARTIN. Right, Mr. Chairman, I've got my technical expert, Mr. Larry Cieslik, who is the Deputy Director of Programs. He's been with the Corps for decades and he could probably answer that question, if that's okay.

Chairman GRAVES. Give us your name for the record and your position.

Mr. CIESLIK. My name is Lawrence Cieslik. I'm the Deputy Director of Programs for the Northwestern Division of the Corps of Engineers. I handle Missouri River issues. I'm also the Chief of Water Management for the Corps.

And to answer your question, Fort Peck was built back in the Depression Era as a Work Progress Administration project and it was in place prior to the Flood Control Act of 1944 or the Pick-Sloan Act. The Pick-Sloan Act authorized the construction of the other five dams in the system and also authorized them as a system of reservoirs to be operated as such. And they were authorized for numerous purposes, including flood control, navigation, irrigation, hydropower, water supply, water quality, recreation, fish and wildlife.

Chairman GRAVES. So basically we've got all those reservoirs and irrigation throughout the system above Gavins Point. Recreation has obviously become a more important or has taken on a more important role, just simply because of the development and flood control. Basically, flood control to hold that water when you've got all of the winter melt coming down, you hang on to that water and then you start, essentially releasing it in the summer time when traditionally our rainfall is low, down in the lower States.

Mr. CIESLIK. That's correct, sir.

Chairman GRAVES. And now we have a system or at least a system is being proposed and all in conjunction with the pallid sturgeon to try to increase the spawning.

And what I want to talk about a little bit is the science behind that. Mr. King, you've mentioned that there's sound science. I've read lots of reports too and I'm sure that you've got many biologists saying that this is going to work. I've read a lot of reports from biologists and people within the Federal Government that say it isn't going to work. I've read that the pallid sturgeons' spawning habits have more to do with the temperature of the water, rather than what's being proposed.

And I want to know exactly how—just tell me how this is going to help? Is it those increased water levels? What makes a pallid sturgeon spawn? What does it take? I'm curious about this.

I want to know how it's going to help and another question I'm going to ask you too, and you can kind of implement it in there, is the pallid sturgeon endangered worldwide or is this just in the Missouri River? I'm curious about that also.

Mr. KING. I think I'll take the last one first, because that's sort of the easiest one. The pallid sturgeon is located in some 1600 miles, something like that, from the Mississippi River all the way up to the upper end of the Missouri River, so it is not world-wide.

It is strictly in the Mississippi and Missouri River system. It is listed as an endangered species.

Chairman GRAVES. That's the only place it lives is in that section of the river, the Missouri River?

Mr. KING. It lives in that 1600-mile stretch from the lower ends of the Mississippi all the way through the upper ends of the Missouri and very sporadically in those areas because of the lakes and reservoirs.

But as far as the spring rise and the science behind the spring rise, scientists, because they're scientists, always question their, are continually questioning their input, so it doesn't surprise me that some people might say that there needs to be more information gathered, but we had a fairly extensive review that included State Fish and Wildlife Agency scientists, that included river scientists, river ecologists and the quotes are just from various scientific published literature is pretty clear that natural river systems and those natural hydrographs are extremely important for maintaining the fish and I read you the quote from the National Academy of Sciences and it's fairly reputable that—I don't have any concerns at all that the science is there. Now what causes the pallid to spawn, there's a whole plethora of things that may be involved in pallid sturgeon spawning and you mentioned some of them in your comments, photoperiod, water temperatures, but I think everybody recognizes that some semblance of a natural hydrograph that includes those peak spawning, peak flows is important for spawning.

And I'll ask—if Sue wants to chime in with anything else.

Ms. HASELTINE. I guess I would concur with what Mitch says, but I would also say that we're not just looking at spawning, but we'd like to see recruitment and there's a whole series of events that are associated with the natural hydrograph and temperature and photoperiod that create circumstances where larvae and young fish can survive to recruit into the year class.

And we think that these kinds of species mimicking the natural hydrograph as much as possible will give us the best opportunity for that recruitment, not just spawning, but recruitment. It's associated with habitat and nutrient flow in the river and maybe turbidity. So there's a whole series of factors. The consensus of the science community is that the more you can mimic the natural hydrograph, the better chance you have of bringing those factors together for a good year class. And that's what we're looking for on that in the Missouri system.

Chairman GRAVES. I've got a 2005 U.S. Geological Survey report that said that 75 percent of the sturgeon tracked last year spawned. And so I have to ask, that seems like a pretty good track record to me. And again, I have to question, does a man-made spring rise, is it going to increase it from 75 percent to even more? Do we know for sure that this is going to have an impact? Do we know for sure or is this an experiment? And that's really the ultimate question I'm getting to. Is this an experiment because ultimately, I don't believe we do know for sure.

But 75 percent seems pretty good, pretty good to me.

Mr. KING. Mr. Chairman, I'm not familiar with that study, but I'll look into that and learn a little bit more about it. But as Ms.

Haseltine said, the issue is spawning and recruitment, and this is a migratory fish and it moves upstream. It spawns its eggs, then floats downstream with the flow and there's got to be enough of a location for that fish to—for the eggs to mature to the point before they reach slack water and that's how shortnose sturgeon do it. I'm not quite sure that—I'll let Ms. Haseltine talk about the USGS study.

Is it an experiment? I don't think it is. I think we know enough about this species, and as I've mentioned before, there's good, solid science that says restoring these natural stream flows is important. The key here is are we being responsive to the downstream water users? I think we have. We've said let's reduce these amounts that we think is necessary to restore the natural hydrograph to the very minimum that we think will cause the reaction by the fish that we think we need to have and reduce those levels to the point where we are minimizing the impact downstream.

And then let's again, as I talked about before, all scientists want to learn a little bit more about it. Let's study, let's monitor. Let's not only study the fish, but let's check downstream. Let's study the impacts downstream. I think we've done just about everything that you can possibly do to try to make sure that when we have these short, two-day duration pulses that are slightly above what is normally released under navigation levels, when we have those, that we know that downstream weather systems, they're using that, the Corps is using that in their calculations. They came up today and said or as they mentioned, in March, they decided not to do this because the storage was not sufficient. All of the criteria for managing flows to reduce flood flow stayed in place in this effort. It's just that short, two-day spring pulse. And I think we feel very comfortable that we're on good solid ground.

Chairman GRAVES. Ms. Haseltine, do you want to comment on that?

Ms. HASELTINE. Actually, I'm not familiar with the specific study that you—we're doing sturgeon studies all up and down the river, so I'm not sure which specific one that you're referring to, but I guess I would go back to my point that yes, we may be tracking sturgeon that spawned, but our intent here is to get really effective spawning and then recruitment over the summer into the next year class. And so my question would be the natural hydrograph in relation to not just spawning but the whole recruitment process. So I believe that the consensus is that this natural hydrograph gives many clues to both shortnose, which we've done more work with because there are not that many pallids in the basin to work with, but also to pallids that will be beneficial.

Chairman GRAVES. Do we have hatcheries? Are we raising pallid sturgeon?

Mr. KING. Yes. We've got our hatchery in Bozeman, Montana. That's where we're doing most of our sort of technical research associated with it. We have several other hatcheries along the Missouri River that we have pallid sturgeon recovery activities.

As I mentioned in my comments, there's sort of the three-pronged approach to try to deal with this. One is—and one of those is hatchery management activities. And we're doing everything we can possibly do to try to make sure that is another safeguard that's

out there to help us restore these pallid sturgeon and keep them mature and in the wild at a reproductive age.

Chairman GRAVES. How does that work? Pallid sturgeon have to swim up river. They spawn, lay their eggs and they've got to float all the way downriver until they get mature. How do you do that in a hatchery?

Mr. KING. We keep them in flowing water and hatch the eggs out and bring them up to a release size of five or six inches and then release them. They're at the point now where they're feeding on their own.

Chairman GRAVES. Another technical question again is it still about the depth of the river, because the river is flowing. I've never seen the Missouri stop and I almost get the impression that if we don't release this water, there's not going to be flow for these eggs to float downstream. But there is flow. There's flow right now. You're not going to release water because there's not water upstream. I live six miles from the Missouri and I go over there and it's still flowing.

Mr. KING. It's flowing all the time, sure.

Chairman GRAVES. So why do we need that increased depth? I still don't understand. I'm not a biologist. So you're going to have to explain it to me in real basic terms.

Mr. KING. It's velocity. It's temperature. It's the change in flows. That's what causes the fish to say it's time to spawn because over centuries, they've had these increased flows that have said it's springtime, it's time to spawn and the eggs float downstream. It's not just maintaining a flow, it's maintaining the changes in flow, that natural hydrograph we talked about.

Sue, do you want to talk a bit about that?

Ms. HASELTINE. I would say that, you know, flow is a term that we use for integrating a lot of things, velocity, volume, temperature are all involved in the cues that the fish get. And the flow also has a lot to do with shaping the physical characteristics of the habitat that they're going to spawn in and so flow, photoperiod and temperature, along with turbidity in the water are vital clues, not just to spawning, but to migration and to habitat creation for these types of fish.

And we have more experience with the shovelnose in that regard, and actually I just did find the reference to this study that you referenced which was on shovelnose sturgeon, not pallids, but this—flow is kind of a term that we use to—and the natural hydrograph is a term that we use to indicate the integration of all the conditions in the main channel of the river which we feel are needed for appropriate spawning and recruitment.

Chairman GRAVES. Is Mother Nature following your time table?

Aren't you attempting to do just exactly what is opposite or counter to what nature does? There are going to be years when we have droughts. We're going to have extended periods of droughts. There's going to be years when we have flooding which that has me more concerned than anything else because you don't know what the rain levels are going to be. It may not be this year. It may not be next year, but one of these years we're going to have a lot of rain and you're going to release that water and it may only be two days, but it only takes a day's worth of rain to change things. But

in those years when we have limited flows, what are you doing about the pallid sturgeon then? What are you doing about the pallid sturgeon when we're flooding?

You're trying to regulate it, put it on a time table so it's exactly the same every single year and I've never known nature to be exactly the same.

Mr. KING. Mr. Chairman, that's not—we're trying to do exactly the opposite of that. We're trying to mimic the natural hydrograph, and that natural hydrograph on that chart that I showed you bounces. Every year it bounces a little bit different. The way the Biological Opinion is written, and the General may be able to correct me on this or Larry, for sure, the way the Biological Opinion is written, is my understanding is that in years when you have more flows coming down, you adjust the release rates.

In years where you have less flows coming down, you adjust the release rates. You're trying to mimic that a little bit, but for this one year here, we basically went to the bottom line and said what is the minimal flow that we think we need from the standpoint of fish to generate the responses we expect to see from the fish that minimize the impact downstream.

Now on top of that, you lay in all of those restrictions that the Corps can speak to better than I of flow limits and when they release, just the same restrictions they use right now for navigation flows that they release down the river, to say we better not release, we better slow up because we've got an interior storm coming through. And if I understand this correctly, they've even expanded that even further now, and they've added to their knowledge base there.

They're doing everything they can possibly do to try to make sure their releases do not adversely impact people downstream. And the Fish and Wildlife Service fully supports that. We don't have a problem in the world with saying no—we can't give you the release right now because conditions are not right.

In fact, that's exactly what happened in March, and no one in Fish and Wildlife Service took issue with the Corps' decision there. And if the Corps were to come along in May and say, we got a major flood coming in off of the Platte River or some other side channel, and we better not do this or storm predictions are there, you won't hear the Fish and Wildlife Service say anything about that either. We recognize the importance of those flood restriction and flood limit criteria that the Corps uses.

Chairman GRAVES. It's not withholding water, because there isn't enough that bothers me, it's letting water go when we have too much that bothers me. But again, I come back to the same question, haven't you changed the river? We've been managing it. We're supposed to be managing it for navigation, but aren't you doing—again, it comes back to my question, aren't you doing exactly opposite of what you intend to do? You're trying to create a natural flow, but do it exactly the same for the most part every single year, just as the graph, you're trying to do it by averages, but Mother Nature doesn't work that way. Some years again, you're going to have flooding. Some years you're going to have drought. You can have extended periods of drought.

I just have a hard time seeing that this management is going to exactly mimicking the natural flow of the river. And we don't know what the rainfall is going to be.

I wish I had as much confidence in your predictions of the rainfall. As a farmer, I don't have any confidence in what the predictions are. They never seem to work out. They never seem to work out.

Mr. KING. Mr. Chairman, I'll ask Ms. Haseltine to speak a little bit more to this, but as I've said several times, our Biological Opinion is written such that it will allow changes to—in that. The graph you're looking at is strictly a projection of averages. If there is more flow coming down the river, then there will be a change in the amount of water that we would suggest that comes down on behalf of the sturgeon. If there's less flows, there certainly will be less of a flow.

So we're not, and I want to make this perfectly clear, we're not suggesting the same thing every year. We're wanting to mimic that natural hydrograph, and I'll see if Sue wants to add anything.

Ms. HASELTINE. I think that you make a good point that these fish evolved in a system that was highly variable. They are long-life fish and we don't expect that the conditions which will create a strong recruitment class will occur every year. We're going to have periods of droughts. We're going to have periods of floods, but as you look over a series of years, there is normally an early pulse which reflects snow melt off the Basin and then a stronger pulse which reflects water coming down from the Rocky Mountain system and entering the system. That's a characteristic. And the amount of each pulse each year naturally is highly variable and this species is evolved to that.

They don't need a good recruitment class every year to make it. They're very long-lived. But every once in a while, the conditions will be ripe so that they will get a strong recruitment class. And so I think their biology is very amenable to managing their needs to other needs in the system.

Chairman GRAVES. Mr. King?

Mr. KING OF IOWA. Thank you, Mr. Chairman. I appreciate Chairman Graves pulling this hearing together. I appreciate the support we have from the Missourians in this task. I'm the lone voice for Iowa that represents any part of the Missouri river on this issue as Mr. Graves is and many of the Missouri delegation as well.

First, I'd like to direct my first question to General Martin and not like a lawyer, I'm going to ask you a question that I'm not certain of the answer, but it occurs to me, having lived there on or near that Missouri bottom most of my life, pretty close from the beginning of Pick-Sloan, that there was a prioritized list of reasons to implement the Pick-Sloan Program, and as I recall it was flood control from the floods in the early 1950s, 1952, I think is the year; and, flood control, hydroelectric generation, navigation and then irrigation. And after that, I don't remember any priorities. Would that be the original priorities in the priority order or was there a different order and have there been other priorities added since that time?

General MARTIN. Sir, I think you have it pretty close. And there were additional priorities that were added in later, recreation, fish and wildlife and some others.

Sir, if it's okay, I'm going to turn that one over to Mr. Cieslik who has been there for decades.

Mr. KING OF IOWA. Thank you.

Mr. CIESLIK. Yes, and originally the Pick-Sloan mentioned what have been called the Big Four, if you will, irrigation, hydropower, navigation and flood control.

Mr. KING OF IOWA. In that order?

Mr. CIESLIK. Not in any order, but the 8th Circuit Court of Appeals, as you've heard, I'm sure, has also said that flood control and navigation are what they call dominant project purposes, undefined as to what exactly "dominant" means, but when they read the 1944 Flood Control Act, they have stated that they believe flood control and navigation are dominant project purposes.

Mr. KING OF IOWA. Thank you. And while we talk about navigation, I pose this question and that is that when the Corps controls the flow or the outlet at Gavins Point that ends up in a lower discharge than is planned in the Master Manual, did we have incidents on the Mississippi River, below St. Louis, where we had some barge traffic that had to pull over and be tied off because of low flows in the Mississippi? Did that affect Mississippi navigation as well as Missouri navigation, General Martin?

General MARTIN. Sir, I believe there were and there were instances.

Mr. KING OF IOWA. Thank you. I wanted to—and I would point out too that when I read a list of priorities, whether they're in a particular order or not, I think about the Declaration of Independence where it says life, liberty, pursuit of happiness. I can't imagine pursuit of happiness taking precedence over life. So I think they are, at least implicitly in a priority order.

And then to Mr. King, and I may plow this field over again because I've missed some of the questions that were directed by Mr. Graves. I regret that I had to leave the room a couple of times, but on the pallid sturgeon, and I look at this surge that we have here and I know that we've reproduced them well in a controlled environment and if I have this right, we go up about three forks and on an annual basis with gill nets until we're successful with finding a couple of females that are ready to spawn, until we get about six males so we have some genetic diversity. And that package of about—well, exactly two females and six males is then brought back to the hatchery and from that there would be perhaps over a quarter of a million eggs, and of those quarter of a million fertilized eggs, the efficiency in captivity is far greater than the wilds, naturally. And as they advised me, about 95 percent of those eggs actually are fertilized and get to the point where they could be released back into the river.

I understood there were fish that were a little larger than the 6 or 7 inches. In fact, I thought they had told me they were raising some to 14 to 15 inches before they were released into the river. But that would indicate that a number approach 250,000 fish would be ready to be released into the river and perhaps on an annual basis. Is that what we're doing? A quarter of a million re-

leased, pallid sturgeon every year or what is that number and for how many years has that gone on?

Mr. KING. Mr. King, I'll have to get back to you on the specific numbers. It sounds like you've got some pretty good numbers in front of you and I don't have anything to suggest that there's any difference in those numbers that you've laid out.

I'll get back to you on exactly what we are releasing each year. I'd be glad to do that. As far as the size of the fish, you're probably more correct than I on the release size. What I was talking about is the size when they—that I saw them in the hatchery where they're basically feeding on their own and they're not just drifting in the system.

Let me get back to one point that you were talking about earlier about purposes. The work that's being done on the pallid sturgeon is not being done under the umbrella of fish and wildlife resource work. The pallid sturgeon work is as much a part of the navigation and the flood control activities because the Endangered Species Act and the adverse impacts to the species are the result of those. So to try to separate out and say this is a fish and wildlife activity versus one of the principal responsibilities or principal purposes is a bit of off.

Mr. KING OF IOWA. I thank you for that because I think you're going to help me get to this point that I want to set this up for. But first I have a couple of other questions to ask and then I will, if given time, return to that. But as Mr. Wells testified, I believe, there have been five incidents on the lower Missouri River that there have been pulses or surges that have exceeded the design pulse at least in this flow that we have. And wouldn't that mimic the natural, you call it the natural hydrograph, during that period of time?

And is there any evidence that there has been natural reproduction of pallid sturgeon in that lower portion of the river that may have been triggered by those natural pulses or previous natural pulses since the time of the implementation of our reservoir system?

Mr. KING. I think, if I recall on the numbers that I've seen, is there is very little evidence at all of any natural reproduction and natural recruitment all the way to a free swimming fish in pallid sturgeon. Now shortnose sturgeon there is.

To answer your question that you had earlier, in 1997, 412 10-inch pallid sturgeon were stocked in the lower Platte. In 1998, 17,500 larval pallid sturgeon were hatched at Garrison and they were taken to Gavins Point Fish Hatchery for further rearing. In 2000, approximately 400 juvenile pallid sturgeon were released from Gavins Point and were stocked. The numbers are much lower, and I'm not quite sure if the numbers that you've got again might have been somebody talking about shortnose sturgeon versus pallid.

In my discussions with our folks at Bozeman Fish Technology Center, the rearing of pallid sturgeon, the spawning of pallid sturgeon is extremely sensitive.

Mr. KING OF IOWA. I recognize that you don't have any results there from the Yankton Hatchery. Would you have those numbers in front of you?

Mr. KING. I don't have those in front of me, but we'll get the complete package for you.

Mr. KING OF IOWA. I did visit that hatchery and I don't have any numbers in front of me, but that's what I did learn that day, at least as the number of eggs and the percentage of successful fertilization and actually I call it weaning them, and so if they're—

Mr. KING. I'll check.

Mr. KING OF IOWA. Pardon me?

Mr. KING. I'll check.

Mr. KING OF IOWA. Okay. I thought you had another name for weaning these fish.

Mr. KING. No. Weaning is good for me.

Mr. KING OF IOWA. Okay, then a couple more questions. Is there evidence that there's a regional genetic imprint that's part of the genetics of these fish? If you go up to three-fourths and net these females and breed them, take them down and release them perhaps in the lower part of the Missouri River down in Mr. Wells' territory, do they stay there? Do they swim away?

What I'm trying to get at here is can we take these fish and transfer them north and south across that river above the dams, below the dams? Will they freely establish a typical habitat for them where the habitat is most conducive to their survival or are they directed by a genetic imprint like a salmon might be?

Ms. HASELTINE. I think we have a little information on the genetics of these fish, but not the whole story. But we do know that in the lower free-flowing part of the river from the lower Mississippi up the Missouri, we have fish that travel that whole length. So we would expect that we will not find great genetic distinctions there because have evidence of fish moving so far. Now much of the rest of the population is trapped by dams and reservoirs, so we don't really—and we don't have enough information to really give you a definitive answer.

Mr. KING OF IOWA. Okay, then that resolves at least conditional to your response being, and you've conditioned it a little bit. But I'm back to this question if we don't have evidence, at least significant evidence that the sturgeon has reproduced under the pulses or the surges that have occurred naturally, as testified by Mr. Wells, then why do we think that if we create lesser surges that really don't meet, if we create lesser surges, why do we think that we're going to have reproduction under those conditions, if we can't have reproduction under natural conditions that exceed them, meet and exceed?

Mr. KING. Fair question. First, I'd have to speak to Mr. Wells' discussion about natural spring pulses. As you move further downstream, because of the uninhibited input from uninhibited streams, streams that are fairly free-flowing, you do see more natural spring pulses. You start to see that as you move further down away from Gavins Point down. The unfortunate thing is because these fish swim so much, they move up towards Gavins Point Dam; that's their response, and as they get closer to Gavins Point Dam, they start losing the impact of any kind of a spring pulse. The result is they get ready; they're moving up. They're ready to spawn. They're getting all of the impulses that they think, but then, as they move further upstream, the impulses fade away. The interesting thing is

right below Gavins Point Dam, 60 miles or so below Gavins Point Dam, is some of the best habitat, but the pulse is diminished because you don't have those in-flowing streams as you move further down.

Mr. KING OF IOWA. Okay, but Mr. King, I can't quite accept an idea that perhaps the fish that would naturally be living in St. Louis or downstream from St. Louis would swim the whole 1800 miles up there, so there must have been a strain of pallid sturgeon that would spawn perhaps in the Platte River as opposed to the upper reaches of the Missouri River.

What's happened to that particular section of the species?

No, let me just take this to the real question and that is the emphasis here was that my questioning focuses on separating the species from the flow of the river. And in fact, what I'm seeking to do is identify what portions of this natural hydrograph, as you've testified, really are necessary for the reproduction of the pallid sturgeon. I mean we're sitting here, the testimony, I think, the tone of it would be under the assumption that no matter that if we could reproduce this natural hydrograph, then everything would be okay and that the species would recover.

And perhaps there's no portion of this natural hydrograph that is necessary for the reproduction of the species and if that natural hydrograph that exists in the lower part of the river, you can qualify that question, hasn't produced that kind of reproductive results, we're going to great lengths here to try to reproduce something that we can never reach this natural hydrograph with dams in the river.

And so why would we think that something less than that would work when we have examples up and down this river and even up in my stretch of the river in the tributaries of the Boyer and the Little Sioux and those rivers that haven't produced reproduction of the pallid sturgeon.

So great lengths to reproduce a tiny little shadow of the natural hydrograph that may never get us to the point where we would like to be to reestablish the species. We could do this for 100 years and then finally decide well, let's just go hatch a million of them and turn them loose to save the species.

Mr. KING. First of all, the overall package for the pallid sturgeon is not just the releases. As I mentioned earlier, there's habitat work that's going on. There's work at the hatchery, so that will be a piece of the puzzle at some point in time. We have, although I agree with Ms. Haseltine that there's not a genetics issue, we don't think that's the case, we do have some disease issues that States are a little concerned about, diseases from one hatchery to another.

But the bottom line is that there's three real pieces to this puzzle. One is restoring the natural hydrograph. One is dealing with them in a hatchery environment and trying to make sure that that piece is there and one is talking about making sure that their habitat in the rivers is available for them. So, we're working on all three of those. We're not just focusing on the one. We're also working upstream with Bureau of Reclamation, the Yellowstone Project, to try to improve opportunities there. We're doing everything we can do all over this river system and we're not just focusing on this issue.

At this point in time this hearing is focused on Gavins Point and the flow issues.

Mr. KING OF IOWA. One more question then, Mr. King, and that is that we're seeking to reestablish a natural habitat for the reasons that you've stated and probably a number of others besides. Are there predator species within the river that might be preying on pallid sturgeon that didn't exist during the time that they were reproducing freely in a relatively prosperous manner?

Mr. KING. I'm not sure I can answer that question. I think the answer is no, not in the river systems. In the lake systems, there certainly is and for those fish that for any kind of eggs and larvae that might be floating down the river system and ending up in one of the lakes on the upper end, that might be a problem, but I don't think that's a problem in the lower end.

Do you have any indication?

Ms. HASELTINE. I would that predation concerns are at the larval stage. There are both natural and introduced predators at the larval stage, but that's kind of a normal part of the fish's live history.

Mr. KING OF IOWA. Would you be able to name some of those species, Ms. Haseltine, that are in the river today that would be predators that weren't there perhaps at the time of Lewis and Clark?

Ms. HASELTINE. I'd have to get back to you.

Mr. KING OF IOWA. How about the Walleye?

Ms. HASELTINE. The Walleye certainly in the upper reservoirs and reaches. I think that's what—

Mr. KING OF IOWA. It's in our mind and we just haven't said it that there are far more Walleye that have been introduced up there that were not a natural species to the river that we can determine and that having it in the lakes also means that they exist in the river and so has there been a study on whether that extra predator, that aggressive predator has had an impact on the successful spawning of the sturgeon?

Mr. KING. I don't know of any study, but what I'll do is I'll get back to our river fishery ecologist, and we'll get you an answer to that question.

Mr. KING OF IOWA. Thank you, Mr. King. Thank you, Mr. Chairman.

Chairman GRAVES. Mr. Wells, I'd be interested in your comments. As you've listened to this, as Chief of Water Resources for the State of Missouri, you're obviously very well in tune with what's going on and what's being proposed. I would be very interested in hearing what you have to say.

Mr. WELLS. Well, I'll go back to what Congressman King just said. I think one of the points that we were trying to make in our testimony is that we have many natural spring rises on the lower Missouri River and the Mississippi and also on the Yellowstone, the 1600 miles is just the Missouri and the Mississippi. And we also know that the pallid sturgeon is found in the Atchafalaya River.

When we look at what's being proposed here, it is really for about a hundred miles just below Gavins Point Dam. Whether you want to call that a controlled experiment or not, I mean we understand the complexities of conducting an experiment in a natural

river, especially down in our part of the world where we get rises over night.

But going back to my testimony, just last year, we just looked at last year, we know it's going to vary during the period of March until June. We had five rises at Boonville and we just looked at Boonville. We know at St. Joe we had similar situations and in Kansas City. but all of the rises that exceeded what's being proposed here, greatly exceeded in duration and magnitude of rise.

So I think back to what Congressman King is saying here, we just don't understand the importance of it, just looking at the hundred miles right below Gavins Point Dam. I understand what Mr. King said here from the standpoint of the fish swimming upstream, but you've got to look at the whole river and where they're coming from. Those that are coming up to spawn around Boonville and Lisbon Bottoms and the area we have there, with the natural spring rise, we just believe that this is an experiment that has the potential to harm our citizens and there's just not the science to support it.

We support the research work that's being done. We think we need to have more baseline information before we move forward. Let's try to find out more about the pallid sturgeon. We've heard here, even today well, we think it's this or it might be this. We're playing with people's lives here and their livelihoods. And so we need to be more certain about what the results are going to be if we're going to move forward.

Chairman GRAVES. I think you just summed it up with that statement. We're playing with people's lives and we're playing with people's lives and putting the best interests of the pallid sturgeon, I believe, ahead of people. I think that is absolutely the wrong approach. I think it's a very reckless approach and some, I guess, could say that it's reckless not to be taking care of the pallid sturgeon, but I truly believe and I'm not a biologist, but I believe the pallid sturgeon can take care of itself and it's going to spawn. We've got lots of reports.

In fact, the one I'm looking at right now by Donald Jorgensen who is retired from the U.S. Geological Survey and claims that the results, there's no indication that spring rise is essential to cue spawning of the Missouri River fish species, any fish species, and we'd be happy to provide this for anybody that wants it.

But there's a lot of conflicting testimony out there. There are those who say it's going to work and those who say it's not going to work and as Mr. King pointed out, I think we need to, and Mr. Wells pointed out, we need to gather a lot more data before we start playing, as I pointed out in my opening statement, Russian Roulette with people's lives and I believe that's what it is.

We're going to have votes called pretty quickly, so I want to go ahead and seat the third panel and try to get started with that so we can hear that testimony and have questions, because unfortunately, we'll probably have a pause in between the testimony for votes. But I appreciate everybody coming and let's bring the third panel up and get them seated.

[Pause.]

We'll go ahead and get started. Again, we do have some votes that are probably coming up, so I want to get started with the tes-

timony and then we can come back to questions, but again, I want to state that all, everyone's statements, including the Members, will be placed in the record in their entirety.

We have Charlie Kruse, President of the Missouri Farm Bureau with us. We also have Lynn Muench, Vice President of the American Waterways Operators out of St. Louis. Steve Taylor, with the Missouri Corn Growers Association and Coalition to Protect the Missouri River. Tom Waters who is a farmer on the river and understands all too well the impact that the river has and I'll let Mr. King introduce our last panelist.

Mr. KING OF IOWA. Thank you, Mr. Chairman. Our last panelist is Mr. Dave Sieck from Glenwood, Iowa. He's the past president of the Iowa Corn Growers, current member of the board and not a bottom feeder, but a bottom farmer in the Missouri River bottom. Thank you, Mr. Chairman.

Chairman GRAVES. We'll start out with Charlie Kruse.

Charlie, thanks for being here. I appreciate you coming all the way to Washington to testify.

STATEMENT OF CHARLIE KRUSE, MISSOURI FARM BUREAU

Mr. KRUSE. Thank you very much, Mr. Chairman, and thank you for having this hearing. And Congressman King, our neighbor to the north, we appreciate your interest in this as well.

My name is Charlie Kruse. I'm the president of the Missouri Farm Bureau, a general farm organization with over 103,000 member families. I am also a fourth generation farmer from Southeast Missouri.

The Subcommittee's interest in management of the Missouri River is very much appreciated as we continue to hope that common sense will ultimately prevail. Missouri Farm Bureau continues to oppose any kind of man-made spring rise on the Missouri River.

Many of us here today and so many back home had faith in the system, faith that policy makers and elected officials would understand that no bird or fish is more important than the fundamental rights of landowners. From our perspective, it is amazing that two birds, a fish and a handful of Government biologists can hold a river hostage.

Yet, the U.S. Army Corps of Engineers will say they have no choice; pointing to the tentacles of the Endangered Species Act and the demands of U.S. Fish and Wildlife biologists. The biologists say they think, perhaps, that a man-made rise will trigger a spawning cue, but can't be sure. And the U.S. Geological Survey has bought into the fishing expedition saying they have a baseline and will solve the mystery given enough time and money.

Obviously, there is no consensus on a man-made spring rise. Yet, the Corps, the U.S. Fish and Wildlife Service and U.S. Geological Survey believe it's prudent to hide behind the Endangered Species Act and disregard the views of landowners, many of whom have expressed their concerns time and time and time again. Their feelings were summarized by stickers worn at a meeting last summer saying "My Farm is Not Your Laboratory."

The final Annual Operating Plan for 2006 is proof that the Endangered Species Act has major flaws. It is meant to be a crutch for species not a shield for bureaucrats. In this regard, I applaud

the House of Representatives for approving much-needed ESA reforms. And Congressman Graves, we're proud of the role that you've played in trying to make some of these things happen.

Our involvement in this issue will continue. However, landowners have no confidence in the scientific "expertise" of the U.S. Fish and Wildlife Service. The Service, in our view, is determined to implement a man-made rise, now renamed a pulse, in 2006. In fact, at last year's Plenary Group meeting in Omaha, the Service disregarded the views of stakeholders from throughout the Basin and lowered the preclude to 36.5 million acre feet—a number they thought achievable even under current drought conditions. Yet, federal computer projections were wrong and the scheduled March rise did not occur.

The Missouri River system was constructed for two primary purposes: flood control and navigation. Over time, the system has yielded many diverse benefits including stable supplies of drinking water, hydroelectric power generation and the expansion of recreational opportunities. Today, we find ourselves fighting a federal law that will increase the potential for flooding and increase the uncertainty surrounding commercial navigation.

Much has been said about the science associated with a spring rise. Given enough time and money engineers can do amazing things, perhaps even determine the exact needs of the prehistoric pallid sturgeon. But in the end, we have to ask ourselves if this is what we want. Do we want to protect this fish at all costs? Is it worth jeopardizing human lives and the livelihood of farmers along the Missouri River? We think not.

In our opinion, the 2006 Annual Operating Plan is nothing more than a grand experiment advocated by Government biologists with nothing to lose and research dollars to gain. These people ignore the fact that man-made rises increase the likelihood of flooding and harm to our citizens.

Today, many Missouri farmers are dealing with the impacts of drought conditions, rising input costs and weak commodity prices. And apparently, on top of all this, we're going to add the uncertainty of a man-made spring rise. In our opinion, this farce should be called off and the focus should be directed towards making our inland waterway system more efficient and more competitive.

For 26 years I wore the same uniform worn by the U.S. Army Corps of Engineers and I must tell you that I am shocked and saddened that the Corps would take steps to impose potential flooding on the citizens of this country. I was always taught that the mission of the Corps was to manage the United States' navigable waters, not to react to the whims of environmentalists and put citizens in harm's way. If anyone wonders why people are losing faith in our Government today, this is a classic example of a great lack of common sense.

We participated in this process every step of the way and we're not going to give up now, but suffice it to say, we believe officials have already made up their minds, thus we have no confidence in their decisions or the science being used to justify those decisions.

Thank you very much, Mr. Chairman.

[Mr. Kruse's testimony may be found in the appendix.]

Chairman GRAVES. Thank you, Mr. Kruse. Next, we'll go ahead and take testimony from Lynn Muench, who is vice president of the American Waterways Operators. I think we can get your testimony in and then we can run over and vote. There's three votes. We shouldn't be too terribly long, but we do have to run and vote.

But Lynn, we'll go ahead and take your testimony.

STATEMENT OF LYNN M. MUENCH, THE AMERICAN WATERWAYS OPERATORS

Ms. MUENCH. Mr. Chairman, thank you, and the distinguished Members of the Committee for an opportunity to make comments on the operation of the Missouri River and the impacts the operations have on small businesses throughout the nation.

AWO is the national trade association for the U.S. tugboat, towboat and barge industry. The industry safely and efficiently moves over 800 million tons of cargo each year, including more than 60 percent of the U.S. export corn and other bulk commodities that are the building blocks of the U.S. economy.

Why does AWO's membership have concerns with the proposed spring rises on the Missouri River? There are two principal reasons. First, the spring rise will decrease the navigational reliability of the Missouri and Mississippi Rivers as it further diminishes congressionally-authorized navigation. And two, this proposal will harm a key customer of the barge and towing industry, the Midwest farmer.

The Committee invited AWO here to answer a simple question, the Missouri River and its spring rise, science or science fiction? The answer is simple. It is science fiction.

It continues to astound me and most reasonable and thoughtful stakeholders throughout the Mississippi River why the spring rise exists. This is an attempt to turn the entire lower basin and its citizens, including the Mississippi River, into a lab experiment is an example of big government gone amok.

This spring and summer, over 50 Missouri River stakeholders spent countless hours as part of the spring rise plenary group sponsored by the Corps, the Service and several other Federal agencies, including the Environmental Protection Agency. The group did come to a consensus that, unfortunately, the Corps and Service continue to ignore, in a truly unprecedented and remarkable the Upper Basin, Lower Basin and the Tribes all agreed that there should be no spring rise as long as the drought persists. That recommendation has been ignored.

Here are some of the things we learned during the session and information that the Corps and Service continued to ignore. There are three areas on the river system that appear to be viable areas and much preferred from a scientific nature than below Gavins Point Dam to recover the pallid sturgeon. These three areas have variable spring rises from none to several. The Missouri River already has over 500 miles with a naturally-occurring spring rise. This information indicates that a spring rise probably has little, if any, impact on the spawning cue of the species.

One of the groups reporting to the plenary group identified several "outside the box" real ways to recover and test the recovery methods of the pallid sturgeon. None have been incorporated by the

Service under its "adaptive management" scheme. Contrary to what you heard earlier today, the Service also continues to ignore the best available science they purport to use.

The Biological Opinion represents nothing more than the values of some members of the Service that implements policy instead of offering science for policy makers to evaluate. This Biological Opinion is not supported by scientific fact. It is clearly science fiction.

The new Master Manual increased the number of non-navigation days in 2005, threefold from 17 to 48 days. Now this flexible spring rise will decrease the navigation season by a minimum of one more day this year at a minimum, over the 15 to 61 the Corps predicts for 2006. As the reservoirs continue to be tapped for the excessive waste of water, non-navigation days will continue to increase as long as the drought persists in the basin.

This change will undoubtedly continue to reduce the flow from the Missouri River that contributes up to 88 percent of the water in the middle Mississippi. During 2005, with low water on the Mississippi River and as Midwestern farmers struggled to get their export products to New Orleans following the hurricanes, the Northwestern Division shut off the flows from the Missouri River, resulting in up to two feet of decreased water levels in October and November in the Mississippi River. This action decreased every southbound tow by a minimum of 407,000 bushels, up to as much as 655,000 bushels of soybeans or corn.

Mr. Chairman, in conclusion, the Corps and the Service continue to disregard the President, the Congress and Federal Courts. For the economic well-being of the small businesses of the Midwest and especially it's agricultural community, these agencies must be directed by Congress to adhere to the primary purposes of the Missouri River system, navigation and flood control and to do so on the basis of sound science, not science fiction.

Once again, on behalf of AWO, I'd like to thank the entire Committee for the invitation and your attention.

[Ms. Muench's testimony may be found in the appendix.]

Chairman GRAVES. Thank you, Ms. Muench. We'll recess for just, hopefully, a brief period of time. I apologize again for votes coming in the middle. It shouldn't take us very long at all and then we'll come back, Steve, and we'll start right off with your testimony.

[Off the record.]

Chairman GRAVES. We'll go ahead and come back to order. Again, I apologize for the delay in votes. Hopefully, it didn't have too big an impact. Looks like we lost some of our audience, but that's all right.

Steve, we'll go ahead and move to you with the Missouri Corn Growers and the Coalition to Protect Missouri River. I appreciate you being here and coming all this way and I look forward to your testimony.

STATEMENT OF STEVEN K. TAYLOR, MISSOURI CORN GROWERS, COALITION TO PROTECT THE MISSOURI RIVER

Mr. TAYLOR. Chairman Graves, thank you, and Members of the Subcommittee. My name is Steve Taylor. I'm the chairman of the Coalition to Protect the Missouri River, a diverse group rep-

resenting utility, navigational and agricultural interests. Again, I thank you for this opportunity to be here today.

The U.S. Fish and Wildlife Service states in its 2003 Amended Biological Opinion that spring rises are mandated for the Missouri River. Also, within the Department of the Interior, the U.S. Geological Survey is tasked with providing science that assists policy makers regarding complicated, natural resource issues such as the spring rise. The USGS states that the 2003 Biological Opinion is based, in large part from a National Research Council report entitled "The Missouri River Ecosystem: Exploring the Prospects for Recovery." This report was sponsored by the Corps of Engineers and the Environmental Protection Agency. Instead of focusing on species recovery, however, these agencies ask the NRC to develop a report on policies that could promote flood plain ecosystem management.

This is where some slight of hand occurred. The issue was species recovery, but the Corps has asked instead for a system and ecocystem recovery. The confusion and chaos this mix-up of science causes came sharply in the focus last year with the Corps and Fish and Wildlife Service attempt to design a spring rise from the Missouri River. The U.S. Corps of Engineers sponsored an intergovernmental and stakeholder group process to develop a recommendation for implementing a spring rise. But because of the use of ecosystem science and a lack of species recovery science, the process failed.

In an amazing show of abstinent persistence, the Corps and the Fish and Wildlife Service acknowledged the failure, but continued its dedication to this failed process by announcing the development of yet another inter-governmental and stakeholder group to work on the spring rise.

Now let me focus on the true status of the science of the sturgeon recovery, some of which we've heard already today. Because of the NRC report, spring rises are currently the main focus of species recovery, but how important are the spring rises to species recovery? Do spring rises help the fish to spawn? Is spawning the problem? Are there other threats to the sturgeon during the life cycle? No one really knows because the science is lacking. We do know that the spawning surveys of 85 species of Missouri River fish indicate a spring rise is not necessary. And again, as we've heard today, temperature the photoperiod has been suggestions of primary cue to spawn.

In a September 2005 USGS survey which you quoted, it did actually provide some limited information on sturgeon research in the Missouri River. There was some fascinating information in this report. Again, as you said, there was 75 percent spawning success rate, successful spawning without the mandated spring rise.

We were also encouraged to see that this limited research also looked at water temperature, depths, physical habitats, quantity of habitat, the spawning substrates regarding gravel and rock deposits within the channel. While expanding the research for spawning beyond just flow is encouraging, we would also encourage more research on the entire life cycle of the sturgeon.

We are also encouraged by some of the recent comments of USGS which they've stated that "scientific data about what management

benefit sturgeon are limited." But notwithstanding the dictatorial stance of the Department of the Interior that a spring rise is mandated, some scientists are being true to their fundamental obligation as scientists, they're beginning to step forward, acknowledge the lack of science supporting the spring rise and questioning the importance of the spring rise.

We hope this trend continues and that other scientists realize that the longer that they stand on the quicksand which is a science supporting the spring rise, the more they do so at their own professional peril.

The Congress and the White House need to encourage agencies to make what little information that does exist more available and to allow for more true partnerships in the question for information. Data and information is all important. Congress appropriates millions of dollars to assist endangered species on the Missouri River. A portion of this money should be provided to scientists outside the U.S. Department of the Interior.

And again, Chairman Graves, I thank you for your time.

[Mr. Taylor's testimony may be found in the appendix.]

Chairman GRAVES. Thanks, Steve.

Next, we'll hear from Tom Waters. Tom, I appreciate you coming all the way. I know you know the river very well and I look forward to your testimony.

STATEMENT OF TOM WATERS, WATERS FARM

Mr. WATERS. Thank you, good afternoon. My name is Tom Waters. I am a seventh generation farmer from Ray County, Missouri. I own and operate our family farm in the Missouri River bottoms near Orrick, Missouri. I also serve as the chairman of the Missouri Levee and Drainage District Association, where I represent farmers, landowners, businesses and others interested in the issues surrounding the Missouri River and its tributaries. I am a member of the Missouri-Arkansas River Basins Association Board of Directors and serve as president of three local levee and drainage districts, which combined encompass over 20,000 acres of Missouri River bottomland.

Mr. Chairman, I want to thank you for this opportunity to provide testimony regarding the Missouri River. It's a great honor to have the opportunity to travel to our Nation's Capitol and represent my friends, colleagues and citizens from home.

I am here to share my thoughts with you regarding the United States Army Corps of Engineers plans for increasing flows on the Missouri River twice during Missouri's spring planting season.

It has become increasingly clear the Corps' plan for a spring rise will be designed to intentionally flood Missouri River Bottomlands. Representatives from the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service describe the spring pulse as a means to connect the river to the floodplain. They tell us the purpose of the spring pulse is to provide some semblance of the "natural hydrograph" which historically inundated the floodplain.

The reason the mainstem reservoir system was built was to protect against the inundation of the floodplains. On two different occasions, the 8th Circuit Court of Appeals in St. Louis has clearly stated "the 1944 Flood Control Act has been interpreted to hold

flood control and navigation dominant and recreation, fish and wildlife secondary."

The Corps' 2006 Annual Operating Plan ignores the Court's opinion and includes two opportunities to cause intentional flooding along the river. I fully expect without changes, future Annual Operating Plans will include even greater threats to bottomland farmers, small businesses and communities as the Corps increases flows.

On March 1st, the Corps of Engineers announced there would not be a March spring rise this year. Severe drought conditions in the Upper Missouri River Basin have caused reservoirs to reach all-time low levels. It is very sad we have to rely on such severe drought conditions to stop the implementation of the March spring rise.

I believe these man-made spring rises are in direct conflict with the Corps' mission of flood control. How can the Corps of Engineers protect our farms, businesses, homes and communities from flooding and at the same time make releases from the reservoir system with the purpose of connecting the river to the floodplains? The two goals are incompatible and the Corps' efforts to do both is doomed to fail. Maybe not this year or the next year, but the Corps of Engineers and the Fish and Wildlife Service are playing a game of Russian Roulette with this super-sized science experiment and sooner or later the small businesses, landowners and communities along the river will pay a high price for their actions.

Increased river levels in the spring keep land near the river wet when farmers need to be preparing soil and planting crops. Drainage outlet pipes need to be open in the spring to help drain water from the normal spring rainy season. A high river in the spring causes outlet flood gates to be covered. This holds back water, which would normally be released into the river, increasing the risk of flooding and keeping land covered with water longer following heavy spring rains.

I know the effects of a high river. It's is a risk I face each time I plant a crop. For seven generations my family has faced the risk of a high river due to Mother Nature's unpredictable weather patterns. But we have never had to face a man-made rise designed to flood us. It is amazing the same system built by previous generations to protect rich Missouri River bottomlands can now be used to flood this land, which produces food and fiber for a hungry world.

By building the reservoir system, Congress made a commitment to the American people. It was a promise and commitment of flood control and navigation. Businesses, communities and farmers rely on that commitment for their livelihoods. The spring rise is the first step in dissolving the commitment and it places a heavy burden on those who rely on the river system for flood protection.

It is my hope that Congress will take a hard look at the dangerous direction the Corps of Engineers has taken with their plan to intentionally flood lands along the Missouri River. I appreciate your time and willingness to serve as Representatives in Congress and thank you for this opportunity to be here. I want to mention one other thing, Chairman. I heard you apologize a couple of times for going to vote and I just want to let you know that my friends

and neighbors voted for you to be here to vote and we're proud you do that for us. Thank you.

[Mr. Waters' testimony may be found in the appendix.]

Chairman GRAVES. I appreciate that. Next we're going to hear from David Sieck, and David, I appreciate you being here from Iowa, representing the Iowa corn growers.

STATEMENT OF DAVID SIECK, IOWA CORN GROWERS

Mr. SIECK. First, I'd like to thank you, Mr. Chairman, and Members of the Committee for the opportunity to comment on the Missouri River spring rise plan. Farmers appreciate that Congress is willing to call attention and investigate whether a spring rise is justified. My name is David Sieck. I farm in Glenwood, Iowa and I'm a third generation farmer. I am a member of the Iowa Corn Growers Board of Directors and past president of the Iowa Corn Growers Association.

My family farm is located along the Missouri River and our family has farmed that ground along the river since the 1940s. I would actually like to say that prior to my grandfather buying the ground, I've seen title that said ground previously located in Sarpe County, Nebraska, now residing in Mills County, Iowa. So I've truly had land that's been in two different States.

I have been personally involved in many stakeholder meetings regarding the Missouri River over the past 12 years. I have most recently been a member of the Socio-Economic Technical Working Group of the Plenary Committee during 2005 to determine the stakeholders' opinions regarding the proposed spring rise in 2006. It was my opinion then, and continues to be my opinion now, that the spring rise is not justified by science, and will cause extensive economic harm to farmers as well as Iowa communities.

Farmers strongly oppose the spring rise plan for 2006 and the years thereafter. The spring rise was proposed because of the pallid sturgeon. While it is documented that the pallid sturgeon numbers are low, there's no scientific certainty the spring rise will bring back the population. In fact, the 2005 study by the U.S. Geological Survey shows that temperature is a much more important factor for the fish's ability to survive than flow changes.

In 2005, the U.S. Geological Survey completed an extensive survey. We've talked about that a lot today and this research project was to learn more about the pallid sturgeon's reproductive habits. The study showed that the shovelnose sturgeon is used as an example because it is a close relative of the pallid. On September 14, 2005, the Geological Survey published a report entitled "Update on Sturgeon Research" which concludes that without changing any flows on the Missouri River, 75 percent of the pallid sturgeon tracked had spawned, including fish in the upper Missouri and Gavins Point. This study corresponds with past studies that have shown no correlation between sturgeon spawning and the spring rise.

The Fish and Wildlife Service's Biological Opinion demands a spring rise as a spawning cue for the pallid sturgeon, but information in the 2004 Army Corps' Revised Draft Environmental Impact Statement Executive Summary states, "Corps and USFWS biologists agree that there is no data to support definition of a spawning

cue that would successfully result in spawning on the Lower River." The Corps affirms in the Revised Draft Master Manual review that "this lack of information supported the general understanding between the Corps and the Fish and Wildlife Service staffs that the required spawning cue is basically unknown at this point in time. Corps staff understood that the criteria were hypothetical, and they did not have supporting data, analysis, and documentation of associated spawning success."

Corps' records demonstrate that there is already a natural spring rise on the Missouri beginning at the mouth of the Platte. I'd say it goes north of that a little further because I farm about two miles north of that—and moving downstream. There is no indication that the pallid are naturally spawning at great levels where this natural spring rise occurs even though shallow water habitat is closest to ideal in that part of the river.

A few short years ago, scientists said a spring rise was needed for the two birds, the piping plover and the least tern. As it turns out, these populations have increased without a spring rise, and even though the Fish and Wildlife Service said that the spring rise was essential to the nesting, in an August 2003 press release from the Army Corps, the following was stated: "The operation this summer resulted in the fourth straight year of record numbers of adult piping plovers and the second highest number of least terns." He added, "This is the sixth consecutive year that the fledge goals have been met for the interior least tern. The fledge goals for the piping plover have been met for five of the last six years." This is another example of where the Fish and Wildlife Service's "science" was not justified.

Iowa Corn Growers support solutions based on science, not experiment. The spring rise is an experiment, to see if the pallid sturgeon may be helped. On the other hand, a spring rise has a real likelihood of economic harm, not only to farmers, but to rural and urban communities along the Missouri River. The people, businesses, and communities along the Missouri River should not have to endure purposeful flooding, when the outcome of the species recovery is not certain.

The levels of increased water proposed in the future could add as much as four feet to flood stages at various river reaches. The water, on top of natural events, could not only flood, but cause interior drainage problems for a large portion of western Iowa. This means that not only farms and communities directly touched by the Missouri River will be impacted, a spring rise will affect interior drainage miles away from the river banks.

Agriculture is a major land use in the Missouri River Basin. It is easy to see the importance of the river to Iowa. Every farm in Iowa is either in the flood plain of the Missouri or Mississippi River. We encourage the Corps to continue to protect agricultural land and provide flood control for the 1.4 million acres along the Missouri River.

While the Iowa Corn Growers Association recognizes the importance of preserving our natural resources, we believe untested methods of preservation should not come at the expense of damaging farms, communities and businesses. The Army Corps of Engineers has the ability to place navigation and flood control ahead of

endangered species according to the Eighth Circuit Court of Appeals. We are asking the Government to put human costs ahead of possible benefits to the pallid sturgeon.

Again, I'd like to thank you for the ability to speak today and I appreciate this hearing.

[Mr. Sieck's testimony may be found in the appendix.]

Chairman GRAVES. Thank you. Thank you all. One of the first areas I want to get into is obviously interior drainage which I think there's more potential for impact and damage there, than anything else and I happen to be very familiar with it. We farm on the Turkey River Bottom which dumps directly into the Missouri in Holt County. We farm in Atchison County and I know what the river does, what happens when it gets high. I know what happens to our flood gates and I know how long it takes that water to move on out and if we get rain, everything is backed up and nothing moves.

But anybody can comment if they want to and my next question is actually about small business impact and the industry impact that it's going to have, but we'll go ahead and start with interior drainage.

Tom, you may want to start. You actually mentioned it in your testimony.

Mr. WATERS. Sure, thank you. I have a long-standing invitation for the Corps of Engineers and Fish and Wildlife folks to come out and visit my farm and look at these internal drainage problems. I'm happy to say several of them have been there. I kind of lost count of the number Generals and Colonels we posted, but I'd welcome you and your colleagues to come out as well.

The problem we face with internal drainage with a high river, our drainage system is not allowed to drain into the river. We have flood gates at the levees that close and when we get an internal rain, that water is not able to drain. One of the drainage pipes that we take these folks to drains over 20,000 acres. About half of that comes from the hills during rain events. And if those gates aren't open, that water doesn't drain and it just starts backing up and our ditches fill with water, our fields aren't able to drain. We're either not able to get in to plant our crop. If our crop is planted, oftentimes it will drown out, cause us to replant or if it's late enough, we may not even be able to replant, so really that's the bulk of our problem.

We're also concerned, of course, about seeing a spring rise come when the river is full and we have a 10-inch rain event within that 10 days, the time that the water is released, we can see flooding in those instances, but I think for most farmers along the river, it's the internal drainage that causes us real havoc.

Mr. KRUSE. I think you make a very good point, Mr. Chairman, because I think all of us who farm know full well that springtime is perhaps the most uncertain time of probability of getting a heavy rain. You pointed out in some of your comments earlier, nobody can—I don't know anybody that can predict accurately two weeks out what the weather is going to do, but the spring time is when a lot of bottom land is wet to begin with. So I think your point is an excellent one. If we're going to release more water and then run the chance of Mother Nature deciding to create more water, it really exacerbates the problem greatly.

Farmers have a certain time line for planting. And farmers certainly know that if you miss that time window, you may still get a crop planted, but you've lost the opportunity for optimal planting times and so I think that again creates a real problem.

A lady at one of the listening sessions that I participated in back in Missouri made a point and I think it's a point that needs to be made pretty often. She said to Fish and Wildlife people and the Corps people, you know, what you all are going to do is not going to affect you personally in any way. It's going to have no bearing on your livelihood. It's going to have no bearing on what you do, but it's going to have the potential to have a huge impact on me personally and my family, she said.

And I think you can translate that to people that live all up and down the river who are scared to death that something that's as void of logic as this suggestion is, has the potential to really cause great harm, not only economic harm, and not just to farmland, we're certainly concerned about farmland, but people who live along the river, people who have businesses along the river.

We're talking about our own Government potentially causing great harm to people and I think it's time we do something to stop it.

Chairman GRAVES. Dave?

Mr. SIECK. I'd like to add one thing. I would concur with what they've been talking about, but I would like to add another perspective to that. I'm in a levee district that has about 22,000 acres. This levee district, as you know, in the 1990s we experienced several from just naturally occurring water and it backed up and the river ran really high or out of its banks for weeks.

It has weakened the structures in our levee. These tubes that go through were basically in our levee were corrugated metal tubes designed by the Corps of Engineers and these structures are probably 25, 27, maybe 30 years old in spots and what is happening is that because of all that water for long periods of time along the levee, these tubes are starting to settle and there's O-rings around them and they're starting to settle and pop the O-rings. So our levee district is basically a—it was a Federal levee, but we have paid it off and now we have a Board of Trustees that runs it.

And anything, if it was a FEMA event and we were limited by a certain amount of time for a FEMA event to turn claims in, well, you know, we couldn't crawl in these tubes because the water may have been low, but it was still up against the tubes. It was no longer out of the banks. And with this, we have tubes that are critically damaged from all this water in the 1990s that didn't get it turned in under FEMA and fixed. So we're sitting here with the potential of lots of structures that maybe we've already replaced one of them. The one on the farm that we own has just been replaced this year with concrete because they're finding the steel isn't holding.

So they're replacing these with concrete structures and that burden at about $250,000 a pop is having to be bore by the levee district because there's no federal money to do that and because of the fact that we couldn't turn it in under FEMA.

So we've had the first one that's in trouble. We have another one that is looking like it needs it and they're starting to inspect all the

tubes. With this increased spring rise, if we do get it, and this water setting against these levees, how are we going to bear the burden of fixing all these levees down the road from that increased pressure that isn't just caused from a natural event. We have a huge concern in our levee district about that.

Chairman GRAVES. Mr. King?

Mr. KING OF IOWA. Thank you, Mr. Chairman. First remarks, Mr. Waters, I've never met a seventh generation farmer and I'm not sure I can find it but it seems to me that Scripture says that the sins of the fathers will be visited upon the son of the seventh generation. Have you actually surpassed the statute of limitations established as Biblical?

Mr. WATERS. Sometimes I wonder about that. I'm proud of my heritage there at home. I'm proud of the farm that we take care of.

Mr. KING OF IOWA. You have every right to be. Can you tell us about how many years does that span, that period of time?

Mr. WATERS. You know, actually, when I was doing the testimony I thought I better check that out and around 1850s is when my first relatives moved to the area where I farm now.

Mr. KING OF IOWA. I just happen to recall that Thomas Jefferson declared a generation to be 19 years, so 19 times 7 would be a little less than that, but it changes, of course, generation to generation. I wanted to remark on that because seven generations really means something and when your roots go down, there's a lot more to this than a crop this year. There's seven other generations behind, hopefully, that can make their living and their lives there.

I direct my first question to Ms. Meunch. I'd just like to ask if you could flesh out a little bit what's happened to the prospects of the barge industry, in the lower Mississippi below St. Louis, as well as the reaches of the Missouri River, all the way up to Sioux City, the percentages of freight. You may have testified to that and I missed it.

Ms. MUENCH. No. The whole structure has changed on the Missouri River. Let me start with that. It wasn't all that long ago that there were annual contracts for things that were shipped on the Missouri River. Now everything is in flux because no one can rely on the navigational flows. And the annual operating plan now with the Master Manual it's always a guessing came on what it's going to look like next year. And that has done a lot of things for the towing industry on the Missouri River in a negative sense.

One, several companies have gone out of business because they just simply can't afford to play that Russian Roulette with their business every year, and there's also been a total lack of investments within the terminals and the ports on the Missouri River, because they're not certain that they're going to have those flows year after year.

On the Mississippi River, what it's essentially done at this point, has only been an increase in freight rates for everything going north and south of St. Louis, because that's really a limiting factor at this point. But it hasn't changed really what kind of traffic is there. But there is that possibility, if we continue to have that unreliability during the major export season in October and No-

vember that it could negatively impact whether we can even get crops to the market for export.

Mr. KING OF IOWA. Thank you, Ms. Meunch. I'll turn to my Iowa witness here, Mr. Sieck, and ask him some questions that I don't expect he's going to be prepared to answer.

What was the indigenous population of bottom farmers in 1952?

Mr. SIECK. The indigenous?

[Laughter.]

Mr. SIECK. I guess in our area, I have a water mark that's about three and a half feet above the land that is the furthest away from the river, almost to the flood plain and there wouldn't have been many farmers out there at that period of time.

Mr. KING OF IOWA. Because that would have been in flood zone and it was habitually flooded?

Mr. SIECK. Right, and even though there was some small farmer levees, there wasn't the kind of protection needed in 1952, it was pretty much bank-based.

Mr. KING OF IOWA. So once the floods—when was the last year that the bottoms flooded in your area?

Mr. SIECK. Before the levees or just between the levees or where are we talking? Because you know, the farmer levees weren't as good a levees. The levees now kind of hold it in between the banks.

Mr. KING OF IOWA. I'd say as we know it today.

Mr. SIECK. 1997 or 1998 was the last year.

Mr. KING OF IOWA. 1997 or 1998?

Mr. SIECK. Right.

Mr. KING OF IOWA. And prior to that, one or two floods a decade or how did that run out?

Mr. SIECK.I always say back before the 1990s we were maybe 1 to 2 per 10. After the 1990s, with all that water, we had probably about three or so, and they were long periods. They weren't just short ups and downs, they were for weeks at a time where the water was out of the banks.

Mr. KING OF IOWA. But the 1990s were what they were?

Mr. SIECK. Right.

Mr. KING OF IOWA. And I'll never forget that. There was a peak population though of farmers in the bottom during that period of time and I'm going to guess it probably—

Mr. SIECK. Pretty much probably hiding in the hills during all high water events. They moved their cattle and everything off, but yes, it was the most amount of farms and the most amount of people out there, probably.

Mr. KING OF IOWA. In the 1960s and 1970s, about in there?

Mr. SIECK. Yes.

Mr. KING OF IOWA. And I just had this bizarre thought as I sat here and I listened and I wondered if it were the sturgeon that were actually studying the indigenous population of bottom farmers over the last half a century, what might they recommend for the habitat to improve the population of the species in the Missouri River bottom? I suspect they would slay let's change some of the habitat so that they're not taking second rate to another species. But that was my little gambit here for fun.

And then I want to just—Mr. Waters, did you lean towards the microphone?

Mr. WATERS. Yes, I was just going to assure you it wouldn't be a spring rise.

Mr. KING OF IOWA. Thank you. Maybe that was what I was looking for.

And in the Corps testimony, the requirement that they list under stakeholders in 2005 and Mr. Sieck, as a member of the Plenary Committee, were the stakeholders given an opportunity to discuss whether a spring rise should go forward? Did you weigh in on that question and if so, did you get a response on that?

Mr. SIECK. I guess. I was on the Socio-Economic Subcommittee which dealt with stakeholders and how it affected us in the lower reaches and our farms and things and we were given sidebars when we started that there was going to be a spring rise, so actually, looking at alternatives that didn't include a spring rise was off the table. So to me, I don't know if we truly looked at all the alternatives and I had a real concern during the process because of that fact that we're going to have a spring rise and you guys have to decide how you want it done.

Mr. KING OF IOWA. Thank you.

Ms. MUENCH. Congressman, I was actually a part of the plenary group and I would like to say something for the record because it was very important and really quite breathtaking that this happened at the very end of the plenary group. And that was Chad Smith, who works for American Rivers, and as you can imagine, we're not usually on the same side of the fence, put up a proposal for how to move forward with the spring rise and part of that proposal was to have a spring rise off the table for 2006 period. And went through another list of what the spring rise would look like, including a preclude level of 49 million acre feed which is much higher than the 36.5 that's presently there. The only part of that proposal that anyone had any problems with was the relaxation of flood control. That was universally from Upper Basin, Lower Basin and the Tribes.

There were a couple of people who were very invested in this Biological Opinion who weren't agreeing with that, but as a group, the plenary group was ready to say yes, let's move forward with this proposal, but we've got to have the flood control constraints in place.

Mr. KING OF IOWA. Thank you. And I'm going to direct a follow-on question to Mr. Kruse and that would be if and in spite of the resistance to this pulse that's here in this panel and that's here in this panel, if this goes forward and as I look at the yellow line on this diagram and realize that that line could well in subsequent years go up and up and up, and each year that there might be a pulse and the greater magnitude that's more likely in subsequent years because we expect there will be more water to work with in subsequent years, in fact, pray there will be, what would you ask the Federal Government to do in order to indemnify the man-created losses that could come from a pulse or a spring rise?

Mr. KRUSE. Congressman King, I think that's a very important point. There has been discussion, for example that the Risk Management Agency should somehow provide crop insurance to farmers who farm in the bottoms. I have personally taken the view that and you know, RMA is saying that they are not allowed to cover

man-made events with crop insurance. I personally have taken the view if Federal Government agencies are going to impose this on citizens, it ought to be those agencies that figure out how to make people whole.

I don't necessarily quarrel with the Risk Management Agency when they say that they are not under current law allowed to provide crop insurance for man-made flooding. I think this is a very, very important point and it goes beyond agriculture; it goes to people who live in these areas. It goes to people who have small businesses in these areas and certainly it goes to people who farm in these areas.

Again, I think if there are Federal Government agencies that are going to impose this kind of total lack of logic event on people, then they ought to figure out how they're going to make them whole and Congressman King, I would agree exactly with your language, how to make these people whole, if something like that occurs.

Mr. KING OF IOWA. Thank you. Anyone else on the panel would like to weigh in on that question of what the Federal Government ought to be obligated to do?

Mr. Sieck?

Mr. SIECK. Well, I guess it comes back to the subsequent years. And if you look at the yellow lines on your chart and you look at the proposed rises for this year and compare that to the natural hydrograph, the first rise basically mimics the natural hydrograph. But the second rise has been so compromised from the start from the natural hydrograph, I don't see how we could ever have a hope of success as far as making people whole. The crop insurance issue is a double-edged knife as far as we can see. If we ask for coverage under crop insurance, we've also given them the right to give us bigger spring rises because all those guys are covered now, go ahead.

So it's a huge issue that cuts both ways and there needs to be some serious thought that that's just the opportunity for them to give us more of what we've opposed all the way along. So I have an issue with that.

Mr. KING OF IOWA. Thank you. Anyone else?

Mr. WATERS. You know the attorneys for the Fish and Wildlife Service and the Corps of Engineers in Federal Court told the Judge that the purpose of the spring rise was to intentionally flood bottoms lands. So if that's the case, we shouldn't have to rely on crop insurance to cover us for those types of flooding because one thing, crop insurance is a percentage. You're just going to get a percentage of your loss. So there needs to be some way that you can recover 100 percent of your losses due to this Federal action.

And so I don't know if there's a program that needs to take place or what, but I can tell you this, the easiest answer is not to have the spring rise, not to put us in that predicament to begin with.

Mr. KING OF IOWA. Thank you. Mr. Taylor.

Mr. TAYLOR. As mentioned earlier, I'm here representing Missouri corn growers, but I'm also chairman of the CPR which has over 30 some organizations as members, including chambers of commerce. I believe it was at the beginning of this hearing that Senator Talent laid out quite well the magnitude of what's at risk here, billions of dollars, not only in agriculture, but others. And

that's why we have chambers of commerce and utilities and navigation and others that are interested in this.

I thought in my testimony what would be good to frame this was talking about how when the USGS, the main science agency was asked what was the basis of science, they turned to the NRC report. If you take and look at that NRC report really closely, it really to me strikes me as goes completely against what this Committee is here for which is promote small business. It talks, in my opinion and I guess other people can read it and have other opinions, but in my opinion as I read it, it bemoans the facts that we put the dams in in the first place and that sort of thing. And protecting—it actually talks about the problems that the infrastructure and transportation, the population growth that's caused to the ecosystem. And that's fine if we're debating the ecosystem, but the issue and the science that we're supposed to be talking about is the pallid sturgeon.

So again, I just wanted to expand it. The big picture is definitely a lot is at risk as far as the agricultural community and that's part of what I'm representing here today. But as Senator Talent said, there's billions of dollars at stake in the bottomland.

Mr. KING OF IOWA. Thank you. And just in a concluding statement here, Mr. Chairman, I would just like to make a remark on Mr. Sieck's testimony with regard to the least tern and the piping plover and I recall as the saga unfolded, it was we need to have the spring rise in order to do three things, well, actually two things for three species. One of them was to wash the pallid sturgeon out into the Oxbow, so they could spawn. Another one was to wash the willows off of the sandbars so there would be a place for the plover and the tern to nest and then we needed to have another surge to go out there and flood up into the Oxbow, apparently to round up the spawned pallid sturgeon and bring it back into the river so they can swim away.

And now we've resolved the issue with two of the species that you've testified and I think it was very relevant to this that their numbers are up several years in a row. It looks like their population is becoming more and more stable. We found ways to manage that. We found ways to hatch the sturgeon out, so it almost looks like there was a pre-conceived notion of what this river needed to be flowing like and that the species fit the need to design the river flow conveniently. And now we're down to one species instead of three. That's great progress in a way. If we could continue this kind of progress, this question would be over.

But the part that disturbs me yet, as I look at these lines on this graph, the yellow, the orange and the two blues, is the idealistic viewpoint that we should get to the natural hydrograph and the impossibility of getting there with dams in the river, and so if we don't know to what degree we need to mimic the natural hydrograph or what portion of it is necessary for reproduction, it may be impossible to ever have the type of, if it is indeed even effective in the spawning, it may be impossible to ever reach the level of the flow of the river. It is impossible to reach the natural hydrograph. So what less than that ideal, if that is the ideal, would it be required for the reproduction of the pallid sturgeon? And this is, I've been somewhat amazed with the skill in language that I'm

seeing here, but what did I read, the super-size science experiment, I appreciated that remark and I think with that, I would conclude my remarks and thank the Chairman.

I yield back.

Chairman GRAVES. Thank you, Mr. King. You're exactly right. We don't know what degree we're ever going to be able to achieve the natural hydrograph. We do know that the pallid sturgeon has adapted. It's adapted in our fisheries. I mean the fact is they're swimming around in circles at least in our hatcheries.

I do think they will adapt. We can't lose sight of the fact that it affects not only farmers, but it affects businesses. It affects power plants. It affects communities. And we just barely touched on that whole aspect of it.

This is an important issue. It's a very powerful issue and it's something that concerns me. I get myself in trouble sometimes when I say things and I know my staff gets a little upset, but the fact of the matter is if—I hate to lose a species, but if we were to lose the pallid sturgeon, as a result of—because we've become more commercial, we've got more people farming the river and it becomes another one of the 90 percent of the species that have lived on this planet and are now extinct. I'm sorry for that, but I'm not going to put fish or two birds for that matter ahead of people. And I think we have to bear that in mind.

Thank you all for being here. I do want to thank Mr. King and General Martin and Mr. Wells for sticking through the hearing. I appreciate that very much for you sticking by and listening to the rest of the testimony in light of the votes that we had. And we do have to vacate the hearing room. We ran a little over time, but I do appreciate everybody being here and thank you so much for your testimony.

[Whereupon, at 12:55 p.m., the hearing was adjourned.]

SAM GRAVES, MISSOURI
CHAIRMAN

JOHN BARROW, GEORGIA
RANKING MINORITY MEMBER

Congress of the United States
House of Representatives
109th Congress
Committee on Small Business
Subcommittee on Rural Enterprises, Agriculture and Technology
2361 Rayburn House Office Building
Washington, DC 20515-6319

CONGRESSMAN SAM GRAVES
OPENING STATEMENT FOR MO RIVER HEARING
MARCH 15TH, 2005
2360 RHOB

Good Morning and welcome to this hearing of the Rural Enterprises, Agriculture and Technology Subcommittee. This hearing, entitled, The Missouri River and its Spring Rise: Science or Science Fiction, will look at the science used to by U.S. Fish and Wildlife Service to mandate management of the Missouri River by the U.S. Corps of Engineers. i want to thank everyone for their participation.

the current policy dicates that the corps will implement two spring rises, otherwise called a man-made flood, in order to mimic the natural yudrology of the river to protect threatened species without looking at its impact on stakeholders along the Missouri River. in my view there are far less draconian measures that could be implemented, without having to chose fish over farmers.

I am adamently opposed to a spring rise. First off, this policy is based on unproven science. According to the Fish and Wildlife Service a spring rise might increase the spawning habits of the endangered pallid sturgeon…might. In accordance with this theory and the Endangered Species Act the Army Corps of Engineers is mandated to implement an artificial, man-made spring rise. However, many including the Missouri Department of Resources dispute that the spring pulse will cause the pallid sturgeon to spawn. in fact, many say that the spring pulse could further harm piping plover and least tern.

Second, the spring rise, which according to the Army Corps of Engineers will occur in May, pending sufficient water levels in upper basin reservoirs, will happen at a time when a rise already occurs naturally. A combination of a naturally occurring rise and a man-made spring rise can create significant problems and flooding. In a state with a history of floods, as well as many acres and livelihoods in the flood plain, a flood could have a devastating impact on the economy and public safety.

In July of 2003 the Missouri River flooded and its impact was devastating. Most people outside of Missouri have probably forgotten this, but for the citizens of Missouri, it is embedded in their memories. This flood cost 48 people their lives, cost $15 billion in damages, and damaged 72,000 homes. now our government wants to play Russian Roulette with the same river through a man-made flood.

To add insult to injury, we all were informed late last year by the USDA that a farmer's crop insurance will not cover any destruction caused by a spring rise. The USDA reasons that crop insurance only covers crops destroyed by a "natural occurring event." The USDA goes on to explain that a federally mandated spring rise will not be covered because it's man-made, not naturally occurring. As i understand it, the government is mandating a flood that could impact over one million Missourians in the MO River flood plain but the government will not cover the flood costs associated with its own policies. That is absolutely ridiculous.

As a farmer, I understand the risks associated with my business. It is my job to prepare and reduce as much risk as I can. However, we have an instance where the government is coming in and throwing us a pitch we have never seen before. This seems counterproductive. farmers themselves are becoming an endangered species.

there are other alternatives that will protect these threatened species without threatening the livelihoods of farmers and others who depend on the missouri river.

Again, I thank everyone for their participation and look forward to hearing today's testimony.

Thank you, Mr. Chairman.

Internet and telecommunications technologies have a profound impact on our daily lives. They have changed how we communicate with friends and family and how we interact with our government. Accessing information about the world in which we live, or balancing our checkbooks, has never been easier or more convenient.

America's twenty-three million small businesses are some of the savviest users of telecommunications technology, using the Internet to access new markets to grow and diversify. In fact, American small businesses have a strong record of being the driving forces behind further technological innovation and the development of innovative business models that we now take for granted.

Along with being connected comes being exposed to new threats. The risks associated with turning more of our lives and business into digital "1's" and "0's" and burst of light over fiber-optic cables are significant and require vigilant management. A single individual can design computer viruses that can be spread across continents in milliseconds. Identity theft has become all too common of an occurrence. Identity theft compromises credit records, businesses, and, sadly, lives.

Destructive computer viruses and other malicious Internet activities pose severe problems for small business owners that are not prepared to mitigate this kind of risk. This exposure can even result in thousands of hard earned revenues being lost. An FBI conducted survey of computer-related crimes – including viruses, spyware and theft – revealed that a total of nearly seventy billion dollars in 2005 alone was lost, with companies incurring an average of twenty-four thousand dollars in losses. Losses likes this are 'make-or-break' for some businesses. Sadly, some small companies and computer users fail to recognize the benefit of cyber-risk mitigation as an investment until it is too late.

The Federal Trade Commission, the FBI, the Secret Service, and the National Institute of Standards and Technology have all embarked on efforts to offer federal programs designed to educate the public on computer security. In fact, federal cyber security spending has increased from $5.6 billion dollars in 2004 to more than six billion dollars in 2007 – and is expected to hit seven billion dollars by 2009.

I am concerned that, despite the rise in cyber attacks over the past few years and the growing impact they have had on small businesses in America, the Small Business Administration – the sole agency charged with aiding America's entrepreneurs – does not have updated Internet security information readily accessible on its Website.

Like all of us, small firms are exposed to cyber attacks and vulnerable to their malicious effects. Today's hearing will give us an opportunity to review whether the increases in federal investment – both human and financial resources – have had or can have an impact on small firms' ability to mitigate their cyber-risk.

It is my hope that the testimony that we hear today will both help us to better understand what role the Congress and the federal government can play in educating the American public and the business community to the risks they face from cyber-crime and what recommendations Congress can act on to protect Americans and their businesses from this growing threat.

Thank you, Mr. Chairman.

House Committee on Small Business
Subcommittee on Rural Enterprise, Agriculture, and Technology

Wednesday, March 15, 2006

Statement of Congressman Ike Skelton (D-MO)

First, let me thank the Chairman and Ranking Member for holding this important hearing regarding the impact of the Corps of Engineers' spring rises on rural America. Today's hearing provides another opportunity for the U.S. House of Representatives to perform legislative oversight over several Executive Branch agencies that have implemented policies that may harm Midwestern farmers and the rural economy.

On February 28, 2006, at the request of Congressman Kenny Hulshof and me, the House Agriculture Committee's Subcommittee on General Farm Commodities and Risk Management held a hearing in Jefferson City to investigate the impact of the Corps' spring rises on the federal crop insurance program and to hear from stakeholders with views regarding river issues. Some of you here today were in Jefferson City, and I am hopeful that this hearing will build upon that testimony.

As a former member of the Small Business Committee, I take seriously the impact of all federal laws and regulations on America's small business community. Small businesses are the backbone of the U.S. economy, and they play an especially pivotal role in the economic viability of rural areas.

Because the river is so vital to the Show-Me State, I always keep a close eye on how the Corps of Engineers plans to manage the river each year. When the Corps released its 2006 operating plan, I was extremely disappointed to see two spring rises – in March 2006 and in May 2006 – included in the proposal.

These government-sanctioned spring rises will impact small businesses throughout the Missouri River Valley. This is particularly true for agricultural producers who face increased economic uncertainty and potentially devastating floods as a result of the Administration's water management decisions.

All of this comes at a time when producers have also faced one of the most expensive harvests in history. High diesel fuel prices, increased fertilizer costs, uncertainty in the transportation system, extreme weather, and lower crop prices have negatively impacted farmers and weakened small town economies. These spring rises, which were sanctioned by the Corps of Engineers, simply add insult to injury for many of these hard working Americans.

For quite some time, I have worked with my colleagues in a bipartisan manner to ensure federal Missouri River policies do not harm the American people we represent. I have strongly opposed government sanctioned spring rises, and I will continue to do so.

I am hopeful that today's hearing will continue to shed light on an issue that is critical to so many people throughout the Missouri River basin.

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS (NORTHWESTERN DIVISION)

COMPLETE STATEMENT
OF
BRIGADIER GENERAL GREGG F. MARTIN
COMMANDER
NORTHWESTERN DIVISION, U.S. ARMY CORPS OF ENGINEERS

BEFORE THE
SMALL BUSINESS SUBCOMMITTEE ON
RURAL ENTERPRISES, AGRICULTURE AND TECHNOLOGY
SMALL BUSINESS COMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES

MARCH 15, 2006

Mr. Chairman, and distinguished members of the Subcommittee, I am honored to be testifying before your subcommittee today. My name is Brigadier General Gregg Martin, and I am the Commander of the Northwestern Division of the U.S. Army Corps of Engineers. The operation of the Missouri River Mainstem Reservoir System is under my command.

The Corps operates the Missouri River Mainstem Reservoir System to serve the Congressionally authorized purposes of flood damage reduction, commercial navigation, hydropower, irrigation, recreation, water supply, water quality, and fish and wildlife. The Corps' goal is to best serve these authorized purposes while complying with all applicable laws, including the Endangered Species Act (ESA), and while fulfilling our responsibilities to federally recognized Native American Indian Tribes.

The Corps has been consulting with the U.S. Fish and Wildlife Service (USFWS) under the ESA since the early 1990s on the operation of the Missouri River Mainstem Reservoir System, the Bank Stabilization and Navigation Project, and the Kansas River projects. In November 2000, the USFWS provided the Corps a Biological Opinion, which concluded that the Corps' operation of these projects jeopardized the continued existence of the interior least tern, piping plover, and pallid sturgeon, three species protected under the ESA. In 2003, as a result of additional information, including the listing of critical habitat for the piping plover, the Corps and USFWS reinitiated ESA consultation. In their 2003 Amended BiOp, the USFWS concluded that the Corps' actions still jeopardized the continued existence of the three listed species. However, in the 2003 Amended BiOp, the USFWS provided a revised Reasonable and Prudent Alternative, or RPA, to jeopardy. The RPA includes a requirement for a bimodal spring pulse from Gavins Point Dam for the benefit of the endangered pallid sturgeon.

Intense efforts continue by the Corps, with assistance from the USFWS, U.S. Geological Survey (USGS), States, and other natural resource experts, to restore

physical habitat for the three listed species including the pallid sturgeon in the watershed of the Missouri River. The restoration work for the pallid sturgeon is intended to provide the habitat for young sturgeon to develop and survive. We also have a significant research program underway with the USGS to determine the factors that may be limiting pallid sturgeon spawning and recruitment, as well as an aggressive pallid sturgeon propagation program. However, under the 2003 Amended BiOp, these efforts, although beneficial, do not substitute for changes in river management to provide the flow conditions that the USFWS has indicated promote sturgeon reproduction.

The 2003 Amended BiOp requires the Corps to implement the bimodal spring pulse releases no later than the spring of 2006. However, the BiOp also allows for consideration of existing hydroclimatic conditions such as drought, in the decision on whether and how to implement the bimodal spring pulse in any given year.

The Missouri River basin is currently experiencing an extended drought, and system storage is at unusually low levels. The Corps has taken these low levels into account in developing the technical criteria for a bimodal spring pulse release plan included in the Missouri River Mainstem Reservoir System Master Water Control Manual (Master Manual), along with public input regarding any potential risks associated with the spring pulse releases. Consistent with the Master Manual technical criteria, the plan for this year is presented in the Corps' 2005-2006 Annual Operating Plan (AOP) for the Missouri River Mainstem System. The technical criteria and AOP were developed through a collaborative process and were based on the requirements of the 2003 Amended BiOp; analysis of hydrologic data; input from the Spring Pulse Plenary Group, which was composed of more than 50 Basin stakeholders, Tribal meetings and consultations; and public comments received on the draft AOP. This process was facilitated by the U.S. Institute for Environmental Conflict Resolution and included representation from the USFWS, the Corps, Tribal representatives, basin states, and a wide range of stakeholders. These discussions were key in the identification of Master Manual technical criteria for the bimodal spring pulse and the 2006 AOP. The technical criteria greatly reduce the potential for negative impacts as compared to the plan identified in the 2003 Amended BiOp. One key change was a reduction of the peak of the spring pulses from one to two weeks down to two days. This not only saves water in System storage, which is very important during the current extended drought, but also reduces the duration of the higher river stages downstream. The Plenary Group discussions, and extensive discussions with the USFWS, also helped the Corps identify criteria for adjusting the magnitude of the May spring pulse in response to hydroclimatic conditions. During drought these adjustments substantially reduce or eliminate the spring pulses. The USFWS informed us that the draft technical criteria for the bimodal spring pulse plan, when implemented in conjunction with a comprehensive adaptive management program to address future operational flexibility, will meet the intended purposes outlined in the 2003 Amended BiOp for 2006 and beyond. These criteria were then incorporated in the Master Manual Revision issued March 1, 2006.

The Corps understands farmers' concerns over the potential for flooding of cropland during the bimodal spring pulse releases. The bimodal spring pulse plan includes criteria specifically designed to minimize the risk of downstream flooding and crop damage. First, the established downstream flow limits have not been changed in the revised Manual, and thus provide similar downstream flood control during the spring pulse releases as in previous years' operations. Second, the Corps has agreed, at the request of the downstream farmers, to integrate the National Weather Service precipitation forecasts into its daily Missouri River operational forecasts during the spring pulse period, and will adjust releases accordingly. And third, the Corps will integrate estimated actual rainfall derived from weather radar information into its forecasts during the spring pulse releases. These measures, along with the reduced duration and magnitude of the pulses, will reduce the potential for downstream flooding of cropland. It is also important to note that as provided in the Master Manual spring rise technical criteria, because System storage was below 36.5 million acre- feet on March 1 of this year, the March pulse was not implemented. We will check storage again on May 1 to determine if the May pulse will be implemented this year. System storage must be above 36.5 million acre-feet for the May pulse to be implemented this year. Also, due to the current extended drought, releases for navigation in 2006 will be 6,000 cubic feet per second lower than normal, thus resulting in lower peak flows if the May pulse is implemented.

In conclusion, the Corps remains committed to operate the Missouri River Mainstem System to serve the Congressionally authorized project purposes, fulfill our Tribal Trust and Treaty obligations, and comply with all applicable laws, including the ESA. We are convinced that this can be best accomplished in a sustained collaborative process that includes the entire spectrum of Basin interests. Working together as a team – Federal, Tribal, State, local agencies, and stakeholders – we can identify solutions that benefit the Basin as a whole. Thank you for the opportunity to testify today, and I will be happy to answer any questions.

DRAFT STATEMENT

STATEMENT OF MITCH KING,
REGIONAL DIRECTOR, MOUNTAIN-PRAIRIE REGION,
U.S. FISH AND WILDLIFE SERVICE
ON MISSOURI RIVER AND ITS SPRING RISE
BEFORE THE
COMMITTEE ON SMALL BUSINESS
SUBCOMMITEE ON RURAL ENTERPRISE, AGRICULTURE AND TECHNOLOGY
U.S. HOUSE OF REPRESENTATIVES

MARCH 15, 2006

Mr. Chairman and members of the subcommittee, I am Mitch King, Regional Director for the U.S. Fish and Wildlife Service's (Service) Mountain-Prairie Region. I appreciate the opportunity to testify today on fish, wildlife, and the Missouri River on behalf of the Department of the Interior.

The Missouri River has undergone many changes since the journey of Lewis and Clark. At that time, settlers complained that the rich organic water of the "Mighty Mo" was "too thick to drink and too thin to plow." Over the next 200 years, generations of settlers and the United States Government expended considerable resources trying to manage the river and carve out a safe and prosperous place to live. Through the creation of a system of Federal reservoirs and navigation-related infrastructure, we have created dependable hydropower, flood control, irrigation systems, and navigational opportunities for the benefit of the public.

Large river systems and their associated fish and wildlife resources have evolved over thousands of years, so major changes to a system invariably result in consequences. Harnessing the Missouri River resulted in significant changes to the populations of many native fish and wildlife

species that once thrived in a free-flowing river. The status of the pallid sturgeon, least tern, and piping plover are all somewhat indicative of the changes in environmental health and diversity of the Missouri River system; each of these species is currently listed under the Endangered Species Act (ESA) as threatened or endangered.

The pallid sturgeon is native to the Missouri and Mississippi Rivers and is adapted to the pre-development habitat conditions that existed in these once large, warm, turbid rivers. The river's floodplains, backwaters, chutes, sloughs, islands, sandbars, and main channels formed the large-river ecosystem that provided the habitat for the various life stages of pallid sturgeon.

Today, much of this ecosystem has been altered by human developments. The construction of dams and the regulation of the river for flood control and navigation captured the spring peak runoff flows in reservoirs for release during the late summer and early fall, when conditions are drier and river flows naturally lower. This loss of spring runoff flows, along with the loss of spawning habitat due to channelization of the river, have been the key contributing factors to the decline of the pallid sturgeon.

Restoring the physical habitat, providing for flow fluctuation, and augmenting wild pallid sturgeon populations will provide the "three-legged stool" for recovery of the species, and we've made strides in recent years in the areas of aquatic habitat restoration and artificial propagation of pallid sturgeon. However, the continual challenge facing the Service and our partners, the U.S. Army Corps of Engineers (Corps), states, tribes and stakeholders along the river, is to create a balance among the river uses, including the habitat needs of native fish and wildlife. We do

not feel that, in the case of the Missouri River, we are forced to choose between the well-being of people and the needs of a species. By complying with the applicable laws, using the best scientific information available and applying common sense, we can provide for the needs of both people and wildlife.

Our December 2003 amended final biological opinion used the most current scientific information as the basis for recommending changes to management of the dams and set the stage for even more important collaborative discussions related to changing management of the river. The recommendations in the biological opinion are similar to those previously provided by the National Research Council (a subcommittee of the National Academy of Sciences) in their recent report "The Missouri River Ecosystem - Exploring the Prospects for Recovery," as well as the Missouri River Natural Resource Committee, an organization comprised of state fish and wildlife agency officials from Missouri River basin states. Indeed, the National Research Council stated in its report: "Degradation of the Missouri River ecosystem will continue unless some portion of the hydrologic and geomorphic processes that sustained the pre-regulation Missouri River are restored - including...flow pulses that emulate the natural hydrograph. [Without them] the ecosystem faces the prospect of irreversible extinction of species."

Flow pulses emulating the natural hydrograph, commonly referred to as spring rises, are increases in flows in the early part of a water year. Spring rises are intended to accomplish specific goals such as shifting sedimentation to create new channels, pools, and islands, which provide habitat for the pallid sturgeon; providing and transporting nutrients; and eliminating

problematic plant life on river banks. Monitoring the environmental and biological effects of the current spring rise, as directed by the 2003 amended final biological opinion, will determine how successful we are in accomplishing these goals.

Future operation of the Missouri River with a spring rise will mimic natural conditions and help stimulate native river fishes, like the pallid sturgeon, to spawn and eventually provide young. Pallid sturgeon are extremely endangered. Only seven very young wild pallid sturgeon have been captured in the last seven years, indicating that there is little natural replacement of older sturgeon. Without a spring rise, we believe spawning and recruitment of wild sturgeon will not occur, placing the population in further decline.

In developing its recommendations for spring flow pulses, the Service relied on literally thousands of articles in published scientific literature related to large river ecology and native fishes. A river hydrograph characterized by seasonal ebbs and flows of water increases nutrients in the river which trigger insect production and smaller fish to reproduce – eventually providing food for young pallid sturgeon. This increase in water flow, coupled with the appropriate day length and temperature, also gives the right set of environmental cues necessary for the pallid sturgeon to complete its reproductive process.

The 2003 amended final biological opinion calls for adaptive management based on increasing knowledge of pallid sturgeon biology. Consistent with this mandate, we are making significant progress in our understanding of sturgeon life history. This will allow us to further refine our

management actions in order to give sturgeon the best recovery chance possible while balancing river uses.

The U.S. Geological Survey (USGS), working with the Corps and the Service, is in the third year of a scientific research effort dedicated to furthering our understanding of the ecological requirements for reproduction and survival of sturgeon. USGS has been successful at developing procedures for placing transmitters and sensors in sturgeon to effectively allow the fish to help us determine what and where spawning habitat is, and when spawning occurs. This information will be critical in the evaluation of the benefits of the spring rise and how it contributes to successful spawning and recruitment.

The USGS has also developed protocols for evaluating habitat used by fish, allowing us to gauge the effectiveness of habitat restoration efforts. For example USGS has documented that patches of gravel-cobble substrate, thought to be preferred by sturgeon for spawning, exist throughout the lower Missouri River from St. Louis to Gavins Point. These findings indicate that potential spawning substrate is available in the area of the River influenced by the spring rise.

The science that USGS is providing on physiological conditions has resulted in an understanding of reproductive stage-specific hormone levels, enabling differentiation of sexes in sturgeon, as well as the ability to predict whether a fish will spawn in the upcoming summer. Over time and under different environmental conditions, these measurements allow us to best evaluate the sturgeon's response to changes in its environment. A partnership of agencies that includes the

USGS, the Service and several states are teaming together to use all of these techniques for evaluating the effectiveness of the pulses of the spring rise.

We understand and appreciate the concerns of the users and stakeholders in the Missouri River Basin. The Service and the Corps have been working in a collaborative effort with tribal representatives, Basin states, and a wide range of stakeholders. The spring pulse provisions in the Corps' 2006 annual operating plan (AOP), which incorporated input from this Plenary Group, complies with the requirements of the ESA, while being responsive to hydroclimatic conditions in the basin and the potential impacts on people.

The Service is sensitive to the concern about potential flooding that may occur during the releases. The cooperatively developed AOP includes criteria specifically designed to minimize the risk of downstream flooding and crop damage. The Corps and the Service have agreed that the established downstream flow limits would not be changed under the 2006 AOP, providing similar downstream flood control as has been provided in previous years. In addition, the Corps has agreed, at the request of the downstream farmers, to adjust releases based on precipitation forecasts and estimated actual rainfall. These measures, along with the reduced duration and magnitude of the pulses, will reduce the potential for downstream flooding of cropland. We are confident in the Corps' assessment of the minimal risks associated with a change in operation, and we will continue to support the Corps in its efforts to work collaboratively with stakeholders in the lower basin as they collect additional data related to this concern.

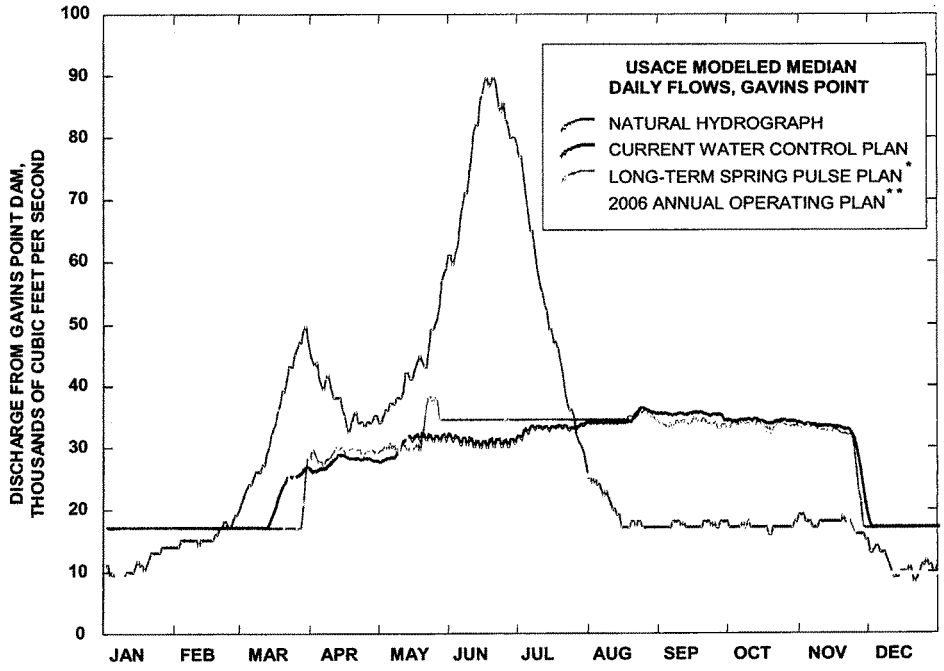
DRAFT STATEMENT

We also note that because System storage is low due to the current extended drought, releases for navigation in 2006 will be 6,000 cubic feet per second lower than normal, resulting in lower peak flows due to the spring pulse releases. In addition, the duration of the pulse, if one occurs this year, will be only 2 days, far shorter than has been previously discussed.

The Service's goal is to ensure the actions proposed to prevent the extinction of native species are reasonable, based on sound science, and are within the authority of the Corps to implement. The proposed changes have been designed with safeguards related to flow constraints downstream.

The Service is proud to be working with our partners, including the USGS, state Fish and Wildlife Departments, tribal Fish and Wildlife Departments, the Corps, and basin stakeholders to develop a robust set of monitoring and evaluation programs that will ultimately be used to implement a scientifically sound adaptive management program on the Missouri River. We anticipate approximately a two year effort to convene the parties; establish measurable goals and objectives; and to begin implementation. To that end, we will continue to work with the Plenary Group and future cooperative groups and strive to best meet the needs of the people and resources of the Basin.

Mr. Chairman, this concludes my statement and I am happy to answer any questions that you might have.



* PRELIMINARY MODEL, LONG-TERM IMPLEMENTATION, WITH PRECLUDES AND PRO-RATIONING, WITHOUT WEATHER FORECASTS

**USACE AOP PRESENTATIONS, ASSUMES MINIMUM NAVIGATION SERVICE LEVEL, FULL SEASON LENGTH, NO PRO-RATIONING

USGS

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

Before the U.S. House of Representatives Committee on Small Business, Subcommittee on Rural Enterprise, Agriculture and Technology
The Missouri River and its Spring Rise: Science or Science Fiction?

March 15, 2006

Good morning Mr. Chairman. My name is Mike Wells; I am Deputy Director for the Missouri Department of Natural Resources and Chief of Water Resources for the State of Missouri. As Chief of Water Resources, I represent the state in all interstate water issues. Thank you Congressman Graves for inviting me to give testimony on this important issue.

Let me begin by saying that the State of Missouri is truly concerned about protecting endangered species and natural habitat along our rivers. In fact, we have been strong advocates of the research efforts being conducted to learn more about the life requirements of the pallid sturgeon. However, we are extremely disappointed to see the federal government move forward with a manmade spring rise on the Missouri River that intentionally increases the risk of flooding.

The federal government has characterized the spring rise as an experiment to learn more about the pallid sturgeon. It is disheartening to know that the welfare of our citizens is being threatened by an experiment. Especially, when federal scientists have publicly acknowledged that very little is known about the ecological needs of the pallid sturgeon and the basic research questions that they hope will be answered by the spring rise experiment have yet to be studied under existing conditions. It is apparent from the limited research that has been conducted to date that there is a lack of scientific evidence to justify a manmade spring rise.

In the U.S. Fish and Wildlife Service's (Service) 2003 Amended Biological Opinion, the Service indicated that a "spring rise" was needed as a spawning cue to ensure the continued survival of the pallid sturgeon. Yet, in all but less than 100 miles of river immediately below Gavins Point Dam, the Missouri River already experiences natural spring rises. As an example, in 2005 there were at least five natural rises between March and June on the lower Missouri River near Boonville, Missouri that exceeded the manmade rises mandated in the Service's Biological Opinion. The more than 800 miles of free flowing river below Gavins Point Dam

should provide researchers with ample opportunities to conduct experiments on flow changes without putting downstream farmers and riverside communities at an increased risk of being flooded.

The Missouri River's floodplain encompasses approximately one million acres in Missouri, much of which is prime farmland. With spring being the time of year when Missouri floodplain farmers are already at the greatest risk of being flooded, artificially adding even more water to the river in the spring only intensifies the flooding risk.

Regardless of the precautions that the U.S. Army Corps of Engineers takes to minimize the risk of downstream flooding that would result from a manmade spring rise, they cannot ensure that the added water will not cause flooding. Water released from Gavins Point Dam takes five days to reach Kansas City, and approximately 10 days to travel to the Missouri River's confluence with the Mississippi River at St. Louis. Once water is released from Gavins Point Dam, it cannot be retrieved. Given that local rainfall events can cause the Missouri River to rise by more than 10 feet in less than 24 hours, a planned spring rise experiment that would increase river levels from one to three feet would increase interior drainage and flooding problems for farmers and riverside communities.

Last spring we had a perfect example of how quickly water levels can change on the lower Missouri River. During the week preceding May 12, 2005, the level of the Missouri River at St. Joseph, Missouri was considered low, with stage readings of around eight feet. With these low river levels, it would have appeared that conditions were right for the Corps to implement a manmade spring rise without causing flooding. However, from noon on May 12 until mid-day on May 13, the Missouri River at St. Joseph rose over 10 feet to a stage reading of 18 feet. This level is one foot above flood stage. Local drainage districts begin to have problems with interior drainage when river stages at St. Joseph reach 12 feet. With water released from Gavins Point Dam taking about four days to reach St. Joseph, it is easy to see that had the Corps implemented the manmade spring rise in mid-May of last year, the additional water would have increased the level of flooding and compounded interior drainage problems in Missouri.

The federal government should not be conducting experiments that threaten people's livelihoods, especially when more reasonable courses of action are available. The range of the pallid sturgeon includes over 1,600 miles on the lower Missouri and Mississippi Rivers as well as a significant reach of the Yellowstone River in Montana, all of which have natural spring rises. By focusing research and

recovery efforts on these reaches, the Service and Corps could take advantage of reaches of the rivers that have more natural hydrographs. This would avoid the contentious issues related to flow while providing ample opportunities to study the pallid sturgeon. The prescriptive and inflexible manner in which the Endangered Species Act is being applied in the management of the Missouri River is threatening many of the cooperative efforts being pursued with private landowners to recover the pallid sturgeon. Federal agencies should be working to find common sense ways to protect the species without harming citizens who live and farm along the Missouri River.

Thank you for the opportunity to testify before this committee. At this time I would be glad to answer any questions.

Statement of Charles E. Kruse, President,
Missouri Farm Bureau Federation
to the U.S. House of Representatives
Small Business Subcommittee on
Rural Enterprise, Agriculture and Technology

My name is Charlie Kruse and I am President of Missouri Farm Bureau—a general farm organization with over 103,000 members. I am also a fourth generation farmer from Southeast Missouri.

The Subcommittee's interest in management of the Missouri River is much appreciated as we continue to hope common sense will ultimately prevail. Missouri Farm Bureau continues to oppose any kind of man-made spring rise on the Missouri River.

Many of us here had faith in the system; faith that policy-makers and elected officials would understand that no bird or fish is more important than the fundamental rights of landowners. From our perspective, it is amazing that two birds, a fish, and a handful of government biologists can hold a river hostage.

Yet the U.S. Army Corps of Engineers will say they have no choice; pointing to tentacles of the Endangered Species Act and the demands of U.S. Fish and Wildlife biologists. The biologists say they ***think*** a man-made rise will trigger a spawning cue but can't be sure. And the U.S. Geological Service has bought into the fishing expedition saying they have a baseline and will solve the mystery given enough time and money.

Obviously, there is no consensus on a man-made spring rise. Yet, the Corps, U.S. Fish and Wildlife Service and U.S. Geological Survey believe it is prudent to hide behind the Endangered Species Act and disregard the views of landowners—many of whom have expressed their concern time and time again. Their feelings were summarized by stickers worn at a meeting last summer, "My Farm is Not Your Laboratory."

The final Annual Operating Plan for 2006 is proof the Endangered Species Act has major flaws--it is meant to be a crutch for species not a shield for bureaucrats. In this regard, I applaud the House of Representatives for approving much-needed ESA reforms.

Our involvement in this issue will continue, however landowners have no confidence in the scientific "expertise" of the U.S. Fish and Wildlife Service. The Service is determined to implement a man-made rise, now renamed a pulse, in 2006. In fact, at last year's Plenary Group meeting in Omaha, the Service disregarded the views of stakeholders from throughout the Basin and lowered the preclude to 36.5 million acre feet—a number they thought achievable even under current drought conditions. Yet, federal computer projections were wrong and the scheduled March rise did not occur.

The Missouri River system was constructed for two primary purposes: flood control and navigation. Over time, the system has yielded many diverse benefits including stable supplies of drinking water, hydroelectric power generation and the expansion of recreational opportunities. Today, we find ourselves fighting a federal law that will increase the potential for flooding and increase the uncertainty surrounding commercial navigation.

Much has been said about the science associated with a spring rise. Given enough time and money engineers can do amazing things—perhaps even determine the exact needs of the prehistoric pallid sturgeon. But in the end, we have to ask ourselves if that is what we want. Do we want to protect this fish at all costs? Is it worth jeopardizing human lives and the livelihood of farmers along the Missouri River?

In our opinion, the 2006 Annual Operating Plan is nothing more than a grand experiment advocated by government biologists with nothing to lose and research dollars to gain. These people ignore the fact that man-made rises increase the likelihood of flooding.

Today, many Missouri farmers are dealing with the impacts of drought conditions, rising input costs and weak commodity prices. But even in a good year it makes absolutely no sense to add the uncertainty of a man-made spring rise. In our opinion, this farce should be called off and the focus should be directed towards making our inland waterway system more efficient and more competitive.

For 26 years, I wore the same uniform worn by the U.S. Army Corps of Engineers, and I must tell you that I am shocked and saddened the Corps would take steps to impose potential flooding on the citizens of this country. I was always taught that the mission of the Corps was to manage the United States' navigable waters, not to react to the whims of environmentalists and put citizens in harm's way. If anyone wonders why people are losing faith in our government, you only have to point to this issue which is totally void of logic and common sense.

We have participated in the process every step of the way and will not give up now. But suffice it to say we believe officials have already made up their minds, thus we have no confidence in their decisions or the science being used to justify those decisions.

Statement of

Lynn M. Muench
Vice President-Midcontinent
The American Waterways Operators

U. S. House of Representatives
Committee on Small Business

March 15, 2006

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The group did come to a consensus that, unfortunately, the Corps and the Service continue to ignore. In a truly unprecedented and remarkable fashion, the upper basin, lower basin and the tribes all agreed that there should be no spring rise as long as the drought persists. For very different reasons, we all agreed that human health, safety and economic welfare should have precedence over the survivability of any fish species. That recommendation has been ignored.

This group started all its work with a clear direction to itself: first and foremost, do no harm to the other purposes of the system. This was a true win for the stakeholders in the basin as they strive to look for ways to recover a species in a unified and professional manner.

Here are some of the things we learned during the sessions and information the Corps and Service continue to ignore:

- A credible biologist from the U.S. Geological Service (USGS), Dr. David Galat, stated during a "101 Pallid Sturgeon" presentation that there were three areas on the river system that appeared to be viable areas (and much preferred from a scientific nature than below Gavins Point Dam) to recover the pallid sturgeon. These three areas have variable "spring rises" from none to several, indicating that a spring rise probably has little if any impact on the spawning cue of the species. Dr. Galat identified the Yellowstone River, the lower Missouri River and the middle Mississippi River as these preferred areas.
- One group identified several "outside the box" real ways to recover and test the recovery methods of the pallid sturgeon. None have been incorporated by the Service under its "adaptive management" scheme.
- There continues to be a scientific debate as to whether the pallid sturgeon is a unique species.
- The Missouri River already has over 500 miles with a naturally occurring spring rise. The Mississippi River has none and the Yellowstone River has several spring rises. Instituting a spring rise on a short section of the Missouri River below Gavins Point will have no impact on the recovery of the species.
- There appears to be little baseline information on population or spawning of the species, and no plan for how these measurements will be taken. Without such baseline measures, success or failure cannot be measured.
- The Service insisted that the Corps create 1,200 acres of Shallow Water Habitat (SWH) in 2005 to ensure that navigation was not shut down in the middle of the season. The Corps' effort to create those areas was Herculean. Now, the Service continues to push the Corps to create up to 20,000 additional SWH acres over the next several years to avoid a river shutdown. There is no clear rationale for such a requirement. The Service initially stated in the Biological Opinion that the SWH would be used by juvenile pallids. However, no juveniles have been found there. As a

matter of fact, most juveniles appear to prefer a minimum of five to eight feet of water. Now the Service states that the SWH may create food for the pallids. If the juvenile pallids prefer deeper water, they are unlikely to come to the SWH to feed. The requirement for greatly expanded SWH is unjustified.

- During the "101" discussion, the scientists' charts indicated that the pallid has a very protracted spawning timeframe. One or two specially timed spring rises would appear to be of little benefit to a species that spawns over several months.
- The Service continues to ignore the "best available science" they purport to use. Peer-reviewed scientific papers such as Don Jorgensen's' "Evaluation of the Spring Rise on the Missouri River" continue to be ignored by the Service. This paper illuminates considerable scientific question marks as to whether a spring rise has any influence on the spawning of the pallid.

The insistence by the Service that a spring rise or rises are necessary for the survival of the species is "normalitive" science. The biological opinion represents nothing more than the values of some members of a governmental agency that implements policy instead of offering reputable science for policy makers to evaluate. This biological opinion is not supported by scientific fact. It is clearly "science fiction."

Impacts on the Economy of the Nation

The Master Manual for the Missouri River was reissued last March after almost 20 years. The new Master Manual has already negatively impacted navigation. The number of non-navigation days in 2005 alone was increased threefold from 17 to 48 days. This draconian governmental action continues to chill any capital improvements or economic development of ports or terminals on the Missouri River, to the detriment of small businesses along the river. Now this "flexible" spring rise will decrease the navigation season by a minimum of one more day this year over the 15 to 61 the Corps predicts for 2006. As the reservoirs continue to be tapped for this excessive waste of water, non-navigation days will continue to increase as long as drought persists in the basin.

This change will undoubtedly continue to reduce the flow from the Missouri River that contributes up to 88% of the water in the middle Mississippi River (from St. Louis to Cairo, Illinois where the Ohio River empties into the Mississippi.) Let me put those flows into a real world example. The upper Mississippi and Illinois rivers alone transport over $2.3 billion of goods each year. When the Missouri River was closed in 2002 and 2003 by court orders, the Mississippi River closed for several days, costing the nation's economy millions of dollars.

During 2005, with low water on the Mississippi River and as the Midwestern farmers struggled to get their export products to New Orleans following the hurricanes, the Northwestern Division shut off the flows from the Missouri River resulting in up to two feet of decreased water levels in the Mississippi in October and November. So, as the rest of the nation and the Corps worked miracles to restart international and national trade through New Orleans, the Northwestern Division thwarted the progress by decreasing the amount of tonnage that could move through the system. The amount of tonnage decreased due to this ill-advised move was enormous. For every one inch of draft lost to a barge, its cargo capacity decreases by 17 tons. Tows moving from St. Louis to New Orleans are comprised of 30 to 45 barges.

That means that this action decreased every southbound tow by a minimum of 12,240 tons, up to as much as 18,360 tons. To put the numbers in more understandable terms to those of us from a farm, this flow management decreased the amount by 407,592 to 611,388 bushels of soybeans or 436,968 to 655,452 bushels of corn per tow! Obviously, this increased the transportation cost for agricultural exports and all other products moving through the middle Mississippi, dearly costing farmers and other small businesses throughout the entire Midwest on the bottom line.

If a modal shift could have moved these products to truck, the increased truck traffic through St. Louis would have been 471 to 706 trucks for each tow moving southbound from St. Louis. The increased air and noise pollution and road congestion would have been staggering.

Despite operating the river at minimum flows in 2005, decreasing the navigation season significantly for two years in a row, and a complete shutdown in 2002 and 2003 by the U.S. Army Corps of Engineers, the U.S. Fish & Wildlife Service, and court orders instigated by purported environmentalists, the Missouri River continues to provide economic power to the lower Missouri River basin. In one example, a Japanese company constructing a new power plant in Council Bluffs, Iowa (MM 606) hauled over $350,000,000 worth of parts on the Missouri River in 2005. The parts, made in Japan, were shipped to New Orleans and hauled to Council Bluffs on barges. The parts could not have been transported via truck or rail. If the plant had been forced to rely on truck or rail, the plant could only have been built to generate 600 megawatts of power instead of 795 megawatts.

Other traffic in 2005 included over $80,000,000 in parts for the Callaway Nuclear Power Plant (MM 115.4), over $49,000,000 of sand and gravel, and $75,000,000 of asphalt and cement. However, agricultural imports and exports traveling on the Missouri River continue to struggle due to its ongoing lack of reliability, which in turn is a direct result of wrongheaded actions, including a very late release of the 2006 AOP.

Conclusion

Mr. Chairman, I continue to be astounded that federal agencies are blatantly harming the welfare of U.S. citizens. It is especially astounding since the last two Court rulings on the regulation of the Missouri River confirmed the original intent of the Flood Control Act (FCA) of 1944 to make downstream navigation one of the two primary purposes of the system. Neither the Court rulings nor the law imply that downstream navigation stops at the mouth of the Missouri River. Downstream navigation clearly includes the Mississippi River. The Corps should be instructed to follow the direction of Congress and manage the Missouri River flows for the Mississippi River. Of course, this spring rise will also negatively impact the other primary purpose of the system -- flood control.

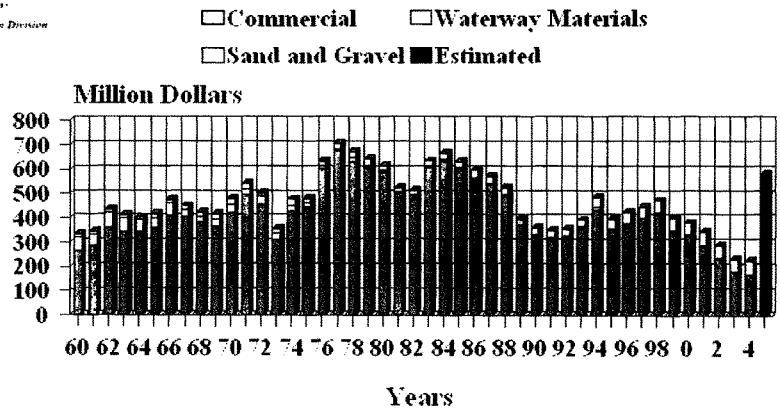
The Court ruling this past August was very specific about the purposes of the systems when it stated that, "the FCA has been interpreted to hold flood control and navigation dominant and recreation, fish and wildlife secondary." It went on to say that, "If the Corps is faced in the future with the unhappy choice of abandoning flood control or navigation on one hand or recreation, fish and wildlife on the other, the priorities established by the FCA would forbid the abandonment of flood control or navigation." Purposely causing a spring flood and purposely decreasing the navigation year most certainly is an abandonment of the Corps' direction from Congress under the FCA as well as the dictates of the Court ruling.

The President and Vice President made campaign promises during both the 2000 and 2004 campaigns that their Administration would not support flooding private property owners, especially farmland. They also talked about the need to maintain the critical flows to the "superhighway" of the waterway transportation system, the Mississippi River. They have further articulated their desire to keep this promise to both the Congress and stakeholders. Mr. Chairman, these two key federal agencies, the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service, continue to disregard the views of the President, the Congress and the federal courts. For the economic well being of the small businesses of the Midwest, and especially its agricultural community, these agencies must be directed by Congress to adhere to the primary purposes of the Missouri River system – navigation and flood control – and to do so on the basis of sound science, not "science fiction."

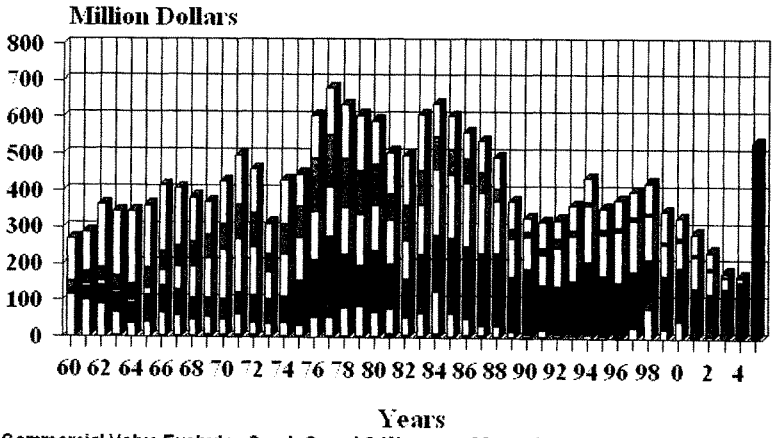
Once again, on behalf of AWO, I thank the entire committee for the invitation and your attention. I would be happy to answer any questions you have.

Missouri River

Total Navigation Tonnage Value - 2005 Present Worth



Commercial Navigation Tonnage Value - 2005 Present Worth



Commercial Value Excludes Sand, Gravel & Waterway Materials

TESTIMONY PROVIDED BY

STEVEN K TAYLOR
CHAIRMAN
COALITION TO PROTECT THE MISSOURI RIVER
MARCH 15, 2006

TO THE

HOUSE SMALL SUBINESS SUBCOMMITEE ON
RURAL ENTERPRISE, AGRICULTURE, AND TECHNOLOGY

Chairman Graves and members of the Subcommittee, my name is Steve Taylor and I am Chairman of the Coalition to Protect the Missouri River (CPR). CPR represents a diverse group including utility, navigational, and agricultural interests. We support responsible management of the Missouri River and maintenance of congressionally authorized purposes of the river including flood control and navigation. I am also the Chief Executive Officer of the Environmental Resources Coalition (ERC), an organization dedicated to improving land and water resources through the use of sound science and technology. ERC administers several science based projects, some of which have received the highest national recognition.

It is my pleasure to address you on the issue of the Missouri River and the spring rise. This issue clearly falls under the jurisdiction of this Subcommittee. If allowed to be fully implemented as envisioned by the U.S Department of the Interior, the spring rise could jeopardize business growth and opportunities in the rural and urban areas surrounding the Missouri River.

I have been directly involved in Missouri River management issues for nearly 10 years. However, the debate over Missouri River management dates back much further. I would like to briefly review some of the history of the science.

The U.S. Fish and Wildlife Service today states that spring rises are mandated under the 2003 Amended Biological Opinion in accordance with the Endangered Species Act and that compliance with the Biological Opinion is necessary so that the continued existence of the endangered pallid sturgeon is not jeopardized. The U.S. Fish and Wildlife Service also states today that failure to comply with the Biological Opinion could lead to the management of the river being taken over by the Federal Courts.

Also within the U.S. Department of the Interior, the U.S. Geological Survey is tasked with providing science that assists policy makers regarding complicated natural resource issues such as the spring rise. The U.S. Geological Survey states that the 2003 Biological Opinion is based in large part from a National Research Council's report from January 2002 entitled "The Missouri River Ecosystem: Exploring the Prospects for Recovery." This National Research Council report was sponsored by the Corp of Engineers and the Environmental Protection Agency. These agencies asked the National Research Council to develop a report on "policies that could promote floodplain ecosystem management".

This is where some sleight of hand occurred. The issue was species recovery but the Corps of Engineers asked for assistance in ecosystem recovery.

In its report, the National Research Council states that human activities have caused substantial ecological changes to the Missouri River ecosystem and that land use changes, including urbanization, agriculture, and transportation infrastructure, have all caused large amounts of habitat loss and have affected the ecosystem. The report states that the loss of natural spring rises have also jeopardized the Missouri River ecosystem.

Regarding the basin's natural condition, the National Research Council mentions scientific studies including Lewis and Clark's expedition and refers to the impacts of the Missouri River dams. The report also sites the input and opinions of environmental organizations and others as instrumental in developing its report.

Again, the National Research Council report is focused on recovery of the ecosystem. However, the U.S. Fish and Wildlife Service used this report to base its Biological Opinion for recovery of the endangered Pallid Sturgeon.

Let me interject a somewhat lighthearted analogy. The aeronautical unit of the U.S. National Aeronautical and Space Administration (NASA) conducts fundamental research in traditional aeronautical disciplines in order to provide the science to benefit the nation's air transportation system. Basically, NASA helps provide the science to build better aircraft, better 737s. The space operations unit of NASA provides the science to allow space operations. Basically, NASA builds space vehicles.

Let me ask. What would happen if NASA used its space operations science to fulfill the tasks of its aeronautical unit? Would the science be related or useable? Maybe? Would it be efficient? Maybe not? Would it be complex and confusing? Definitely!

Please forgive my digression, but, I do think this fictitious NASA scenario is somewhat analogous to what is actually occurring today with the U.S. Fish and Wildlife Service, the U.S. Geological Survey, and the U.S. Corps of Engineers proposed management of the Missouri River. Is ecosystem recovery science related to or usable for pallid sturgeon recovery? Maybe? Is using ecosystem recovery science for pallid sturgeon recovery complex and confusing? Definitely !

The confusion and chaos this mix-up of science causes came sharply into focus last year with the COE and FWS attempt to design a spring rise for the Missouri River. In the spring of 2005, the U.S. Corp of Engineers solicited the assistance of an outside group, the U.S. Institute for Environmental Conflict Resolution (EDR) to facilitate an intergovernmental process involving multiple stakeholders to develop a spring rise recommendation. The organization I represent here today, CPR, participated in this process throughout the summer of 2005. Through this process, we found that there was a lack of science regarding pallid sturgeon recovery and therefore the group could not make informed recommendations. We found that this process was focused on the mechanics of a spring rise and was a confusing process due to the lack of foundational science upon which to build the spring rise. Because of this, the process failed in its mission to provide the Corps of Engineers a consensus-based proposal for implementing a spring rise. In an amazing show of obstinate persistence, the Corps of Engineers and the U.S. Fish and Wildlife Service in a joint letter dated September 13, 2005, acknowledged failure to reach consensus on how to implement a spring rise but continued its dedication to this failed process by announcing development of yet another intergovernmental and stakeholder group to work on the spring rise. This group is being called the Missouri River Recovery implementation Committee or also known as MR-RIC.

So far today, I have described for you how the agencies are using the wrong science, ecosystem recovery science, for pallid sturgeon recovery. Let me now focus on the true status of the science of pallid sturgeon recovery.

Remember earlier I said that the National Research Council report states spring rises are necessary for Missouri River ecosystem recovery. With that, spring rises is currently the main focus for species recovery. But, how important is spring rises to species recovery. Does spring rises help the fish to spawn? Is spawning the problem or are there other threats to the sturgeon during its life cycle? No one knows because the science is lacking.

The lack of science supporting a spring rise is not unique to the Missouri River. In other areas of the nation, the situation is similar. Data from the northwest Columbia River, the Marias River in Montana, the Yellowstone River in North Dakota and Montana, and others do not indicate that spawning is cued by spring rises.

What we do know is that spawning surveys of 85 species of Missouri River fish indicate spring rise in not essential. Specifically for the sturgeon, temperature and photoperiod has been suggested as a primary cue to spawn. There are indications other habitat issues such as having an appropriate gravel substrate may be beneficial to spawning. There are also indications that sturgeon may spawn more in tributaries of the Missouri River. This brings into question why it is important to focus on main stem of Missouri river. Predator fish are also an issue with some Missouri River biologists recommending a moratorium on stocking non-native predator fish.

In September 2005, the USGS did actually provide some limited information on its Sturgeon Research in the Missouri River. The research focused on the spawning behavior and habitat use of sturgeon on the Missouri River. There was some fascinating information in this report. The research showed a very successful spawning rate of 75% of the sturgeons studied. Successful spawning is occurring now, without the mandated spring rise!

We were also encouraged to see that this limited research did not just look at spring rise as a factor for sturgeon spawning, but, also looked at water temperature, depths, and physical habitat such as macro habitats available, the quantity of habitat, the make up of the spawning substrates regarding gravel and rock deposits within the channel. While expanding the research for spawning beyond just flow is encouraging, we would also encourage more research on the entire life cycle of the sturgeon.

We are also encouraged by some of the recent comments of U.S. Geological Survey. U.S. Geological Survey has stated recently that "scientific data about what management practices benefit sturgeon are limited" and that "understanding the effect of spring rise is critical". Notwithstanding the dictatorial stance of the Department of the Interior that "compliance with the Biological Opinion is mandated so that the continued existence of the endangered pallid sturgeon is not jeopardized", many scientists are being true to their

fundamental obligations as scientists and are beginning to step forward, acknowledge the lack of science supporting the spring rise, and question the importance of a spring rise. We hope this trend continues and other scientists realize that the longer they try to stand on the quick sand which is the science supporting the spring rise, the more they do so to their own professional peril.

I commend this Subcommittee for holding this hearing and implore the Congress to get more involved in this issue. The Congress and the White House need to encourage agencies to make what information that does exist more available and to allow for more true partnerships in the quest for information. Data and information is all important. Congress appropriates millions of dollars to assist endangered species on the Missouri River. A portion of this money should be provided to scientists outside of the U.S. Department of the Interior.

Members of this Subcommittee, this issue does fall squarely under your jurisdiction. The work being done today regarding Mo River management may be proceeding under the guise of species recovery but it is based in ecosystem recovery. Recovery of the Missouri River ecosystem, as promoted by National Research Council and the federal agencies, creates very real challenges to business growth and opportunities. Let's be clear that the foundational science supporting a spring rise is lacking. Let's be honest, clear, and forthright about the issues we are addressing and the science concerning these issues.

Again, I thank you for this opportunity to appear before you today.

Statement of
Tom Waters, Chairman
Missouri Levee & Drainage District Association
to the
U.S House of Representatives
Small Business
Subcommittee on
Rural Enterprise, Agriculture and Technology
Washington, D.C.

March 15, 2006

Good Morning. My name is Tom Waters. I am a 7th generation farmer from Ray County Missouri. I own and operate our family farm in the Missouri River bottoms near Orrick, Missouri. I also serve as Chairman of the Missouri Levee and Drainage District Association, where I represent farmers, landowners, businesses and others interested in issues surrounding the Missouri River and its tributaries. I am a member of the Missouri-Arkansas River Basins Association Board of Directors and serve as President of three local levee and drainage districts, which combined encompass over 20,000 acres of Missouri River bottomland.

Mr. Chairman and members of the subcommittee, I want to thank you for this opportunity to provide testimony regarding the Missouri River. It is a great honor to have the opportunity to travel to our Nation's Capitol and represent my friends, colleagues and citizens from home.

I am here to share my thoughts with you regarding the United States Army Corps of Engineers plans for increasing flows on the Missouri River twice during Missouri's spring planting season.

It has become increasingly clear the Corps' plan for a Spring Rise will be designed to intentionally flood Missouri River Bottomlands. Representatives from the United States Army Corps of Engineers and the United States Fish and Wildlife Service describe the spring pulse as a means to connect the river to the floodplain. They tell us the purpose of the spring pulses is to provide some semblance of the "natural hydrograph" which historically inundated the floodplain.

The reason the mainstem reservoir system was built was to protect against the inundation of the floodplains. On two different occasions, the 8th Circuit Court of Appeals in St. Louis has clearly stated in separate opinions[1]:

> *"the 1944 Flood Control Act has been interpreted to hold flood control and navigation dominant and recreation, fish and wildlife secondary."*

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[1] Operation of the Missouri River System Litigation. American Rivers v. United States Army Corps of Engineers.

The Corps of Engineers' 2006 Annual Operating Plan ignores the court's opinion and includes two opportunities to cause intentional flooding along the river. I fully expect without changes, future Annual Operating Plans will include even greater threats to bottomland farmers, small businesses and communities as the Corps increases flows.

On March 1, 2006, the Corps of Engineers announced there would not be a March Spring Rise this year. Severe drought conditions in the Upper Missouri River Basin have caused reservoirs to reach all-time low levels. It is very sad we have to rely on such severe drought conditions to stop the implementation of the March Spring Rise.

I believe these man-made Spring Rises are in direct conflict with the Corps mission of flood control. How can the Corps of Engineers protect our farms, businesses, homes and communities from flooding and at the same time make releases from the reservoir system with the purpose of connecting the river to the floodplains? The two goals are incompatible and the Corps' efforts to do both, is doomed to fail. Maybe not this year or the next year, but the Corps of Engineers and the Fish and Wildlife Service are playing a game of Russian roulette with this super-sized science experiment and sooner or later the small businesses, landowners and communities along the River will pay a high price for their actions.

Increased river levels in the spring keep land near the river wet when farmers need to be preparing the soil and planting their crops. Drainage outlet pipes need to be open in the spring to help drain water from the normal spring rainy season. A high river in the spring causes outlet floodgates to be covered. This holds back water, which would normally be released into the river, increasing the risk of flooding and keeping land covered with water longer following heavy spring rains.

I know the effects of a high river. It is a risk I face each time I plant a crop. For seven generations my family has faced the risk of a high river due to Mother Nature's unpredictable weather patterns. But we have never had to face a man-made rise designed to flood us. It is amazing the same system built by previous generations to protect rich Missouri River bottomlands can now be used to flood this land, which produces food and fiber for a hungry world.

By building the reservoir system, Congress made a commitment to the American people. It was a promise and commitment of flood control and navigation. Businesses, communities and farmers rely on that commitment for their livelihoods. The Spring Rise is a first step in dissolving the commitment and it places a heavy burden on those who rely on the River System for flood protection.

It is my hope Congress will take a hard look at the dangerous direction the Corps of Engineers has taken with their plan to intentionally flood lands along the Missouri River. I appreciate your time and willingness to serve as Representatives in Congress and thank you for this opportunity to be here. I'd be happy to answer any questions you may have at this time.

TESTIMONY BEFORE THE HOUSE COMMITTEE ON SMALL BUSINESS
DAVID SIECK, on behalf of IOWA CORN GROWERS ASSOCIATION
MARCH 15, 2006
TOPIC: MISSOURI RIVER SPRING RISE

My name is David Sieck and I am a farmer from Glenwood, Iowa, and also a member of the Board of Directors and past president of the Iowa Corn Growers Association. My comments are on behalf of the Iowa Corn Growers Association (ICGA), and our 6000 farmer-members from across the state of Iowa. I am also here representing individual farmers like myself who may be negatively impacted by the federal government's plan to implement a forced flooding of the Missouri River as early as May of 2006.

My family farm is located near the Missouri River, and our family has farmed land along the Missouri River since the 1940's. I am a third generation farmer.

I would first like to thank you for the opportunity to comment on the proposed plan for a 2006 spring rise of the Missouri River. Iowa farmers appreciate that Congress is willing to call attention to, and investigate whether a spring rise is justified.

I have been personally involved in many stakeholder meetings surrounding the Missouri River over the past 12 years. I have most recently been a member of the Socio-Economic Technical Working Group of the Plenary committee during 2005 to determine the stakeholders' opinions regarding a proposed spring rise in 2006. It was my opinion then, and continues to be my opinion now, that a spring rise is not justified by science, and will cause extensive economic harm to farmers as well as Iowa communities.

The ICGA strongly opposes the spring rise planned for 2006 and the years thereafter. The spring rise has been proposed because of concern over the population of the pallid sturgeon. While it is documented the pallid sturgeon is low in numbers, there is no scientific certainty a spring rise will bring back the population. In fact, a 2005 study by the US Geological Survey shows that temperature is a much more important factor for the fish population's ability to survive than flow changes including a spring rise.

In 2005, the US Geological Survey completed an extensive research project throughout the year with the purpose of learning more about the pallid sturgeon's reproductive habits. USGS used the shovelnose sturgeon as an example as it is a close relative of the pallid. On September 14, 2005, the USGS published a report entitled "Update on Sturgeon Research" which concludes that without changing any flows on the Missouri River, 75% of the sturgeon tracked had spawned, including fish in the upper Missouri and Gavins Point reach. This study corresponds with past studies that have shown no correlation between sturgeon spawning and a spring rise.

The Fish and Wildlife Service's Biological Opinion demands a spring rise as a spawning cue for the pallid sturgeon, but information in the 2004 Army Corps' Revised Draft Environmental Impact Statement (RDEIS) Executive Summary states, "Corps and USFWS biologists agree that there is no data to support definition of a spawning cue

that would successfully result in spawning on the Lower River."(Page 22) The Corps affirms in the Revised Draft Environmental Impact Statement (RDEIS) Master Manual Review that, "This lack of information supported the general understanding between the Corps and USFWS staffs that the required spawning cue is basically unknown at this point in time. Corps staff understood that the aforementioned criteria were hypothetical, and they did not have supporting data, analysis, and documentation of associated spawning success." (Page 7-61)

Corps' records demonstrate there is a natural spring rise on the Missouri River beginning at the mouth of the Platte River (Missouri river mile 595) and moving downstream. There is no definitive indication that pallid are naturally spawning at any greater levels where this natural spring rise occurs even though shallow water habitat is closest to ideal in this portion of the river.

We strongly support the Corps' statement in the 2004 Final Environmental Impact Statement (FEIS) that "flow regimes for listed species would not provide the anticipated physical attributes and biological effects likely to avoid jeopardy to the species." (FEIS Summary p. 4). We also strongly agree with the Corps statement that "scientific uncertainty remains about the lifecycle requirements of the pallid sturgeon." (FEIS Summary p. 4).

Additionally, we need to remember that a few short years ago, we were also talking about the need for a spring rise for two birds, the piping plover and the least tern. As it turns out, these populations have increased without a spring rise, even though the Fish & Wildlife Service earlier said the spring rise was essential to their nesting. In an August 19, 2003 press release from the Army Corps, the following was stated: "The operation this summer (2003) resulted in the fourth straight year of record numbers of adult piping plovers and the second highest number of least terns, he added. Both species exceeded the individual year short-term goal and the longer-term 3-year goal for fledged birds set by the Service. This is the sixth consecutive year that the fledge goal has been met for the interior least tern. The fledge goal for the piping plover has been met for 5 of the last 6 years." This is another example of where the Fish and Wildlife Service's "science" was not justified. Even with this extreme change in bird population, the Fish & Wildlife Service's plan for a spring rise did not change.

ICGA supports solutions based on science, not experiment. The spring rise is an experiment, to see if the pallid sturgeon may be helped. On the other hand, a spring rise has a real likelihood of economic harm not only to farmers but to rural and urban communities along the Missouri River. The people, businesses, and communities along the river should not have to endure purposeful flooding, when the outcome of species recovery is not certain.

Not only farms and communities directly touching the Missouri River will be impacted. The interior drainage issue is very important. Farms and communities located along tributaries of the Missouri River are affected by the Missouri River's drainage and to control flooding. A spring rise could adversely affect interior drainage and the level of flood control protection these farms and communities depend upon.

Agriculture is a major land use activity in the Missouri River basin. It is easy to see the importance of the River issues to the State of Iowa, because every farm in the state of Iowa is either in the floodplain of the Missouri River or the Mississippi River. Iowa farmers encourage the Corps to continue to protect agricultural land use by providing flood control for the 1.4 million acres of productive farmland at risk from Missouri River flooding. (2004 FEIS Summary p. 11).

ICGA is very concerned about the fact there is no guarantee that future spring rises will be small or quick. The government has authority to change on a year-to-year basis. This particular spring rise plan for 2006 may not create a disaster; however, there will be a new plan each and every year. Furthermore, the first spring rise sets the precedent for future spring rises. Once the first spring rise is completed, it can be assumed the rises will continue; then we can only comment upon "how much" and not "whether" our farmland will be flooded.

The reason the 2006 plan has a so-called smaller and shorter spring rise is due to the current drought. When water is low in the reservoirs, the river will have a shorter spring rise, in order to best maintain the reservoir levels. When there is not a drought, and when reservoir waters are high, it is expected to have a longer or stronger spring rise. This means in Iowa's wetter years, there will be more flooding. Iowa would be likely to get more water in precisely the years water is not needed.

Many people might say that since the plan for a spring rise includes only a few days in March and May, farmers should simply agree to it. However, it is not just a few days of flooding. The "peak" is likely two days. The plan would require 1-5 days of increasing the flows, then a peak for 2-5 days, then 5-14 days to bring the water back to normal. This is a potential of 24 days for a spring rise.

There is no ability to call water back once it is released. When water is released from Gavin's Point, it will take approximately 3.5 days to get to Omaha, and 5 days to get to St. Joseph. A spring rise would be a disaster if there is also a heavy rain during the same week. Additionally, since it will take up to 24 days for the water to return to normal, it is next to certain there will be a significant rainfall in Iowa during that time frame. Because we cannot predict the weather, it is quite possible that after the release, the area could be flooded not only by natural causes, but the damage would be compounded by intentional government action. The result could be devastating to the entire Missouri River region.

The level of increased water proposed in the future could add as much as 4 feet of flood stage conditions at various river reaches. This water, on top of natural events, could not only flood, but cause drainage problems for a large portion of western Iowa.

The stakes for this issue have been raised even higher now that we have learned from the Federal Risk Management Agency that anyone who loses crops due to the spring rises caused by the government will not have their crops covered by crop insurance.

RMA has stated that because the flooding is intentional and "not a natural event" there will be no payment made to farmers for damages caused by the Army Corps spring rise plan. Before the Army Corps is allowed to move forward with its plan to conduct purposeful flooding, it is essential the federal government first resolve the issue of compensation for prevented planting or the destruction of crops by flooding or drainage problems.

While the ICGA recognizes the importance of preserving our natural resources, such as the pallid sturgeon, we believe untested methods of preservation should not come at the expense of damaging farms, communities, and businesses. The Army Corps of Engineers has the ability to prioritize navigation and flood control ahead of endangered species according to the Eighth Circuit Court of Appeals in State of SD v. MO-ARK Association, (2005). We are asking the Army Corps of Engineers to indeed put human cost ahead of a theoretical benefit to the pallid sturgeon.

Another major concern is the impact the spring rise may have on the navigability of the Missouri and Mississippi rivers. A major share of Iowa corn is exported, much of it down the Mississippi River. Creating unpredictability on the Missouri River will negatively impact navigation on the Mississippi River. This year, after Hurricane Katrina closed the port of New Orleans, it is clear what happens to corn markets when our barge industry is disrupted. It is essential to maintain a strong, predictable river system.

We are very concerned about the financial, emotional, and physical impact a spring rise would have on the Missouri River region. We are hopeful you will recognize the dangers of the spring rise and take action to prohibit purposeful flooding by the federal government.

Thank you again to the House Committee on Small Business for the opportunity to provide public comment regarding this very important issue.

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