

# United States Department of the Interior

### BUREAU OF RECLAMATION

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



IN REPLY REFER TO: MT-450

June 26, 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. 08-33

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

Elevation: 3637.56; Storage: 1,040,244 acre-feet; River Release: 7,660 cfs; Inflow: 9,910 cfs;

## **GENERAL COMMENTS:**

Inflows to Bighorn Lake continue to decline slowly. In response, the following operation change is required at Yellowtail Dam and Bighorn Lake to control the rate of fill.

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 Monday, June 30, 2008:

Decrease average daily turbine release to  $\approx 6,530$  cfs ( $\approx 5,225$  MW-Hrs/day using 30.0 cfs/mw).

# **AFTERBAY RELEASE AND OPERATION:**

#### At 1700 hour on Monday, June 30, 2008:

Maintain diversions to the Bighorn Canal at 450 cfs (gage height = 74.13 with 0.0 shift). Decrease release to the Bighorn River to 6,150 cfs (gage height = 62.13 & apply shift of 0.08). Decrease total release from the Afterbay to 6,600 cfs.

/S/ Tim H. Felchle