



IN REPLY REFER TO: MT-450

United States Department of the Interior

BUREAU OF RECLAMATION

Great Plains Region

Montana Area Office

P.O. Box 30137

Billings, Montana 59107-0137



July 29, 2008

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. 08-45**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3642.03; Storage: 1,096,345 acre-feet; River Release: 3,117 cfs; Inflow: 2,291 cfs;

GENERAL COMMENTS:

To continue evacuating storage from the exclusive flood pool as planned, and to meet BIA irrigation demands, the following operation change is 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.

YELLOWTAIL TURBINE RELEASE:

At 0100 hour on Thursday, July 31, 2008:

Decrease average daily turbine release to $\approx 3,130$ cfs ($\approx 2,209$ MW-Hrs/day using 34.0 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 1500 hour on Tuesday, July 29, 2008:

Increase diversions to the Bighorn Canal at 450 cfs (gage height = 74.13 with 0.0 shift).

Decrease river release to 2,975 cfs (decrease gage height to 60.79 & apply shift -0.42).

Maintain total release from the Afterbay to 3,425 cfs.

At 0100 hour on Thursday, July 31, 2008:

Maintain diversions to the Bighorn Canal at 450 cfs (gage height = 74.13 with 0.0 shift).

Decrease river release to 2,750 cfs (decrease gage height to 60.62 & apply shift -0.42).

Decrease total release from the Afterbay to 3,200 cfs.

/S/ Tim H. Felchle