



ASSOCIATION OF STATES AND TRIBES

November 21, 2008

Brigadier General William E. Rapp
Commander Northwestern Division
U.S. Army Corps of Engineers
P.O. Box 2870
Portland, OR 97208-2870

Dear General Rapp,

Thank you for the opportunity to review the 2008-2009 draft Annual Operating Plan. MoRAST offers the following comments for your consideration as you finalize the AOP this year. Even though drought conditions have drastically improved this year, the Missouri River mainstem system storage is still below average after experiencing almost nine years of drought. We emphasize that conservation of water still must be a priority and the USACE should continue to take every opportunity to conserve water where possible. We request that the USACE not support navigation targets at locations when there is not commercial barge traffic on the reach affected. However, releases should ensure that the flows are otherwise adequate for thermal cooling and operation of M&I intakes on the river.

We appreciate the USACE including in the draft AOP intrasystem regulation for 2009 similar to the proposal contained in our August 15, 2008 preliminary MoRAST recommendations, which are repeated herein:

In 2008, actual conditions developed such that Garrison's level fell during the critical fish spawning period in 2008. Our first preference is to maintain rising water levels during the critical fish spawning period in Fort Peck, Garrison and Oahe Reservoirs. However if conditions do not allow, we ask that the USACE favor Garrison in 2009 from approximately April 20th through May 20th, 2009 while attempting to maintain rising water levels in Fort Peck and Oahe. We ask that the USACE maintain the flexibility and communications with affected States and Tribes to determine ultimate operations late in the winter of 2009 based on actual February and March 2009 snow pack conditions in the basin. If reservoir storage in Fort Peck is used to facilitate rising elevations during the recommended period it is anticipated the storage would be balanced with mountain snowpack in June and July of 2009. Future rotation scenarios should be adaptively managed with coordination from the States and Tribes.

An operational issue that has come to light over the past several years is the cycling of releases from Ft. Randall Dam. Because Ft. Randall is operated to produce peaking power, in past years daily releases were cycled from a low of near zero to a peak release of at least 41,000 cfs. While this may not be an explicit issue for the AOP, it is an operational issue of concern to the states and the Yankton Sioux Tribe. In order to help find an acceptable solution to this complicated problem, we ask that the USACE, WAPA and MoRAST begin discussing cost/benefit information regarding hydro peaking from Fort Randall Dam to determine reasonable base flows during hydro peaking operations.

We believe this should be done in conjunction with an adaptive management approach to future actions and operations. The following is some background information regarding these concerns:

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These cycling operations are having a detrimental effect upon the secondary productivity of aquatic insects which are vital to support higher trophic level organisms such as fish and birds. According to Mestl and Hesse (1993) there was a decline in fish abundance in this reach as well as a 61% decline in secondary productivity between 1963 and 1980. Below Ft. Randall (power peaking impoundment) and Gavins Point (Lewis and Clark re-regulating impoundment) dams, Troelstrup and Hergenrader (1989) reported similar findings in terms of invertebrate communities. They found that invertebrate communities on shallow water samplers subjected to daily fluctuations in flow averaged 3 taxa and 91 organisms per square meter. In the absence of fluctuations, the number of taxa increased to 12 and mean densities increased to 743 organisms per square meter.

Given that system storage will likely be high enough (40 MAF) to allow for both the March pulse and May pulse we provide the following input regarding the May pulse. We request that harassment flows begin when piping plovers or interior least terns initiate nesting in the Gavins Point or Fort Randall reaches. Given the level of monitoring and need to better understand the benefits of the spring pulses, we ask that the base of the May pulse is initiated at the top of the harassment flows or the steady release projected to meet service levels later in the year of operations. In 2006, operations switched from flow to target to harassment/steady release operations during the spring pulse, thereby masking the spring pulse and making it difficult to assess spring pulse effects. We also request that the USACE follow all other technical criteria to minimize any potential damages, e.g. follow flood control constraint guidelines, QPF etc. Given that operations will be at minimum service navigation levels and the scientific monitoring of the spring pulses is in place, 2009 provides a great opportunity to assess the benefits to listed species while minimizing potential impacts to other uses under the adaptive management approach identified in the Master Manual Record of Decision. We also request that monitoring continue and updates be provided with regard to the validity of current flood control constraints.

The draft AOP describes a steady release-flow to target (SR-FTT) scenario that provides navigation benefits while reducing impact to threatened and endangered species. While the specific methodology is not specified in the draft AOP, we understand that the USACE will use minimum service navigation to determine the amount of the steady release. We agree with this method, since all the runoff levels show minimum service in May when the birds arrive and the steady release levels are set and reservoir storage is still well below normal. However, we believe the AOP should be more specific in describing the process.

The draft AOP calls for dropping releases from Fort Peck Reservoir to 3,000 cfs if flows are high in the lower basin during bird nesting season. In order to maintain game and native river fish populations, a flow below 4,000 cfs should not occur at any time. This is particularly significant for April trout spawning and rearing areas immediately below the dam. Significant fluctuations in flows should be avoided to prevent desiccation of eggs and stranding larva and fingerlings.

Thank you very much for your consideration.

Sincerely yours,



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MoRAST Board of Directors and State/Tribal contacts
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References cited:

Mestl, G.E. and L. W. Hesse. 1993. Secondary production of aquatic insects in the unchannelized Missouri River, Nebraska. Pages 341-349 in: Proceedings of the Symposium on restoration planning for the rivers of the Mississippi River ecosystem. Biological Report 19, National Biological Survey, U.S. Department of the Interior.

Troelstrup, N.H. and G. L. Hergenrader. 1990. Effects of hydropower peaking flow fluctuations on community structure and feeding guilds of invertebrates colonizing artificial substrates in a large impounded river. Pages 217-228 in: *Hydrobiologia*, Volume 199, Number 3.