

Statement for Flood Hearing at EPW
Senator John Thune
October 18, 2011

Introduction

Senator Boxer and Senator Inhofe, thank you for holding this important hearing today on the severe floods that have occurred throughout the nation over the past spring and summer.

Following the hearing request that thirteen of my colleagues and I sent a few months ago, this hearing is timely when it comes to outlining the unprecedented flooding that my state and others along the Missouri River faced this year. I hope this is just the beginning of the Committee's efforts regarding the changes that need to occur based on how the Army Corps of Engineers manages the Missouri River basin.

While you didn't see it in the national headlines and on the nightly national television news like you saw Hurricane Irene, South Dakota and our region was hit hard by a massive flood on the Missouri River this summer. Unlike a "normal natural disaster" that occurs relatively briefly as waters rise and then recede, and victims are able to recover and move on with their lives after a few days or weeks, the flooding in South Dakota lasted over 90 days which displaced individuals and families from their homes and had tremendous economic impact on businesses and communities along the Missouri River.

The flood started on Memorial Day and lasted until Labor Day. Many of those who have had their homes damaged or destroyed never purchased flood insurance because they were told by the Army Corps of Engineers that their homes were not at risk. Even the state's director of insurance, Merle Schieber, whose home was near the river, did not have flood insurance. Mr. Schieber has prepared written testimony for today's hearing, and I would ask that his statement be made a part of the record of this hearing.

The state of South Dakota has four of the six dams that control the Missouri River. At each of these dams, the flows were two times, and in one case nearly three times, the previous record. I would like to highlight and submit for the record a chart that shows the previous record releases in cubic feet per second and the new record releases that were set for each of the six dams.

I would categorize the Missouri River Flood of 2011 as something of a hybrid between a natural disaster and a man-made disaster. I believe that human error contributed to the creation of this particular disaster. I emphasize that I'm not talking about mistakes being made in the aftermath of a natural disaster that worsen the outcome. I'm talking about human beings who made misjudgments and bad decisions in the weeks and months before this disaster occurred that worsened the outcome. I'm not saying that human beings deliberately caused the disaster, but human beings make mistakes. That is why this hearing is so important. We need to understand what human errors, and existing management practices on the Missouri River, occurred so that we can learn from these mistakes and make adjustments where necessary to ensure that similar disasters do not occur in the future.

My constituents fought a 90+-day pitched battle with the Missouri River, and largely won that battle, even though emergency levees and other extraordinary measures didn't completely protect against 600 homes receiving some damage and 100 homes in South Dakota being destroyed or receiving major damage. However, it was a very near-run thing, and I'm here today to tell you that many of those who fought on the front lines of this battle believe a substantial amount of what occurred could have been avoided, but for the mismanagement and failure by the Army Corps of Engineers to heed warning signals.

Recognition of Flood Fighters

Because time is short, I unfortunately cannot recognize and thank all of those who are very worthy of recognition. But I do want to take a few moments to recognize several people.

I first want to recognize and thank Governor Dennis Daugaard, who displayed outstanding leadership in fighting this flood, especially during the darkest moments. At the time this flood began, Gov. Daugaard had been in office for five months. He stepped up and provided unparalleled energy and initiative in leading this flood fighting effort in those desperate first 30 days, when it seemed likely that entire communities would lose their fight with the flood despite all of their best efforts.

I also want to recognize and thank the thousands of South Dakotans who flocked to these flood-stricken communities to lend a helping hand, from filling sandbags to opening their homes to those who had been displaced. People from all walks of life pulled together and helped out at a very trying time. It exemplified what is best about South Dakota.

Additionally, I want to recognize the courage and sacrifice of the residents of those communities along the river, from Pierre to Dakota Dunes in the southeastern corner of our state, who in many cases had to leave their homes for the entire summer. This kind of upheaval in their lives would have been national news had it happened on either of the coasts. Instead, their suffering and loss has gone largely unnoticed by those outside the affected area, with a few articles here and there in the back pages of national newspapers.

Last, but not least, I want to recognize the members of the South Dakota National Guard. At the height of operations during the flood fight, more than 1,300 airmen and soldiers of the South Dakota National Guard were on state active duty orders. Activated on Memorial Day weekend by Governor Daugaard, Guard members worked day and night filling sandbags, constructing levees, and assisting with traffic control, among many other things. They played a crucial role in winning the fight against the flood. We can never thank them enough.

At the end of the day, while property and infrastructure damage was significant, we were fortunate that very little loss of life occurred. This is a testament to the steadfast courage, hard work, and sacrifice of many average, everyday South Dakotans.

Mismanagement of the Situation by the Corps

I want to offer the committee an example of the mismanagement of the situation by the Corps during this flood. I must add that this criticism is not leveled at the local Corps officials who live in the impacted communities, who by all accounts performed admirably in difficult circumstances after record runoff and releases were projected. Rather, this is directed at Corps leadership in Omaha who are responsible for managing and making projections regarding the entire Missouri River basin.

Early Warnings

Brad Lawrence serves as the City of Fort Pierre's Public Works Director, and was one of those on the front lines of the flood fight. I wish he could have been here as a witness today, but he has provided a written statement for this hearing, which I would also ask to have included in the official hearing record. Mr. Lawrence received phone calls from a local Pierre/Ft. Pierre Corps official as early as the 18th of May who was alarmed about the likelihood of significant flooding on the river. However, Corps leadership did not officially notify Governor Dennis Daugaard until May 23 that communities on the river needed to prepare nearly overnight for flows from dams across the state that would inundate them if swift action were not taken.

Coupled with that delay in notification, Corps leadership was providing bad information that caused severe difficulties for those making plans to fight record water levels on the Missouri River. First, the Corps informed the Pierre and Ft. Pierre communities that releases from the Oahe Dam were set to increase to 85,000 cfs, and these communities worked feverishly through Memorial Day weekend making preparations for river levels at those release rates. But then the Corps changed the release rate to 110,000 cfs, and property owners had to continue working in order to protect their properties from even higher release rates. Then, on June 12, the release rates were increased again to 150,000 cfs. As Brad Lawrence states in his testimony, the initial Corps announcement that the release rate would increase to 150,000 cfs forced those constructing the levees to increase the levees by another two feet to accommodate the discharge from the dam. Mr. Lawrence says in his testimony that this news was "a cannon ball to the mainsail" of the flood fight. I can personally attest that homeowners and business owners within the evacuation zone, responders, local leaders, and entire communities were surprised and understandably upset. Then, on June 17, the 26th day of the flood, just as the communities along the river were settling in to the 150,000 cfs releases, the Corps announced releases from Oahe and Gavins Point were increasing to 160,000 cfs. The announcement was made shortly after 5pm on Friday, and resulted in incredible shock and dismay for people living in impacted areas. Many people feared that more bad news of even higher releases would soon be coming and many others considered giving up on their flood fighting efforts altogether, not knowing if the temporary efforts to hold back the river would be strong enough.

While hindsight is always 20/20, it seems that local Corps officials were already aware of a likely flood as early as the 18th of May, but Corps leadership failed to notify the governor until May 23. While communities had just barely enough time to build emergency levees and other flood protection, any additional time would have made a big difference. Moreover, the Corps was sending mixed signals about what water levels to expect. With the analytical tools and expertise at its disposal, the Corps should have been able to provide more solid information about what to expect, in order for communities to better plan and prepare for what would be

coming. Instead, there seems to have been an unwillingness or denial on the part of Corps leadership to provide a clear picture of how bad things were going to get.

Ignored Warning Signals and Unreasonable Risk-Taking

The Corps' mismanagement of the situation when the monster flood was nearly upon South Dakota communities pales in comparison to the mismanagement and bad judgment of the Corps in the months before the flood. As I stated at the beginning of my remarks, this flood was caused by many factors, but the human error factor cannot be ignored. I think human error in those early months of 2011 made the flood worse. These human errors were basically that of ignoring warning signs and that of taking unreasonable risks. Why these human errors were made needs to be carefully examined by this committee and all of us who represent states along the river.

In the early months of this year, many experts were predicting that severe flooding would likely occur throughout the Midwest and the East Coast. As early as February 3, 2011, Brad Lawrence, whose testimony I referred to earlier, warned national officials of the increased possibility of "biblical" flooding across the entire upper plains. As Mr. Lawrence writes in his testimony, "The reason for issuing this warning was to bring attention to the extreme amount of water stored in our plains and mountain snowpacks." Yet by March 1, as Mr. Lawrence points out, the Corps had failed to remove the entire amount of water necessary to reach the multiple use flood control storage requirement—or in plain English, the empty space needed in the system of dams to absorb the snowpack.

March 1st is a significant date for the Missouri River dam system. That is when the system needs to have a required amount of storage—or empty space—to be able to accumulate the average runoff from the winter snowpack. However, as I said, the Corps still had not created all of the required amount of empty space in the system on March 1. Then, throughout the month of March, the empty space that had been created filled up with runoff that exceeded expectations. By March 31, the storage space was erased. The Oahe reservoir above Pierre/Ft. Pierre was nearly 7 feet higher than expected at the end of March. Despite the rapid increase in inflow during the month of March, the Corps inexplicably did not accommodate for the additional water by increasing discharges.

In April, each of the reservoirs were well above expected elevations, but the Corps did not respond with adequate discharges to compensate for the incredible inflow during February and March. This allowed the system to be near maximum capacity on May 1 and unable to store the May runoff.

That leads to a fundamental question I would ask members of the committee to pose to Corps officials today and really press them on it: Why didn't the Corps release more water along the Missouri dam system in March, April and early May when they knew they were losing storage capacity and that snowpack and inflows were well above normal?

Corps leadership frequently responds to this type of question by saying that they would have needed "perfect foresight" to predict the massive amount of rain in Montana during the month of May. But a lot of experts and even informed observers saw early-on that severe flooding and

above average precipitation was likely coming in the spring and summer. Everybody saw it coming and urged action to address the coming deluge, it seems, except for the Army Corps of Engineers, the single entity charged with managing the river.

Conclusion

It's true that some degree of flooding was going to happen in South Dakota this summer regardless of what the Corps did or didn't do. However, human error exacerbated the flooding that we witnessed along the Missouri River. The main thing that I want this committee to take away from my testimony is that the Corps completely failed when it came to understanding the amount of risk the snowpacks contained, which resulted in a cascading series of events that led to a much more serious flood than would otherwise have occurred. The Corps basically thought that they could fill up the entire amount of empty space in the system by the beginning of May, gambling that the snowpack was gone and that there would be no significant precipitation in May. Because the Corps completely miscalculated on the snowpack issue, they never fully communicated what preparations and to what level were needed until it was too late.

The Corps is responsible for simultaneously managing multiple purposes along the Missouri River, from recreation to navigation. Going forward, flood control should be the top priority for the Corps, particularly in wet cycles.

I fear that the Corps is planning to move forward under the assumption that this was a one-off event, and my understanding is that they are planning to have the same amount of storage space in the system next year as they did this year. I think that's a risky proposition, as we seem to be in a wet cycle, and I hope that the Corps will not simply repeat the mistakes next year, or in future years, that occurred this year. Keep in mind, the reservoir system along the Missouri River is not as capable for the 2012 runoff season as it was for this year as a result of the stress that the system witnessed.

I have said throughout this entire debacle this past summer that the Corps of Engineers must be held to account for their management of the Missouri River this year. I hope today's hearing will mark an accountability moment for the Corps.

Senator Boxer and Senator Inhofe, this concludes my statement. Thank you again for the opportunity to testify today. In order to build the record further, I would ask that additional written statements provided by the Mayor of Pierre, Laurie Gill, and by the Manager of the Dakota Dunes Community Improvement District, Jeff Dooley, also appear in the official record of today's hearing.

Questions That Need to be Answered

Why didn't the Corps release more water in March, April and early May when they knew they were losing storage capacity and that snowpack and inflows were well above normal?

What internal discussions occurred between the Missouri River and Mississippi River divisions when it came to requests to hold back water in the Missouri River basin, when no such authority exists under existing law?

Did the Corps hold back water throughout the spring of 2011 at the request of lower Missouri River basin states to reduce the impact to flooding that was occurring in the lower basin at the time?

We seem to be in a wet cycle, but the Corps did not seem to adequately factor that into their forecast. What is the Corps doing to develop better modeling? Is there a way to do better modeling?

What impact did the Western Area Power Administration (WAPA) have on release decisions, especially in March and April, when the Corps should have been evacuating more water?

What is the Corps doing when it comes to managing the Missouri River for the 2011-2012 runoff—particularly when it comes to the Master Manual that dictates operations along the river? What will the Corps be proposing, if anything, when it comes to altering the Master Manual to build in additional protections during wet cycles to reduce the risk of flooding?

Record Flows on Missouri River

