



IN REPLY REFER TO: MT-450

United States Department of the Interior

BUREAU OF RECLAMATION

Great Plains Region

Montana Area Office

P.O. Box 30137

Billings, Montana 59107-0137



September 17, 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. 08-60**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3639.91; Storage: 1,068,896 acre-feet; River Release: 2,500 cfs; Inflow: 3,060 cfs;

GENERAL COMMENTS:

As the 2008 irrigation season comes to a close, the BIA has requested all diversions to the Bighorn Canal be gradually discontinued over the next 2 days. To control the rate of fill as previously scheduled, all decreases in diversions to the Bighorn Canal will be released to the Bighorn River. 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 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 flows to be released through the spillway gates.

YELLOWTAIL TURBINE RELEASE:

At 0800 hour on Wednesday, September 17, 2008:

Maintain average daily turbine release at $\approx 2,650$ cfs ($\approx 2,000$ MW-Hrs/day using 31.8 cfs/mw).

At 1600 hour on Wednesday, September 17, 2008:

Maintain average daily turbine release at $\approx 2,650$ cfs ($\approx 2,000$ MW-Hrs/day using 31.8 cfs/mw).

At 0800 hour on Thursday, September 18, 2008:

Maintain average daily turbine release at $\approx 2,650$ cfs ($\approx 2,000$ MW-Hrs/day using 31.8 cfs/mw).

At 1600 hour on Thursday, September 18, 2008:

Maintain average daily turbine release at $\approx 2,650$ cfs ($\approx 2,000$ MW-Hrs/day using 31.8 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 0800 hour on Wednesday, September 17, 2008:

Decrease diversions to the Bighorn Canal to 170 cfs (gage height = 72.76 with -0.84 shift).

Increase river release to 2,550 cfs (gage height = 61.59 & apply new shift of -1.55).

Maintain total release from the Afterbay at 2,720 cfs.

At 1600 hour on Wednesday, September 17, 2008:

*Decrease diversions to the Bighorn Canal to 120 cfs (gage height = 72.20 with -0.84 shift).
Increase river release to 2,600 cfs (gage height = 61.63 & apply new shift of -1.55).
Maintain total release from the Afterbay at 2,720 cfs.*

At 0800 hour on Thursday, September 18, 2008:

*Decrease diversions to the Bighorn Canal to 70 cfs (gage height = 71.51 with -0.84 shift).
Increase river release to 2,650 cfs (gage height = 61.67 & apply new shift of -1.55).
Maintain total release from the Afterbay at 2,720 cfs.*

At 1600 hour on Thursday, September 18, 2008:

*Decrease diversions to the Bighorn Canal to 0 cfs (gage height = 69.34 with -0.84 shift).
Increase river release to 2,720 cfs (gage height = 61.73 & apply new shift of -1.55).
Maintain total release from the Afterbay at 2,720 cfs.*

/S/ Tim H. Felchle