

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

June 6, 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 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. 07-22

CURRENT RESERVOIR CONDITIONS:

Elevation: 3628.96; Storage: 949,643 acre-feet; River Release: 1,500 cfs; Inflow: 3,770 cfs;

GENERAL COMMENTS:

Due to the recent rains, the BIA requested a reduction in irrigation deliveries to the Bighorn Canal. In addition, recent flow measurements indicated the flow in the Bighorn Canal was actually lower than anticipated. In response, 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.

TURBINE RELEASES:

At 1400 hour on Wednesday, June 6, 2007:

Decrease average daily turbine release to 1,510 cfs (≈ 830 MW-Hrs/day using 43.6 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 1400 hour on Wednesday, June 6, 2007:

Decrease diversions to the Bighorn Canal to 80 cfs (gage height = 71.02 with -0.19 shift). Maintain river release at 1,500 cfs (gage height = 59.15 with a shift of -0.08). Decrease total release from the Afterbay to 1,580 cfs.