

# United States Department of the Interior

# BUREAU OF RECLAMATION

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



TO: MT-450

July 31, 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 Area 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. 07-34

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

Elevation: 3634.35; Storage: 1,003,953 acre-feet; River Release: 1,750 cfs; Inflow: 2,100 cfs;

#### **GENERAL COMMENTS:**

This FAXOGRAM confirms the operation changes that were made at Yellowtail Dam and Powerplant during July 27-28, 2007 in response to the requests made by the BIA for changes in diversions to the Bighorn Canal.

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 1700 hour on Friday, July 27, 2007:

Decrease average daily turbine release to 1,980 cfs ( $\approx$  1,350 MW-Hrs/day using 35.2 cfs/mw).

At 1300 hour on Saturday, July 28, 2007:

Increase average daily turbine release to 2,030 cfs ( $\approx$  1,384 MW-Hrs/day using 35.2 cfs/mw).

## **AFTERBAY RELEASE AND OPERATION:**

#### At 1700 hour on Friday, July 27, 2007:

Decrease diversions to Bighorn Canal to 300 cfs (gage height = 73.52 with a shift of -0.45). Maintain river release at 1,750 cfs (gage height = 59.42 with a shift of -0.08). Decrease total release from the Afterbay to 2,050 cfs.

### At 1300 hour on Saturday, July 28, 2007:

Increase diversions to Bighorn Canal to 350 cfs (gage height = 73.90 with a shift of -0.45). Maintain river release at 1,750 cfs (gage height = 59.42 with a shift of -0.08). Increase total release from the Afterbay to 2,100 cfs.

/S/ Tim H. Felchle