



IN REPLY REFER TO: MT-450

# United States Department of the Interior

BUREAU OF RECLAMATION

Great Plains Region

Montana Area Office

P.O. Box 30137

Billings, Montana 59107-0137



July 17, 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. 08-42**

### **CURRENT RESERVOIR CONDITIONS:**

Elevation: 3642.19; Storage: 1,098,481 acre-feet; River Release: 3,950 cfs; Inflow: 3,810 cfs;

### **GENERAL COMMENTS:**

Algae growth in the Bighorn River and Bighorn Canal has increased considerably this past month. Recent flow measurements have indicated actual river flows and canal flows are lower than anticipated. In response, water release order BHR No. 08-41 is revised as follows to continue evacuating storage from the exclusive flood.

**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 Thursday, July 17, 2008:**

*Decrease average daily turbine release to  $\approx 3,435$  cfs ( $\approx 2,615$  MW-Hrs/day using 31.5 cfs/mw).*

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

**At 1700 hour on Thursday, July 17, 2008:**

*Maintain diversions to the Bighorn Canal at 475 cfs (gage height = 74.29 with 0.0 shift).*

*Decrease release to the Bighorn River to 3,000 cfs (gage height = 60.58 & apply shift of -0.19).*

*Decrease total release from the Afterbay to 3,475 cfs.*

/S/ Tim H. Felchle