

United States Department of the Interior



BUREAU OF RECLAMATION
Great Plains Region
Montana Area Office
P.O. Box 30137
Billings, Montana 59107-0137
April 8, 2008

Dear Interested Party:

Thank you to those who attended our March meeting in Lovell, Wyoming, and particularly those who provided comments regarding our proposed Yellowtail Dam and Bighorn Lake spring/summer 2008 operating plan. Your feedback is always welcome as it helps us do a better job of meeting the various demands on Yellowtail.

We have experienced relatively cool weather and the mountain snowpack within the Bighorn Basin has continued to increase since our meeting in March. Our mountain snowpack is now approximately 104% of average (as compared to approximately 74% at this time last year), and our April-July runoff forecast is 820,000 acre-feet (as compared to 727,000 acre-feet last year). However, due to the cool weather so far this spring, we have yet to see inflows to Yellowtail increase and the reservoir continues to draft. We anticipate this trend to continue into late April or early May, and we are not planning to change releases (currently 1900 cfs) until we see a significant increase in inflows to avoid over-drafting the reservoir (such as happened in 2006).

Under the most probable runoff conditions, we expect to have a relatively full reservoir pool through the summer while providing improved river releases compared to last year. However, due to the uncertainties involved in trying to predict the weather, we will continue to monitor conditions very closely and will make adjustments, as necessary, depending on the actual inflows to Yellowtail. Updates to the operations plan can be accessed through our Web site at www.usbr.gov/gp/mtao.

We remain committed to continue exploring opportunities for enhancing benefits for all Yellowtail beneficiaries through collaborative efforts with interested parties and stakeholders from both Montana and Wyoming. Please feel free to provide us with additional information and comments as this operational season progresses.

Sincerely,

Dan Jewell Area Manager

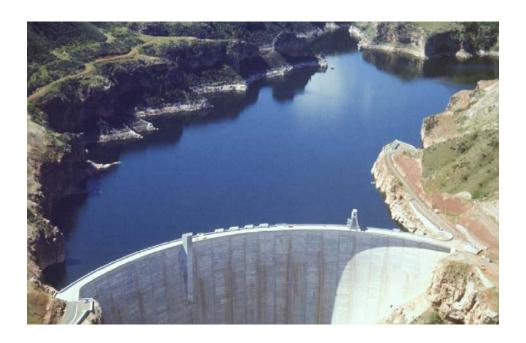
RECLAMATION Managing Water in the West

April 1, 2008

Dear Customer:

Attached are the monthly water supply outlook and projected reservoir and river operating plans as prepared in April 2008. Storage in Bighorn Lake at the beginning of April was 4.3 feet higher than on April 1, 2007. Inflow to Bighorn Lake during March was 51 percent of average, making it the 4th lowest of record for March. The April-July inflow to Bighorn Lake is forecast at 820,000 acre-feet or about 74 percent of average. If you have any questions or concerns, please feel free to call me at (406) 247-7318.

Tim H. Felchle Reservoir and River Operations





U. S. Department of the Interior Bureau of Reclamation Montana Area Office River and Reservoir Operations

YELLOWTAIL RESERVOIR OPERATIONS

Water Supply Forecasts and Reservoir Operations April 1, 2008

Present Elevations & Storages:

Reservoir	Elevation	Storage	Percent of Normal
Boysen	4706.62	447,660	
Buffalo Bill	5368.29	455,220	
Bighorn Lake	3613.47	826,042	99

Actual Inflows (1,000 Acre-Feet):

<u>Month</u>	<u>Inflow</u>	Percent of Normal
April-July, 2007	614.1	51
WY-2007 Total	1,364.2	54
October	138.7	76
November	95.8	63
December	66.3	48
January	66.3	50
February	68.0	50
March	86.1	51

Actual Gains Between Boysen and Buffalo Bill to Yellowtail (1,000 Acre-Feet):

Month	<u>Gains</u>	Percent of Normal
April-July, 2007	188.2	60
WY-2007 Total	462.0	64
October	92.9	118
November	63.2	98
December	32.3	71
January	32.2	69
February	36.0	63
March	52.2	68

April Forecast of April-July Runoff (1,000 Acre-Feet):

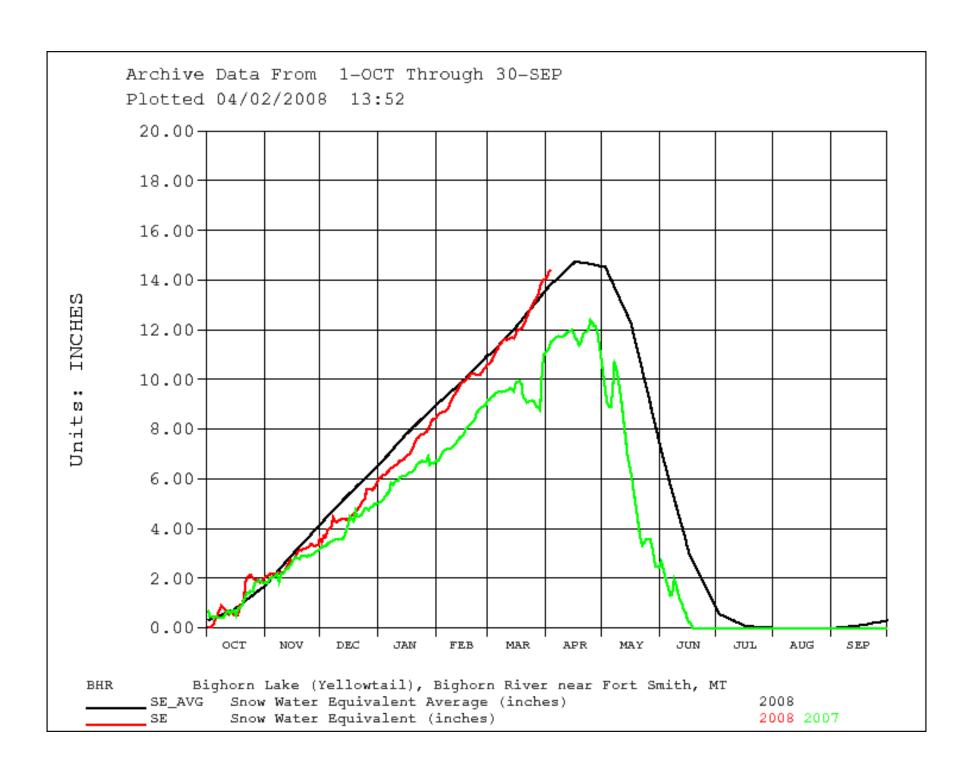
<u>Agency</u>	<u>Gains</u>	Percent of Normal
USBR	245	85
	Inflows	
USBR	820	74

Snowpack Conditions:

S N O W - P R E C I P I T A T I O N U P D A T E Based on Mountain Data from NRCS SNOTEL Sites
As of TUESDAY: April 1, 2008

BASIN Data Site Name	ELEV. (Ft)	SNOW WAT	ER EQUIV	ALENT %	TOTAL PRECIPITATION			
		Current	Average	Avg	Current	Average	Avg	
UPPER YELLOWSTONE RIVER	BASIN							
BEARTOOTH LAKE	9360	26.0	23.6	110	24.7	20.3	122	
BOX CANYON	6670	11.5	10.4	111	14.6	12.5	117	
BRACKETT CREEK	7320	21.1	21.5	98	26.4	25.2	105	
BURNT MTN	5880	5.6	6.2	90	10.1	15.4	66	
CANYON	7870	18.3	13.9	132	21.4	15.6	137	
COLE CREEK	7850	10.8	16.4	66	10.1	16.7	60	
EVENING STAR	9200	31.1	30.1	103	34.2	25.5	134	
FISHER CREEK	9100	42.6	35.4	120	38.6	36.8	105	
MONUMENT PEAK	8850	24.2	21.0	115	22.3	21.3	105	
NORTHEAST ENTRANCE	7350	11.0	11.3	97	14.1	12.8	110	

PARKER PEAK	9400	27.4		125	25.0		
PLACER BASIN	8830	18.7	17.8	105	19.5	19.1	102
PORCUPINE		6.7	6.9		10.1	11.9	
SACAJAWEA	6550	15.6		105	24.4	22.7	
SHOWER FALLS	8100		22.7		28.4	24.6	115
S FORK SHIELDS	8100	14.6	17.7		19.0	20.3	94
SYLVAN LAKE	8420	22.2	22.8	97	26.7	21.1	127
SYLVAN ROAD	7120	13.6	12.9	105	22.1	17.8	124
THUMB DIVIDE	7980	19.4	19.2	101	21.3	19.1	
TWO OCEAN PLATEAU	9240	38.1	28.4	134	32.3		115
WHITE MILL	8700		24.6				
WOLVERINE	7650		11.6				
YOUNTS PEAK	8350	17.7	17.3	102	18.2	16.3	112
	wide perce	nt of av	erage				110
WIND RIVER BASIN (WYO							
BURROUGHS CREEK			14.8		19.3		
COLD SPRINGS	9630	7.0	9.0		10.2	10.7	
DEER PARK	9700	15.7	17.1	92	20.2	22.1	
HOBBS PARK	10100	14.3	15.1		14.5	12.9	
KIRWIN	9550		11.5		14.6		
LITTLE WARM	9370	10.4		87	14.1	13.5	104
OWL CREEK	8975	5.9	5.6	105	7.1	5.9	120
SOUTH PASS	9040	14.9	16.7	89	17.7	18.6	95
ST. LAWRENCE ALT	8620	7.0	7.4	95	8.6	8.9	97
TOGWOTEE PASS	9580	28.0	25.2	111	30.1	24.9	121
TOWNSEND CREEK	8700	8 9	8.8	101	12.4	11.7	106
YOUNTS PEAK	8350	17.7	17.3	102	18.2	16.3	
Basin	wide perce	nt of av	erage				108
SHOSHONE RIVER BASIN							
BLACKWATER	9780	26.5	24.8	107	24.1	20.7	116
EVENING STAR	9200	31.1	30.1	103	34.2	25.5	134
MARQUETTE	8760	7.2	9.0		10.3	9.8	105
SYLVAN LAKE	8420	22.2	22.8		26.7		
SYLVAN ROAD	7120	13 6	12.9	105			
YOUNTS PEAK	8350	17.7	17.3	102	22.1 18.2	16.3	
Basin	wide perce	nt of av	erage	101			122
BIGHORN RIVER BASIN (
BALD MTN.	9380	17.1	19.9	86	15.5	17.5	89
BEAR TRAP MEADOW	8200	9.5	5.2	183	9.6	8.3	
BLACKWATER	9780	26.5	24.8	107	24.1	20.7	116
BONE SPRINGS DIV	9350	17.8	16.4	109	17.8	14.7	121
EVENING STAR	9200	31.1	30.1	103	34.2	25.5	134
GRAVE SPRINGS	8550	10.2	9.4	109	10.8	9.7	111
KIRWIN	9550	12.5	11.5	109	14.6	11.3	129
MAROUETTE		7.2		80		9.8	105
~			11.8		10.3		
MIDDLE POWDER	7760	12.0		102	9.7	12.4	78
OWL CREEK		5.9	5.6	105		5.9	120
POWDER RIVER PASS		12.7	10.9	117		12.4	119
SHELL CREEK	9580	16.0	14.9	107	15.4	13.4	115
SYLVAN LAKE	8420	22.2	22.8		26.7	21.1	127
SYLVAN ROAD	7120	13.6	12.9		22.1	17.8	124
		4.5	5.8	78	8.2	7.4	111
TIMBER CREEK	7950	4.5	5.0				
TIMBER CREEK YOUNTS PEAK	8350	17.7	17.3		18.2		112
YOUNTS PEAK		17.7	17.3	102			112



BHXAOP V1.12 Run: 08-Apr-2008 13:45
Based on Most Probable Inflow Forecast

BIGHORN LAKE MONTHLY OPERATIONS

Bighorn Reservoir	Ir	nitial Co El		26.0 kaf 3.46 ft	Ma	aximum Co		28.4 kaf 7.00 ft	M	inimum C E		93.6 kaf 7.00 ft	
2008	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Boysen Release kaf	32.7	67.6	69.9	76.9	69.2	59.5	36.9	35.7	36.9	37.0	33.4	36.9	592.6
Boysen Release cfs	550	1099	1175	1251	1125	1000	600	600	600	602	601	600	
Buffalo Bill Riv Flo kaf	12.8	84.1	115.5	116.2	101.9	78.6	24.9	20.8	21.5	21.5	19.4	21.5	638.7
Buffalo Bill Riv Flo cfs	215	1368	1941	1890	1657	1321	405	350	350	350	349	350	
Station Gain kaf	39.1	79.9	128.6	-2.6	5.8	43.7	75.7	62.1	44.5	47.7	58.1	77.5	660.1
Monthly Inflow kaf	84.6	231.6	314.0	190.5	176.9	181.8	137.5	118.6	102.9	106.2	110.9	135.9	1891.4
Monthly Inflow cfs	1422	3767	5277	3098	2877	3055	2236	1993	1674	1727	1997	2210	
Turbine Release kaf	109.5	145.1	154.6	177.1	176.2	163.4	153.5	129.7	134.0	134.0	121.1	134.0	1732.2
Bypass/Spill/Waste kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Release kaf	109.5	145.1	154.6	177.1	176.2	163.4	153.5	129.7	134.0	134.0	121.1	134.0	1732.2
Total Release cfs	1840	2360	2598	2880	2866	2746	2496	2180	2179	2179	2181	2179	
Spring Flow kaf	4.2	4.3	4.2	4.3	4.3	4.2	4.3	4.2	4.3	4.3	3.9	4.3	50.8
Irrigation Reqmnt kaf	0.6	11.1	10.0	27.7	26.8	18.8	4.1	0.0	0.0	0.0	0.0	0.0	99.1
Afterbay Rels kaf	113.7	149.4	158.8	181.4	180.5	167.6	157.8	133.9	138.3	138.3	125.0	138.3	1783.0
Afterbay Rels cfs	1911	2430	2669	2950	2936	2817	2566	2250	2249	2249	2251	2249	
River Release kaf	113.1	138.3	148.8	153.7	153.7	148.8	153.7	133.9	138.3	138.3	125.0	138.3	1683.9
River Release cfs	1901	2249	2501	2500	2500	2501	2500	2250	2249	2249	2251	2249	
Min Release kaf	113.1	138.3	148.8	153.7	153.7	148.8	153.7	133.9	138.3	138.3	125.0	138.3	1683.9
End-Month Targets kaf			1070.0	1070.0									
End-Month Content kaf	801.1	887.6	1047.0	1060.4	1061.1	1079.5	1063.5	1052.4	1021.3	993.5	983.3	985.2	
		3621.78				3640.74							
Net Change Content kaf	-24.9	86.5	159.4	13.4	0.7	18.4	-16.0	-11.1	-31.1	-27.8	-10.2	1.9	159.2
Yellowtail Power 2008	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Turbine Release kaf	109.5	145.1	154.6	177.1	176.2	163.4	153.5	129.7	134.0	134.0	121.1	134.0	1732.2
Generation gwh	41.212	55.248	61.421	72.268	72.051	67.004	62.967	52.993	54.406	53.918	48.438	53.527	695.453
End-Month Power Cap mw	258.7	269.9	285.6	286.7	286.8	288.0	287.0	286.1	283.4	280.9	279.9	280.1	
% Max Gen	20	26	30	34	34	32	29	26	25	25	25	25	
Ave kwh/af	376	381	397	408	409	410	410	409	406	402	400	399	401
Upstream Generation qwh	14.942	28.062	28.206	30.196	29.493	27.641	11.003	8.719	9.025	9.022	8.130	9.005	213.444
Total Generation gwh	56.154	83.310			101.544	94.645	73.970	61.712	63.431	62.940	56.568	62.532	908.897

BIGHORN LAKE

