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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



February 15, 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. 07-14**

### **CURRENT RESERVOIR CONDITIONS:**

Elevation: 3606.75; Storage: 783,223 acre-feet; River Release: 1,500 cfs; Inflow: 1,455 cfs;

### **GENERAL COMMENTS:**

Personnel at Yellowtail Dam Field Office reported mechanical problems with the Afterbay Dam's sluiceway gates, making them unavailable for use. To continue releasing water to the Bighorn River at a rate of 1,500 cfs through the Afterbay Dam's spillway radial gates, the level of the Afterbay must be maintained no lower than elevation 3182. The outage on the sluiceway gates is expected to last until further notice.

**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 1200 hour on Thursday, February 15, 2007:**

*Maintain average daily turbine release at 1,430 cfs ( $\approx$  900 MW-Hrs/day using 38.1 cfs/mw).*

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

**At 1200 hour on Thursday, February 15, 2007:**

*Maintain diversions to the Bighorn Canal at 0 cfs.*

*Maintain river release at 1,500 cfs (decrease gage height to 59.22 and apply a shift of -0.15).*

*Maintain total release from the Afterbay at 1,500 cfs.*

**Note: Maintain Afterbay level no lower than elevation 3182, to safely discharge 1,500 cfs through the Afterbay Dam's spillway radial gates.**

/S/ Tim H. Felchle