**DEPARTMENT OF THE ARMY**
**OFFICE OF THE ASSISTANT SECRETARY**
**CIVIL WORKS**
**108 ARMY PENTAGON**
**WASHINGTON DC 20310-0108**

DEC - 6 2012

Honorable Richard J. Durbin
United States Senate
711 Senate Hart Office Building
Washington, D.C. 20510

Dear Senator Durbin:

This is in response to your November 29, 2012 letter, co-signed with nine other Senators, requesting an analysis of the impact of additional Missouri River releases to sustain navigation traffic on the Mississippi River. I am providing an identical response to each of the signers of your letter.

As we discussed in our November 29 meeting, in accordance with the Missouri River Mainstem Reservoir System's statutory authorization and as required by the Missouri River Mainstem Reservoir System Master Water Control Manual, the Army Corps of Engineers (Corps) operates the system for its multiple Congressionally-authorized purposes within the Missouri River basin. The Corps lacks authority to alter the authorized purposes of the Missouri River Mainstem Reservoir System or to modify operation of the system under the water control manual for the express purpose of benefiting Mississippi River navigation. However, in response to your request, the Corps performed a historical event review and a qualitative analysis of the likely effects of greater releases from the Missouri River Mainstem Reservoir System into the Mississippi River. The Corps has identified the potential for significant negative effects on the Missouri River system. If the drought persists, these are the likely negative effects on project purposes, based on past experience from the 2000 to 2007 drought:

a) Additional releases on the Missouri River would further deplete storage in the reservoir system, which currently is forecast to begin the 2013 runoff season 20% below the storage level specified by the reservoir system's 12-year drought plan. Based on current estimates for below average rainfall, releasing water for navigation for the Mississippi River would increase the 12-year drought storage shortfall by another 5% after just one year of drought. More significantly, any such Missouri River releases are insufficient to maintain navigation on the Middle Mississippi River without additional rainfall.

b) The water control manual identifies variable water release volumes, as well as the duration of the navigation season, depending on reservoir levels. Current drought conditions are likely to require reductions in the volume and duration of the 2013 Missouri River navigation season. In the absence of significant additional rainfall, additional water withdrawals in support of Mississippi River navigation in the December 2012 to April 2013 period would not only shorten the 2013 Missouri River navigation season but also negatively affect 2013 Mississippi River navigation.

c) Hydropower production on the Missouri River Mainstem Reservoir System relies on the system's planned water releases. Lower reservoir levels and lower water releases would reduce production, leading to higher rates paid by customers that would continue for a period even after the drought ended.

d) Water supply and water quality are negatively affected by low reservoir levels. Lowered water levels would cause water intakes located at and below the Missouri River reservoirs to be unable to reach the water. These intakes also provide drinking water for several federally-recognized Tribal communities. During the last 2000-2007 drought, the Standing Rock Sioux Tribe lost access to water for several days when the lake levels became lower than their intake. Other intakes had to be relocated at Federal expense.

e) Irrigation costs would be expected to increase through greater pumping costs and the need to dredge pumping sites. During the last drought, some farmers were forced to abandon irrigation efforts and forego a production of a crop until reservoir levels recovered.

f) Fish and wildlife would be affected by low water through the direct loss of habitat and a reduction in the quality of habitat.

g) Recreation and resulting local economic benefits would decline if there is a loss of access to boat ramps and marinas. Millions of dollars were spent by users during the last drought extending and relocating boat ramps and marinas. Some small businesses associated with recreation were forced to close.

h) While flood risk reduction may be enhanced through increased storage capacity caused by reservoir releases, this is negated significantly in winter months by an increased likelihood of flooding caused by ice-jams obstructing the channel.

i) Lower reservoir levels can also expose cultural resources, risking damage to them. Two federally-recognized Tribes have already requested formal consultation regarding this issue because of declining reservoir levels due to the drought.

As a further update from our November 29 discussion, the Corps has proceeded with an expedited contract advertisement and award process to remove rock pinnacles from the Mississippi River. The Corps held an on-site meeting with perspective contractors on December 4th and expects that the contractors will begin removing rock as early as possible in December. The Corps also has begun mobilizing dredges to remove approximately 21 sediment shoals in the Middle Mississippi River. The rain now being forecast by the National Weather Service could reduce the rate of decline in Mississippi River stages through the mid- to late-December period. Based on that rain forecast and the combination of rock pinnacle removal, dredging, Upper Mississippi River releases, and the limited Missouri River flows currently authorized are expected to be sufficient to sustain navigation on the middle Mississippi River without additional releases from the Missouri River Mainstem Reservoir System.

I assure you that the Corps continues to undertake all measures within its authority and available resources that are necessary to maintain navigation on the Mississippi River during these drought conditions.

Very truly yours,

Jo-Ellen Darcy

Jo-Ellen Darcy
Assistant Secretary of the Army
(Civil Works)