



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 27, 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. 08-53**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3638.54; Storage: 1,051,978 acre-feet; River Release: 2,700 cfs; Inflow: 2,100 cfs;

GENERAL COMMENTS:

After chemically treating the algae growth in the Bighorn Canal, the BIA called and requested increases in diversions to the canal. In response the following operation changes are required at Yellowtail Dam and Powerplant. Water Release Order BHR No. 08-52 is hereby rescinded and replaced by this Order.

NOTE: This is the time period when fish are less affected by high levels of nitrogen gas super-saturation. Since mixing flows through the spillway gates and the sluice gates is not required at this time, it is still desirable to provide a mixing flow of approximately 75% through the spillway gates and 25% through the sluice gates whenever the level of the Afterbay allows for flows to be released through the spillway gates.

YELLOWTAIL TURBINE RELEASE:

At 1430 hour on Wednesday, August 27, 2008:

Maintain average daily turbine release at $\approx 2,825$ cfs ($\approx 1,880$ MW-Hrs/day using 36.1 cfs/mw).

At 0700 hour on Thursday, August 28, 2008:

Increase average daily turbine release to $\approx 2,825$ cfs ($\approx 1,880$ MW-Hrs/day using 36.1 cfs/mw).

At 1300 hour on Thursday, August 28, 2008:

Increase average daily turbine release to $\approx 2,780$ cfs ($\approx 1,850$ MW-Hrs/day using 36.1 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 1430 hour on Wednesday, August 27, 2008:

Increase diversions to the Bighorn Canal to 250 cfs (gage height = 73.03 with -0.37 shift).

Decrease river release to 2,645 cfs (gage height = 60.97 with new shift of -0.85).

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

At 0700 hour on Thursday, August 28, 2008:

Increase diversions to the Bighorn Canal at 300 cfs (gage height = 73.44 with -0.37 shift).

Decrease river release to 2,595 cfs (gage height = 60.93 with new shift of -0.85).

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

At 1300 hour on Thursday, August 28, 2008:

Increase diversions to the Bighorn Canal at 350 cfs (gage height = 73.82 with -0.37 shift).

Decrease river release to 2,500 cfs (gage height = 60.85 with new shift of -0.85).

Decrease total release from the Afterbay to 2,850 cfs.

/S/ Tim H. Felchle