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# United States Department of the Interior

BUREAU OF RECLAMATION

Great Plains Region

Montana Area Office

P.O. Box 30137

Billings, Montana 59107-0137



January 31, 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. 07-12**

### **CURRENT RESERVOIR CONDITIONS:**

Elevation: 3607.38; Storage: 787,016 acre-feet; River Release: 1,500 cfs; Inflow: 1,230 cfs;

### **GENERAL COMMENTS:**

Power generation indicates actual river flows are higher than anticipated. In response, the following operation changes are required at Yellowtail Dam and Powerplant, applying a new shift to the river stage.

**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 1800 hour on Wednesday, January 31, 2007:**

*Maintain average daily turbine release at 1,430 cfs ( $\approx$  853 MW-Hrs/day using 40.2 cfs/mw).*

### **AFTERBAY RELEASE AND OPERATION:**

**At 1800 hour on Wednesday, January 31, 2007:**

*Maintain diversions to the Bighorn Canal at 0 cfs.*

*Maintain river release at 1,500 cfs (decrease gage height to 59.28 and apply a shift of -0.21).*

*Maintain total release from the Afterbay at 1,500 cfs.*

/S/ Tim H. Felchle