

# United States Department of the Interior

# BUREAU OF RECLAMATION

TAKE PRIDE'

MT-450

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

July 27, 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. 06-33

## **CURRENT RESERVOIR CONDITIONS:**

Elevation: 3606.02; Storage: 778,877 acre-feet; River Release: 1,500 cfs; Inflow: 860 cfs;

# **GENERAL COMMENTS:**

The BIA has 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 1300 hour on Thursday, July 27, 2006:

*Increase average daily turbine release to 1,880 cfs (≈ 1,235 MW-Hrs/day using 36.5 cfs/mw).* 

## **AFTERBAY RELEASE AND OPERATION:**

#### At 1300 hour on Thursday, July 20, 2006:

Increase diversions to the Bighorn Canal to 450 cfs (gage height = 74.32 with -0.19 shift). Maintain river release at 1,500 cfs (gage height = 59.37 with a shift of -0.30). Increase total release from the Afterbay to 1,950 cfs.