

United States Department of the Interior

BUREAU OF RECLAMATION

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



MT-450

August 1, 2007

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 Area 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. 07-35

CURRENT RESERVOIR CONDITIONS:

Elevation: 3634.28; Storage: 1,003,196 acre-feet; River Release: 1,750 cfs; Inflow: 1,980 cfs;

GENERAL COMMENTS:

Recent flow measurements indicated actual flows varied slightly from those anticipated in the Bighorn Canal and Bighorn River. To adjust for the variation in flows, 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:

At 1600 hour on Wednesday, August 1, 2007:

Maintain average daily turbine release at 2,055 cfs ($\approx 1,450$ MW-Hrs/day using 35.2 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 1600 hour on Wednesday, August 1, 2007:

Maintain diversions to Bighorn Canal at 375 cfs (gage height = 73.90 with a shift of -0.27). Maintain river release at 1,750 cfs (gage height = 59.45 with a shift of -0.11). Maintain total release from the Afterbay at 2,125 cfs.