



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



April 10, 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  
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. 08-08**

### **CURRENT RESERVOIR CONDITIONS:**

Elevation: 3611.87; Storage: 815,297 acre-feet; River Release: 1,900 cfs; Inflow: 1,140 cfs;

### **GENERAL COMMENTS:**

A 12-day maintenance outage is scheduled on the Afterbay Dam sluice gates for April 14-25. During this time, the level of the Afterbay must be maintained no lower than elevation 3182 to sufficiently release the required flow to the Bighorn River. As a result, the following operation is required at Yellowtail Dam and Powerplant and the Afterbay Dam. It is anticipated the maintenance may be completed ahead of schedule and all restrictions on the Afterbay levels will be removed at that time.

**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:**

**Beginning 0700 hour on Monday, April 14, 2008 through 1700 hour on Friday, April 25, 2008:**  
*Maintain average daily turbine release at 1,830 cfs ( $\approx$  1,170 MW-Hrs/day using 37.6 cfs/mw).*

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

**Beginning 0700 hour on Monday, April 14, 2008 through 1700 hour on Friday, April 25, 2008:**  
*Maintain diversions to Bighorn Canal at 0 cfs.  
Maintain river release at 1,900 cfs (gage height = 59.54 with a shift of -0.05).  
Maintain total release from the Afterbay at 1,900 cfs.*

**Special Note: The level of the Afterbay must be maintained no lower than elevation 3182 to allow for maintenance of the sluice gates and ensure releasing 1,900 cfs over the Afterbay spillway overflow weir to the river.**

/S/ Tim H. Felchle