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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 29, 2009

## **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. 09-53**

### **CURRENT RESERVOIR CONDITIONS:**

Elevation: 3644.29; Storage: 1,127,384 acre-feet; River Release: 4,000 cfs; Inflow: 2,700 cfs;

### **GENERAL COMMENTS:**

Streamflows in Bighorn River Basin continue to decrease. To slow and control the evacuation rate of storage in the exclusive flood pool, the following operation changes are required at Yellowtail Dam and Powerplant.

**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 required to meet energy demands.**

### **YELLOWTAIL TURBINE RELEASE:**

**At 1600 hour on Thursday, July 30, 2009:**

*Decrease average daily turbine release to  $\approx 3,920$  cfs ( $\approx 2,825$  MW-Hrs/day using 33.3 cfs/mw).*

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

**At 1600 hour on Thursday, July 30, 2009:**

*Maintain diversions to the Bighorn Canal at 490 cfs.*

*Decrease river release to 3,500 cfs.*

*Decrease total release from the Afterbay to 3,990 cfs.*

/S/ Tim H. Felchle