

# United States Department of the Interior

# BUREAU OF RECLAMATION

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



REPLY REFER TO: MT-450

May 26, 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. 06-21

#### **CURRENT RESERVOIR CONDITIONS:**

Elevation: 3608.30; Storage: 792,629 acre-feet; River Release: 2,250 cfs; Inflow: 5,720 cfs;

## **GENERAL COMMENTS:**

Due to a leakage on the Bighorn Canal near Rotten Grass Creek, the BIA called and requested a 300 cfs reduction in diversions to the Bighorn Canal to allow for maintenance work. As a result, 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 1300 hour on Friday, May 26, 2006:

Decrease average daily turbine release to 2,380 cfs ( $\approx$  1,580 MW-Hrs/day using 36.1 cfs/mw).

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

# At 1300 hour on Friday, May 26, 2006:

Decrease diversions to the Bighorn Canal to 200 cfs (gage height = 72.22 with 0.0 shift). Maintain river release at 2,250 cfs (gage height = 60.29 with a shift of -0.49). Decrease total release from the Afterbay to 2,450 cfs.