

# 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

October 1, 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. 07-44

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

Elevation: 3629.71; Storage: 956,743 acre-feet; River Release: 1,750 cfs; Inflow: 2,070 cfs;

#### **GENERAL COMMENTS:**

The BIA called and requested all diversions to the Bighorn Canal be gradually discontinued for the year by October 2, 2007. In response, the following operation changes are required at Yellowtail Dam and powerplant.

NOTE: This is the time period when fish are less affected by high levels of nitrogen gas super-saturation. Since mixing flows through the spillway gates and through the sluice gates is not required at this time, it is still desirable to provide a mixing flow of approximately 75% through the spillway gates and 25% through the sluice gates whenever the level of the Afterbay allows for the flows to be released through the spillway gates.

## **TURBINE RELEASES:**

# At 0800 hour on Monday, October 1, 2007:

Decrease average daily turbine release to 1,855 cfs ( $\approx$  1,030 MW-Hrs/day using 43.2 cfs/mw).

# At 1600 hour on Monday, October 1, 2007:

Decrease average daily turbine release to 1,805 cfs ( $\approx$  1,000 MW-Hrs/day using 43.2 cfs/mw).

## At 0800 hour on Tuesday, October 2, 2007:

Decrease average daily turbine release to 1,755 cfs ( $\approx$  975 MW-Hrs/day using 43.2 cfs/mw).

#### At 1600 hour on Tuesday, October 2, 2007:

*Decrease average daily turbine release to 1,680 cfs (≈ 935 MW-Hrs/day using 43.2 cfs/mw).* 

#### AFTERBAY RELEASE AND OPERATION:

### At 0800 hour on Monday, October 1, 2007:

Decrease diversions to Bighorn Canal to 175 cfs (gage height = 72.32 with a shift of -.35). Maintain river release at 1,750 cfs (gage height = 59.45 with a shift of -0.11). Decrease total release from the Afterbay to 1,925 cfs.

## At 1600 hour on Monday, October 1, 2007:

Decrease diversions to Bighorn Canal to 125 cfs (gage height = 71.77 with a shift of -.35). Maintain river release at 1,750 cfs (gage height = 59.45 with a shift of -0.11). Decrease total release from the Afterbay to 1,875 cfs.

# At 0800 hour on Tuesday, October 2, 2007:

Decrease diversions to Bighorn Canal to 75 cfs (gage height = 71.10 with a shift of -.35). Maintain river release at 1,750 cfs (gage height = 59.45 with a shift of -0.11). Decrease total release from the Afterbay to 1,825 cfs.

# At 1600 hour on Tuesday, October 2, 2007:

Decrease diversions to Bighorn Canal to 0 cfs (gage height = 68.85 with a shift of -.35). Maintain river release at 1,750 cfs (gage height = 59.45 with a shift of -0.11). Decrease total release from the Afterbay to 1,750 cfs.

/S/ Tim H. Felchle