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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 15, 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. 08-38**

### **CURRENT RESERVOIR CONDITIONS:**

Elevation: 3642.44; Storage: 1,101,838 acre-feet; River Release: 6,020 cfs; Inflow: 5,950 cfs;

### **GENERAL COMMENTS:**

Streamflows in the Bighorn River Basin continue to quickly recede. In response, releases from Buffalo Bill and Boysen Reservoirs continue to be decreased to control the runoff into these reservoirs. To control the evacuation rate of storage in the exclusive flood pool in Bighorn Lake and provide additional relief from the high river flows in the Bighorn River, the following operation changes are required at Yellowtail Dam and Bighorn Lake.

**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.**

### **YELLOWTAIL TURBINE RELEASE:**

**At 1700 hour on Wednesday, July 16, 2008:**

*Decrease average daily turbine release to  $\approx 4,355$  cfs ( $\approx 3,295$  MW-Hrs/day using 31.7 cfs/mw).*

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

**At 1700 hour on Wednesday, July 16, 2008:**

*Maintain diversions to the Bighorn Canal at 425 cfs (gage height = 73.97 with 0.0 shift).*

*Decrease release to the Bighorn River to 4,000 cfs (gage height = 60.98 & apply shift of 0.08).*

*Decrease total release from the Afterbay at 4,425 cfs.*

/S/ Tim H. Felchle