



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

July 28, 2014

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-6040
Assistant Superintendent, National Park Service, Lovell, Wyoming
Attention: Valerie Newman

From: Reservoir and River Operations, Billings, Montana /s/ Clayton R. Jordan

Subject: **Yellowtail Water Release Order - BHR No. 14-72**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3639.72; Storage: 1,017,058 acre-feet; River Release: 2,880 cfs; Inflow: 2,725 cfs;

GENERAL COMMENTS:

Inflows into Bighorn Lake continue to remain near 2,750 cfs. The BIA has also reported they would like to perform a chemical treatment on the pond weed in the Bighorn Canal. The Yellowtail Powerplant will be limited to two units from 0800 hour on Tuesday, July 29 through 1600 hour on Wednesday, July 30, 2014, for breaker upgrades and testing. To continue conserving storage in Bighorn Lake and maintain river flows near 2,500 cfs and also assist with the pond weed treatment, the following operations are required at Yellowtail Dam and Powerplant and Yellowtail Afterbay Dam.

SPECIAL NOTE: To provide the proper mixing of water releases to the Bighorn River in attempt to minimize PSAT levels, it is desirable to maintain the Yellowtail Afterbay Reservoir between a maximum elevation of 3192.0 feet and a minimum elevation of 3183.6 feet and provide a mixing flow of approximately 75% through the spillway gates and 25% through the sluice gates, plus or minus 10%.

YELLOWTAIL TURBINE RELEASE:

At 1200 hour on Monday, July 28, 2014:

Decrease average daily turbine release to 2,980 cfs (≈ 2,100 MW-Hours/day using 34.1 cfs/mw).

At 1600 hour on Monday, July 28, 2014:

Maintain average daily turbine release at 2,980 cfs (≈ 2,100 MW-Hours/day using 34.1 cfs/mw).

At 0800 hour on Tuesday, July 29, 2014:

Maintain average daily turbine release at 2,980 cfs (≈ 2,100 MW-Hours/day using 34.1 cfs/mw).

At 1600 hour on Tuesday, July 29, 2014:

Maintain average daily turbine release at 2,980 cfs (≈ 2,100 MW-Hours/day using 34.1 cfs/mw).

At 0800 hour on Wednesday, July 30, 2014:

Decrease average daily turbine release to 2,880 cfs (≈ 2,025 MW-Hours/day using 34.1 cfs/mw).

At 1600 hour on Wednesday, July 30, 2014:

Maintain average daily turbine release at 2,880 cfs (≈ 2,025 MW-Hours/day using 34.1 cfs/mw).

Due to major unit re-wind project, restrict and limit turbine release to 3-unit capacity.

Restrict and limit turbine release to 2-unit capacity from 0800 hour on Tuesday, July 29 through 1600 hour on Wednesday, July 30, 2014

AFTERBAY RELEASE AND OPERATION:

At 1200 hour on Monday, July 28, 2014:

Decrease diversions to the Bighorn Canal to 300 cfs (decrease gage height to 73.73 using -1.25 shift).

Decrease river release to 2,750 cfs (decrease gage height to 60.54 using -0.34 shift).

Decrease total release from the Afterbay to 3,050 cfs.

At 1600 hour on Monday, July 28, 2014:

Decrease diversions to the Bighorn Canal to 200 cfs (decrease gage height to 72.93 using -1.25 shift).

Increase river release to 2,850 cfs (increase gage height to 60.62 using -0.34 shift).

Maintain total release from the Afterbay at 3,050 cfs.

At 0800 hour on Tuesday, July 29, 2014:

Maintain diversions to the Bighorn Canal at 200 cfs (maintain gage height to 72.93 using -1.25 shift).

Maintain river release at 2,850 cfs (maintain gage height at 60.62 using -0.34 shift).

Maintain total release from the Afterbay at 3,050 cfs.

At 1600 hour on Tuesday, July 29, 2014:

Increase diversions to the Bighorn Canal to 325 cfs (increase gage height to 73.91 using -1.25 shift).

Decrease river release to 2,725 cfs (decrease gage height to 60.52 using -0.34 shift).

Maintain total release from the Afterbay at 3,050 cfs.

At 0800 hour on Wednesday, July 30, 2014:

Increase diversions to the Bighorn Canal to 450 cfs (increase gage height to 74.73 using -1.25 shift).

Decrease river release to 2,500 cfs (decrease gage height to 60.34 using -0.34 shift).

Decrease total release from the Afterbay to 2,950 cfs.

At 1600 hour on Wednesday, July 30, 2014:

Maintain diversions to the Bighorn Canal at 450 cfs (maintain gage height at 74.73 using -1.25 shift).

Maintain river release at 2,500 cfs (maintain gage height at 60.34 using -0.34 shift).

Maintain total release from the Afterbay at 2,950 cfs.