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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



April 20, 2006

## **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. 06-10**

### **CURRENT RESERVOIR CONDITIONS:**

Elevation: 3609.23; Storage: 798,388 acre-feet; River Release: 2,500 cfs; Inflow: 1,685 cfs;

### **GENERAL COMMENTS:**

A 12-day maintenance outage is scheduled on the Afterbay Dam sluice gates for April 20-May 01. During this time, the level of the Afterbay must be maintained between elevations 3183 and 3190 to sufficiently release the required flow to the Bighorn River. As a result the following operation is required.

**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 0700 hour on Thursday, April 20, 2006:**

*Maintain average daily turbine release at 2,430 cfs ( $\approx$  1,455 MW-Hrs/day using 40.1 cfs/mw).*

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

**At 0700 hour on Thursday, April 20, 2006:**

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

*Maintain river gage height at 60.36 and apply a new shift of -0.36 (flow = 2,500 cfs).*

*Maintain total release from the Afterbay at 2,500 cfs.*

/S/ Tim H. Felchle