DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS

COMPLETE STATEMENT

OF

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BEFORE

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ON

OVERSIGHT OF THE U.S. ARMY CORPS OF ENGINEERS' MANAGEMENT OF THE MISSOURI RIVER

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Chairman Rounds, I am David Ponganis, Programs Director of the Northwestern Division of the U.S. Army Corps of Engineers (Corps). I am pleased to be here today to discuss the Corps' operations of the Missouri River and the status of the Missouri River Recovery Program.

The Missouri River Mainstem Reservoir System (System) is comprised of six multi-purpose dams and reservoirs, which include hydroelectric power plants and recreational areas. The six dams on the mainstem of the Missouri River form the largest system of reservoirs in the United States. The Corps also operates and maintains a 735-mile navigation channel downstream of the six dams, from Sioux City, Iowa to the mouth near St. Louis, Missouri; and works with levee sponsors who maintain hundreds of miles of Federal and non-Federal levees along the river.

The Corps manages this complex and extensive System for eight congressionally authorized purposes: flood risk management, navigation, hydropower, municipal and industrial water supply, water quality control, recreation, irrigation, and fish and wildlife. The Missouri River Master Manual is the Corps manual that guides the operating regime of the reservoirs under a wide range of water conditions (years of drought, years with flood conditions, and normal rain years) consistent with the authorized purposes. In addition, operation of the System must also comply with other applicable Federal statutory and regulatory requirements, including the Endangered Species Act.

Cycles of flooding and drought have always been a major part of the Missouri River Basin hydrology. The 2011 flooding was the result of unprecedented hydrologic events. Heavy snowpack in the mountains and on the plains of the basin during the winter, combined with record rainfall in May and June over much of Montana, North Dakota and South Dakota, resulted in the extraordinary flood event of 2011. Runoff above Sioux City, Iowa, totaled 62 million acre feet compared to the normal 25 million acre feet, more than double the average and the highest on record, requiring record releases from all six mainstem dams.

Despite the record runoff in 2011, the pendulum swung the other way in 2012 as flash drought spread throughout the basin. Runoff in the upper basin was less than one-third the amount recorded in 2011. Inflows to the reservoirs dwindled as the drought expanded across the upper basin. As the tributaries of the lower basin dried up, the Corps made above normal releases from the mainstem reservoirs to serve navigation and water supply users downstream. The combination of low inflows and high releases drafted more than 8 million acre feet of water from the System in 2012. Reservoir levels at the three largest of the Corps dams (by storage capacity) – Garrison, Oahe, and Fort Peck – declined to levels between 8 feet and 14 feet into the conservation pool, leading to requests by upper basin stakeholders for drought conservation. Fortunately, that drought was short-lived and reservoir levels rebounded in 2013 and 2014.

This year, in 2017, we have again experienced both extremes – but this time in a single year. Heavy snow accumulated on the plains early last winter, an ominous sign for citizens of the basin with fresh memories of the record flood of 2011. Mountain

snowpack, especially in the Yellowstone basin, surged and the forecasts indicated the potential for another high runoff year. But then, the snow on the plains tapered off and melted in an orderly fashion in late February, and the flood risk began to diminish. Mountain snowpack peaked near average in the reach above Fort Peck, and much above average in the Yellowstone basin, but by the time it melted and entered the reservoir drought had developed across the plains. And now, in mid-August 2017, concerns have turned to the drought that is intensifying every day across eastern Montana and the western and central Dakotas, which is now an extreme drought to an exceptional drought in portions of those states according to the U.S. Drought Monitor.

Runoff from the plains and mountain snowpack this year captured by the mainstem reservoirs is now providing excellent recreational opportunities both at the reservoirs and on the river reaches between them. Reservoir levels are sufficient to allow normal access for users to withdraw water for irrigation and for municipal and industrial purposes; and the Corps is making releases to serve navigation and other downstream uses, while generating hydropower. We are also operating the System to support fish and wildlife needs along the main stem of the Missouri River, including during the nesting seasons for the endangered interior least tern and the threatened piping plover, which are now winding down.

Hence, the reservoirs have served both to reduce the flood risk and to dampen the impact of drought in the region this year. While there is now a drought in portions of the basin, water levels in the reservoirs are sufficient to serve the authorized purposes at this time. And most important, all water stored in the annual flood control pools will be evacuated by the start of next year's runoff season, reducing flood risk in this ever changing region.

Following the flood of 2011, the Corps set up an external technical review panel to assess the Corps' operation of the System prior to, during, and after the 2011 flood event for the purpose of gaining lessons learned and recommendations to improve future operations. The independent review panel recommended infrastructure investment to ensure that the flood release spillways and tunnels are ready for service and that our levees are in good condition. That work is essentially complete.

The independent panel also recommended that the Corps conduct several studies on the operation of the System. The 2011 flood was a historical event that provided a new "data point" to incorporate into the tools used to predict, monitor and manage this System. The Corps is incorporating the information and lessons learned from the 2011 flood event into the models and tools we use to manage Missouri River operations.

The Corps works closely works with the Federal agencies that produce water supply forecasts. Post 2011 flood, the Corps has worked with the National Weather Service, the Natural Resource Conservation Service, and the states to share existing data. Working with them, we also have developed a joint proposal for a comprehensive plains snowpack and soil moisture monitoring network for the upper plains.

The Corps has also enhanced its coordination with Tribes, state and local government officials, and other agencies during periods of heightened flood risk including monthly basin update calls leading up to and during the peak runoff season to ensure awareness and two-way communication of potential flood risk. These calls include staff from the National Weather Service and are recorded and available online through the Corps web site.

And following a meeting with you in January, Mr. Chairman, the Corps initiated a weekly update which is posted on our website each Tuesday, providing stakeholders a clear, concise report on plains and mountain snowpack, reservoir conditions and other critical information to ensure public awareness of basin conditions. Initially we planned to suspend the weekly updates until next year once the flood threat diminished, but as a result of the overwhelming positive response, the update has become part of our normal business process and will continue year-round. Thank you for that suggestion.

We are hopeful that improvements in runoff forecasting and sharing of critical data will provide even greater lead time for flood events resulting from high plains and mountain snowpack, although unfortunately they will have little impact on the more typical rainfall-driven flooding which is most common in the lower basin.

Finally, the Corps is reviewing comments received from the public regarding the draft Missouri River Recovery Management Plan-Environmental Impact Statement (EIS) as it moves toward preparing a final EIS.

The draft EIS examined alternative ways to manage the Missouri River Recovery Program to meet the Corps' obligations under the Endangered Species Act for the river's threatened and endangered species – the pallid sturgeon, interior least tern, and piping plover – while allowing the Corps to operate the river for the benefit of residents and businesses of the basin.

The Corps received approximately 450 comments on the draft EIS via public meetings, mail, and online comment forms. Comments were received from members of the public, businesses, non-governmental and civic organizations, Federal, state and local governments, and Tribal governments. The final EIS will include a comment response report index, which will state how the Corps addressed the comments on the EIS.

While the Corps is reviewing the public comments, it is also conducting government-to-government consultation with Native American Tribes and is consulting with the U.S. Fish and Wildlife Service (USFWS) to develop the Biological Assessment for formal Endangered Species Act Consultation. Due to ongoing consultation, it is too early to know how this process will impact the final EIS. After receiving the Biological Assessment, the USFWS will prepare a Biological Opinion, and then the Corps will issue a final EIS and Record of Decision with its selected alternative.

This concludes my testimony. Thank you for allowing me to testify about the ongoing operation of the Missouri River Mainstem Reservoir System and the Missouri River Recovery Program. I would be happy to answer any questions you may have.