



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



August 25, 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. 08-51**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3638.81; Storage: 1,055,265 acre-feet; River Release: 2,600 cfs; Inflow: 2,065 cfs;

GENERAL COMMENTS:

The BIA reported they will be conducting a chemical treatment on the large algae growth in the Bighorn Canal. To assist them in this chemical treatment, 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.

YELLOWTAIL TURBINE RELEASE:

At 1230 hour on Monday, August 25, 2008:

Maintain average daily turbine release at $\approx 2,825$ cfs ($\approx 1,800$ MW-Hrs/day using 37.7 cfs/mw).

At 1630 hour on Monday, August 25, 2008:

Maintain average daily turbine release at $\approx 2,825$ cfs ($\approx 1,800$ MW-Hrs/day using 37.7 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 1230 hour on Monday, August 25, 2008:

Decrease diversions to the Bighorn Canal to 245 cfs (gage height = 72.99 with -0.37 shift).

Increase river release to 2,650 cfs (decrease gage height to 60.81 & apply shift of -0.69).

Maintain total release from the Afterbay at 2,895 cfs.

At 1630 hour on Monday, August 25, 2008:

Decrease diversions to the Bighorn Canal to 195 cfs (gage height = 72.54 with -0.37 shift).

Increase river release to 2,700 cfs (gage height = 60.84 with shift of -0.69).

Maintain total release from the Afterbay at 2,895 cfs.

/S/ Tim H. Felchle