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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



May 6, 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  
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. 08-17**

### **CURRENT RESERVOIR CONDITIONS:**

Elevation: 3608.03; Storage: 790,973 acre-feet; River Release: 1,900 cfs; Inflow: 1,530 cfs;

### **GENERAL COMMENTS:**

Inflows to Bighorn Lake during May continue to remain at only 50-55 percent of average. To slow the rate of decline in reservoir storage and to preserve future operational flexibility, the following operation changes are required at Yellowtail Dam, Powerplant, and Afterbay as follows.

**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 2000 hour on Tuesday, May 6, 2008:**

*Decrease average daily turbine release to 1,930 cfs ( $\approx$  1,220 MW-Hrs/day using 38.0 cfs/mw).*

**At 2000 hour on Wednesday, May 7, 2008:**

*Decrease average daily turbine release to 1,730 cfs ( $\approx$  1,090 MW-Hrs/day using 38.0 cfs/mw).*

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

**At 2000 hour on Tuesday, May 6, 2008:**

*Maintain diversions to the Bighorn Canal at 300 cfs (gage height = 73.07 with 0.0 shift).*

*Decrease river release to 1,700 cfs (gage height = 59.34 with a shift of -0.05).*

*Decrease total release from the Afterbay to 2,000 cfs.*

**At 2000 hour on Wednesday, May 7, 2008:**

*Maintain diversions to the Bighorn Canal at 300 cfs (gage height = 73.07 with 0.0 shift).*

*Decrease river release to 1,500 cfs (gage height = 59.12 with a shift of -0.05).*

*Decrease total release from the Afterbay to 1,800 cfs.*

/S/ Tim H. Felchle