Missouri River Dam Reforms and Navigation

Dam reforms will support Missouri River navigation during the spring and fall -- when more than 80 percent of farm-related cargo is shipped, and will enhance navigation on the Mississippi River. Marginally reducing the meager amount of barge traffic will no impact on highway and rail transportation costs, and the Corps provided no evidence that suspending summer barge navigation would impact transportation rates or threaten the long-term prospects of commercial navigation on the Missouri. Even the Corps concedes the marginal economic benefit of Missouri River barge navigation -- less than $7 million annually, according to the RDEIS -- although the NAS found that actual benefits are closer to $3 million annually and that net benefits are eliminated when flows reach 30,000 cubic feet per second.[1]

By contrast, the RDEIS estimates that hydropower generates $741 million in annual economic benefits, water supply generates $610 million in annual economic benefits, and flood control generates $410 million in annual economic benefits. Nevertheless, the Corps has consistently managed the Missouri's mainstem dams primarily to benefit barge navigation -- and at the expense of every other economic and environmental use of the Missouri. Even recreation produces 12 times as many economic benefits as navigation -- despite historic river management that has decimated the river's flora and fauna and limited access to boat ramps. Recreation between Sioux City and Saint Louis alone produces twice as many economic benefits as Missouri River barge navigation, according to the Corps' 1994 analysis. Only 1.5 million tons of commercial cargo has been annually shipped on the Missouri during the 1990s -- far less than the 15 million tons predicted by the Missouri River Navigation Commission in 1929 and just three-tenths of 1 percent of the grain harvested in Nebraska, Iowa, Kansas and Missouri.

Despite the insignificance of Missouri River navigation, dam reforms would provide sufficient for commercial navigation between April 1 and July 15, and from August 16 through December 1. The Corps estimates that barge navigation would continue to generate $4.75 million in annual economic benefits. Less than 20 percent of farm-related cargo is shipped in July and August, according to the Corps. In essence, the Missouri River already operates in a split season format -- fertilizer is moved upstream during spring, and grain is shipped downstream in the fall, and the amount of grain shipped downstream is fixed by the amount of fertilizer moved upstream.[2] The presence of empty fertilizer barges from spring hauls makes shipping some corn and soybeans on the river economically viable.[3] There is no evidence presented in the RDEIS that formal implementation of this informal custom would jeopardize Missouri River navigation.

Dam reforms would have no impact on highway and rail rates. Agricultural economists from Iowa State University, the University of Nebraska, and Kansas State University

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

concluded that the competitive rate study is “likely meaningless” and “suffer(s) from several defects. ”[4,5] Low levels of Missouri River barge traffic have no measurable impact on transportation rates in the region, and the Corps has provided no evidence in the RDEIS that suspending summer barge navigation would impact transportation rates or threaten the long-term prospects of commercial navigation on the Missouri.

Dam reforms would also enhance Mississippi River barge navigation between Saint Louis and Cairo, a historic "bottleneck" that naturally suffers from low fall water levels. Many factors contribute to "lost navigation efficiency," including shallow water forcing operators to spread their cargo across more tows. The Corps estimates that "lost navigation efficiency" between Saint Louis and Cairo annually costs the barge industry $45 million, according to the RDEIS.

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

By contrast, reducing summer flows increases the water available for fall flows into the Mississippi, which supports Mississippi River navigation. Dam reforms cut Mississippi River congestion losses by more than 16% -- saving an estimated $7.3 million each year. Ironically, this savings for the Mississippi River barge industry is greater than the annual economic benefit of the entire Missouri River barge industry.

The tradeoff between Missouri River barge support and Mississippi River barge support has long been known. Agriculture economists from the basin continue to point out that particularly in droughts, managing flows on the Missouri River more naturally -- which better supports Mississippi River navigation -- could result in “substantial benefits for agriculture in (the form of) lower rail rates.”[6]

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[4] *Ibid*.

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

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