

# United States Department of the Interior

### **BUREAU OF RECLAMATION**

Great Plains Region
Montana Area Office
P.O. Box 30137
Billings, Montana 59107-0137

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ER TO: MT-450

May 31, 2006

#### **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. 06-24

## **CURRENT RESERVOIR CONDITIONS:**

Elevation: 3611.11; Storage: 810,327 acre-feet; River Release: 2,250 cfs; Inflow: 3,270 cfs;

#### **GENERAL COMMENTS:**

The BIA called and requested an increase in diversions to the Bighorn Canal. In response, the following operation change is 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.

#### **TURBINE RELEASES:**

#### At 0800 hour on Wednesday, May 31, 2006:

Increase average daily turbine release to 2,580 cfs ( $\approx$  1,720 MW-Hrs/day using 36.0 cfs/mw).

#### AFTERBAY RELEASE AND OPERATION:

## At 0800 hour on Wednesday, May 31, 2006:

Increase diversions to the Bighorn Canal to 400 cfs (gage height = 73.80 with 0.0 shift). Maintain river release at 2,250 cfs (gage height = 60.29 with a shift of -0.49). Increase total release from the Afterbay to 2,650 cfs.