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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



July 5, 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. 07-29**

### **CURRENT RESERVOIR CONDITIONS:**

Elevation: 3637.52; Storage: 1,039,771 acre-feet; River Release: 1,750 cfs; Inflow: 1,095 cfs;

### **GENERAL COMMENTS:**

Warm weather is beginning to increase the algae growth in the streams and canal. Due to recent flow measurements, flow in the Bighorn Canal was actually lower than anticipated. In response, the following operation change is required at Yellowtail Dam and Powerplant, applying a new shift of -0.45 to the canal gage height.

**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 1600 hour on Thursday, July 5, 2007:**

*Maintain average daily turbine release at 2,060 cfs ( $\approx$  1,290 MW-Hrs/day using 38.3 cfs/mw).*

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

**At 1600 hour on Thursday, July 5, 2007:**

*Maintain diversions to Bighorn Canal at 380 cfs (gage height = 74.11 with new shift of -0.45).*

*Maintain river release at 1,750 cfs (gage height = 59.42 with a shift of -0.08).*

*Maintain total release from the Afterbay at 2,130 cfs.*

/S/ Tim H. Felchle