United States Department of the Interior

BUREAU OF RECLAMATION
Great Plains Region
Montana Area Office
P.O. Box 30137
Billings, Montana 59107-0137

IN REPLY REFER TO: MT-450

September 18, 2006

FAXOGRAM: Water Order Change

To: Chief, Power Supply and Billing Division, WAPA, Watertown, South Dakota
          Attention: F-6001
        Chief, Power Dispatching Branch, WAPA, Loveland, Colorado
          Attention: J-4120
        Facilities Manager, Hardin, Montana
          Attention: MT-300: Tom Tauscher
        Project Manager, Mills, Wyoming
          Attention: WY-4000, WY-4100, WY-6400
        Assistant Superintendent, National Park Service, Lovell, Wyoming
          Attention: Jim Staebler

From: Reservoir and River Operations, Billings, Montana

Subject: **Yellowtail Water Release Order - BHR No. 06-41**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3599.84;   Storage: 743,701 acre-feet;   River Release: 1,500 cfs;   Inflow: 2,920 cfs;

GENERAL COMMENTS:

Due to the recent rains, the BIA has requested an decrease in diversions to the Bighorn Canal. In response, the following operation changes are required at Yellowtail Dam and Powerplant.

NOTE: This is the time period when fish are more susceptible to high levels of nitrogen gas super-saturation. To provide a more desirable mixing flow of approximately 75% through the spillway gates and 25% through the sluice gates to maintain the total gas super-saturation levels at safe limits, the minimum Afterbay elevation should be maintained at or above elevation 3183 whenever possible. This is only a soft limit and may be deviated from during special or emergency operations.

TURBINE RELEASES:

Beginning at 0830 hour on Monday, September 18, 2006:
    Decrease average daily turbine release to 1,665 cfs (≈ 1,048 MW-Hrs/day using 38.1 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

Beginning at 0830 hour on Monday, September 18, 2006:
    Decrease diversions to the Bighorn Canal to 235 cfs (gage height = 73.34 using a shift of -0.81).
    Maintain river release at 1,500 cfs (gage height = 60.08 using shift of -1.01).
    Decrease total release from the Afterbay to 1,735 cfs.

/S/ Tim H. Felchle