

United States Department of the Interior

BUREAU OF RECLAMATION Great Plains Region Montana Area Office P.O. Box 30137 Billings, Montana 59107-0137 April 9, 2007



Dear Interested Party:

Thank you for taking time to provide us with your comments regarding our proposed Yellowtail Dam and Bighorn Lake spring/summer 2007 operating plan. By my count, slightly more than 50 people attended the Annual Spring Bighorn Basin Interagency Coordination Meeting on March 21, 2007, here in Billings, and we have received several sets of comments on our proposed operating plan.

The past couple of weeks have yielded some interesting climatic variations, and we have been closely monitoring those events. After carefully considering the information before us, we have revised the plan that was presented for comment on March 21. In summary, we are intending to keep releases from Yellowtail Dam at 1500 cubic feet per second (cfs) through May, increase releases in early June to 2000 cfs and maintain 2000 cfs through October, and then increase releases to 2250 cfs for the fall/winter period (if available storage allows).

Under the most probable runoff conditions, this release schedule should enable us to keep a relatively full reservoir pool through the summer, and hopefully provide sufficient fall storage to afford some additional flexibility during this coming year. However, we will continue to monitor conditions very closely and will make adjustments to that release schedule, 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 as this operational season progresses.

Sincerely,

Dan Jewell Area Manager

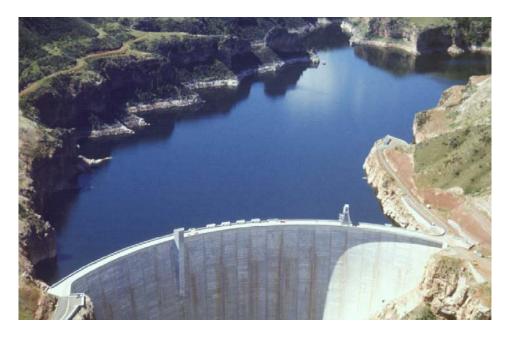
RECLANATION *Managing Water in the West*

April 7, 2007

Dear Customer:

Attached is the monthly water supply outlook and projected reservoir and river operating plans as prepared on April 7, 2007. Mountain snowpack and streamflow into Bighorn Lake continues to remain below normal. Water users are advised to continue making plans to conserve the limited available water supply. We hope you find the information useful. If you have any questions or concerns, please feel free to call me at (406) 247-7318.

Tim H. Felchle Reservoir and River Operations





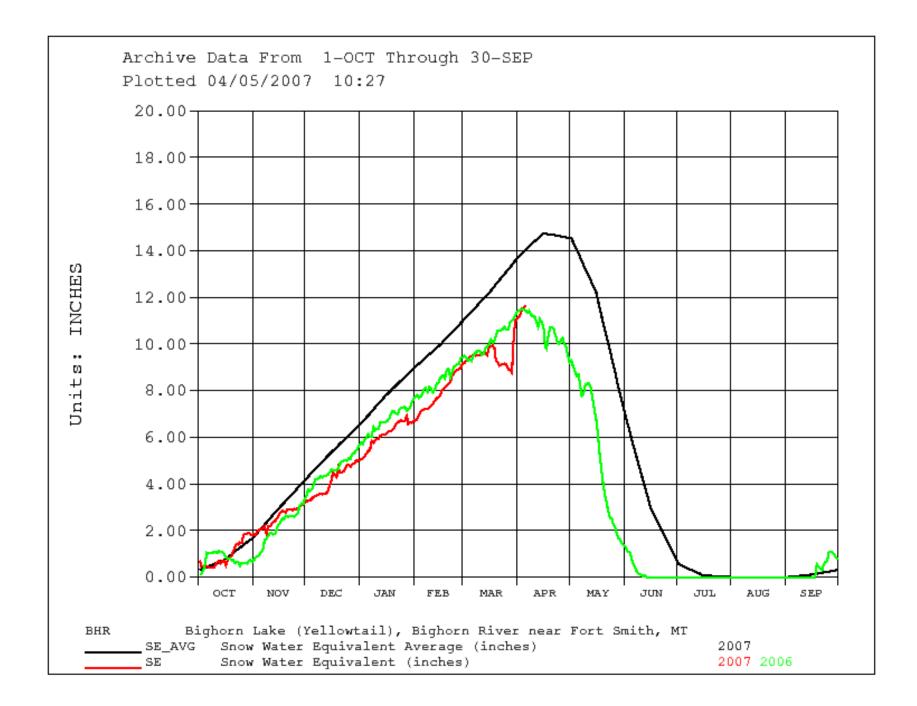
U. S. Department of the Interior Bureau of Reclamation Montana Area Office River and Reservoir Operations

YELLOWTAIL RESERVOIR OPERATIONS

Water Supply Forecasts and Reservoir Operations April 1, 2007

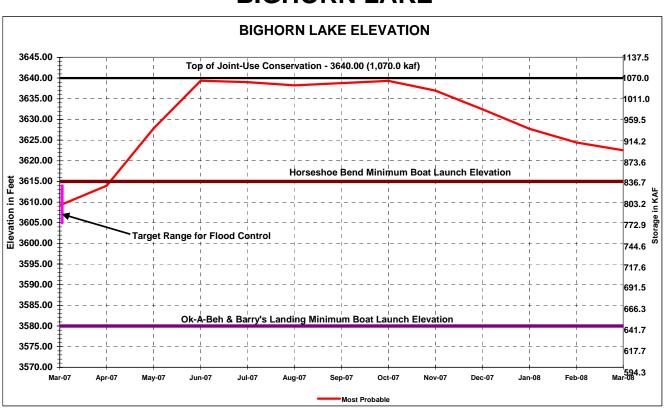
| Present Elevations & Storages: | | | | | | | | | | | | |
|--|-------------------------|--------------------------------------|------------------------------------|----------------------------|-----------------------------------|--------------------------------------|------------------------------------|----------------------------|--|--|--|--|
| | <u>Reservoir</u> | | torage | | ElevationPercent of Normal4707.90 | | | | | | | |
| | Boysen | | 54,319 | | | | | | | | | |
| | Buffalo Bill | | 57,725 | 5368. | | | | | | | | |
| | Bighorn Lake | 1 | 98,200 | 3609. | 20 | | 96 | | | | | |
| Actual Inflows (1,000 Acre-Feet):InflowPercent of NormalMonthInflowPercent of Normal | | | | | | | | | | | | |
| | Month | | Inflow | | Perc | | <u>ormal</u> | | | | | |
| | April-July, 200 | | 528.2 | | 44 | | | | | | | |
| | WY-2006 Total | I | ,432.9 | | | 57 | | | | | | |
| | October | | 125.6 | | | 66 | | | | | | |
| | November | | 98.7 | | | 61 | | | | | | |
| | December | | 82.5 56 | | | | | | | | | |
| | January | | 67.4 | | | 48 | | | | | | |
| | February | | 77.8 | | | 54 | | | | | | |
| | March | | 100.2 | | | 56 | | | | | | |
| Actual Gains Between Boysen and Buffalo Bill to Yellowtail (1,000 Acre-Feet): | | | | | | | | | | | | |
| | <u>Month</u> | | <u>Gains</u> | | Perc | cent of Nor | <u>mal</u> | | | | | |
| | April-July, 200 | | -2.5 | | | | | | | | | |
| | WY-2006 Total | | 280.6 | | 39 | | | | | | | |
| | October | | 73.5 | | 97 | | | | | | | |
| | November | | 56.9 | | 88 | | | | | | | |
| | December | | 39.6 | | | 84 | | | | | | |
| | January | | 24.0 | | 51 | | | | | | | |
| | February | | 38.7 | | 67 | | | | | | | |
| | March | | 56.7 | | | 72 | 72 | | | | | |
| April Foreca | st of April-July | Inflow | (1,000 Acr | e-Feet): | | | | | | | | |
| | Agency | <u>I</u> 1 | <u>nflows</u> | | Perc | cent of Nor | <u>mal</u> | | | | | |
| | USBR | | 727 | | | 61 | | | | | | |
| Snowpack C | onditions: | | | | | | | | | | | |
| - | SNOW – PR | | | ΤΙΟΝ | | | | | | | | |
| Based on Mountain Data from NRCS SNOTEL Sites As of SUNDAY: APRIL 1 , 2007 | | | | | | | | | | | | |
| BASIN | | | | | | | | | | | | |
| | Name | (Ft) | SNOW WAI | ER EQUIVA | .11510 I % | IOIAL P | RECIPIIA | 8 8 | | | | |
| | | | Current | Average | Avg | | Average | Avg | | | | |
| UPPER YELLC | | | | | | | | | | | | |
| | | | | 12 C | 76 | 17 2 | 20.2 | 0 5 | | | | |
| BEARTOOTH | | 9275 | 17.9 | 23.0 | 10 | 1/.3 | 20.3 | 65 | | | | |
| BOX CANYON | LAKE I | 9275 6700 | 17.9 5.4 | 10.4 | 78 52 | 17.3 | 20.3 12.5 | 105 | | | | |
| BOX CANYON | | 7320 | 12.3 | 21.5 | 57 | 19.0 | 25.2 | 75 | | | | |
| BOX CANYON BRACKETT C BURNT MTN | LAKE I | 7320 | 12.3 | 21.5 | 57 | 19.0 | 25.2 | 75 | | | | |
| BOX CANYON BRACKETT C BURNT MTN CANYON | LAKE I REEK | 7320 | 12.3 | 21.5 | 57 * | 19.0 11.4 | 25.2 | 75 | | | | |
| BOX CANYON BRACKETT C BURNT MTN CANYON COLE CREEK | LAKE I REEK | 7320 5880 8090 7850 | 12.3 .5 11.0 10.9 | 21.5 -M 13.9 16.4 | 57 * 79 66 | 19.0 11.4 14.7 11.1 | 25.2 -M 15.6 16.7 | 75 * 94 66 | | | | |
| BOX CANYON BRACKETT C BURNT MTN CANYON | LAKE I PREEK C | 7320 5880 8090 7850 9200 | 12.3 .5 11.0 10.9 20.4 | 21.5 -M 13.9 16.4 | 57 * 79 66 68 | 19.0 11.4 14.7 11.1 25.5 | 25.2 -M 15.6 16.7 25.5 | 75 * 94 66 100 | | | | |

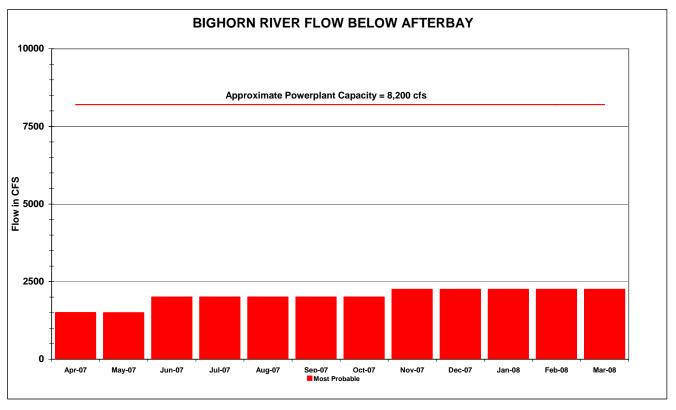
| NORTHEAST ENTRANCE PARKER PEAK PLACER BASIN PORCUPINE SACAJAWEA SHOWER FALLS S FORK SHIELDS SYLVAN LAKE SYLVAN ROAD THUMB DIVIDE TWO OCEAN PLATEAU WHITE MILL WOLVERINE YOUNTS PEAK | 7350 9400 8830 6500 6550 8100 8420 7120 7980 9240 8700 7650 8350 | 3.8 18.1 13.8 .0 6.5 19.0 12.6 14.1 6.3 11.6 23.4 18.2 4.1 10.1 | 21.9 17.8 6.9 14.8 22.7 17.7 22.8 12.9 19.2 28.4 24.6 11.6 | 83 78 0 44 84 71 62 49 60 82 74 35 58 | 12.1 16.6 17.8 12.3 19.3 22.7 19.7 20.2 15.1 14.5 21.5 19.1 10.5 13.4 | 16.4 19.1 11.9 -M 24.6 20.3 21.1 17.8 19.1 28.0 27.3 12.9 | 101 93 103 * 92 97 96 85 76 77 70 | | | | |
|--|--|--|---|---|--|--|---|--|--|--|--|
| Basin wide percent of average 67 | | | | | | | | | | | |
| WIND RIVER BASIN (WYOM BURROUGHS CREEK COLD SPRINGS DEER PARK HOBBS PARK KIRWIN LITTLE WARM OWL CREEK SOUTH PASS ST. LAWRENCE ALT TOGWOTEE PASS TOWNSEND CREEK YOUNTS PEAK | 8750 9630 9700 10100 9550 9370 8975 9040 8620 9580 | 16.7 | $\begin{array}{c} 9.0 \\ 17.1 \\ 15.1 \\ 11.5 \\ 12.0 \\ 5.6 \\ 16.7 \\ 7.4 \\ 25.2 \\ 8.8 \end{array}$ | 76 39 70 85 86 62 75 74 54 66 89 58 | | $16.4 \\ 10.7 \\ 22.1 \\ 12.9 \\ 11.3 \\ 13.5 \\ 5.9 \\ 18.6 \\ 8.9 \\ 24.9 \\ 11.7 \\ 16.3 \\ 16.3 \\ 10.7 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10.7 \\ 10.3 \\ 10.7 \\ 10$ | 104 69 108 74 102 77 | | | | |
| | wide perce | nt of av | erage | 70 | | | 84 | | | | |
| SHOSHONE RIVER BASIN (BLACKWATER | 9780 | 19.0 20.4 | 24.8 30.1 | 68 | 18.2 25.5 | 20.7 25.5 | 88 100 | | | | |
| EVENING STAR MARQUETTE SYLVAN LAKE SYLVAN ROAD YOUNTS PEAK | 9200 8760 8420 7120 8350 | 2.7 14.1 6.3 10.1 | | | 9.1 20.2 15.1 13.4 | 9.8 21.1 17.8 16.3 | | | | | |
| SYLVAN LAKE SYLVAN ROAD YOUNTS PEAK Basin | 8760 8420 7120 8350 wide perce | 2.7 14.1 6.3 10.1 | 22.8 12.9 17.3 | 62 49 | 20.2 15.1 | 21.1 17.8 | 96 85 | | | | |
| SYLVAN LAKE SYLVAN ROAD YOUNTS PEAK | 8760 8420 7120 8350 wide perce | 2.7 14.1 6.3 10.1 | 22.8 12.9 17.3 | 62 49 58 | 20.2 15.1 | 21.1 17.8 | 96 85 82 | | | | |



BIGHORN LAKE MONTHLY OPERATIONS

| Bighorn Reservoir | | Ir | nitial Co El | | 98.2 kaf 9.20 ft | Ма | aximum Co E | | 28.4 kaf 7.00 ft | M: | inimum Co E | | 93.6 kaf 7.00 ft | |
|------------------------|-----|--------|-----------------|---------|---------------------|--------|----------------|--------|---------------------|--------|----------------|--------|---------------------|---------|
| 20 | 007 | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Total |
| 1 | kaf | 44.6 | 65.8 | 69.6 | 73.2 | 66.4 | 45.5 | 30.7 | 29.8 | 30.7 | 30.8 | 28.8 | 30.7 | 546.6 |
| - 1 | cfs | 750 | 1070 | 1170 | 1190 | 1080 | 765 | 499 | 501 | 499 | 501 | 501 | 499 | |
| Buffalo Bill Riv Flo k | | 24.4 | 64.9 | 62.7 | 70.4 | 63.0 | 50.0 | 18.4 | 8.9 | 9.2 | 9.2 | 8.6 | 9.2 | 398.9 |
| Buffalo Bill Riv Flo c | | 410 | 1055 | 1054 | 1145 | 1025 | 840 | 299 | 150 | 150 | 150 | 150 | 150 | 670 A |
| | kaf | 47.8 | 78.5 | 126.8 | -1.5 | 6.8 | 44.5 | 76.4 | 62.7 | 44.9 | 48.3 | 58.9 | 78.3 | 672.4 |
| - | kaf | 116.8 | 209.2 | 259.1 | 142.1 | 136.2 | 140.0 | 125.5 | 101.4 | 84.8 | 88.3 | 96.3 | 118.2 | 1617.9 |
| Monthly Inflow c | cfs | 1963 | 3402 | 4354 | 2311 | 2215 | 2353 | 2041 | 1704 | 1379 | 1436 | 1674 | 1922 | |
| Turbine Release k | kaf | 85.6 | 99.1 | 136.6 | 146.4 | 145.5 | 133.6 | 118.7 | 129.7 | 134.0 | 134.0 | 125.4 | 134.0 | 1522.6 |
| Bypass/Spill/Waste k | 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 k | kaf | 85.6 | 99.1 | 136.6 | 146.4 | 145.5 | 133.6 | 118.7 | 129.7 | 134.0 | 134.0 | 125.4 | 134.0 | 1522.6 |
| Total Release c | cfs | 1439 | 1612 | 2296 | 2381 | 2366 | 2245 | 1930 | 2180 | 2179 | 2179 | 2180 | 2179 | |
| Spring Flow k | kaf | 4.2 | 4.3 | 4.2 | 4.3 | 4.3 | 4.2 | 4.3 | 4.2 | 4.3 | 4.3 | 4.0 | 4.3 | 50.9 |
| 1 3 | kaf | 0.5 | 11.2 | 21.8 | 27.7 | 26.8 | 18.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 106.8 |
| | | | 100.4 | 140.0 | 150 5 | 140.0 | 100.0 | 100.0 | 122.0 | 120.2 | 100.0 | 100 4 | 120.2 | 1550 5 |
| - | kaf | 89.8 | 103.4 | 140.8 | 150.7 | 149.8 | 137.8 | 123.0 | 133.9 | 138.3 | 138.3 | 129.4 | 138.3 | 1573.5 |
| | cfs | 1509 | 1682 | 2366 | 2451 | 2436 | 2316 | 2000 | 2250 | 2249 | 2249 | 2250 | 2249 | 1466 8 |
| | kaf | 89.3 | 92.2 | 119.0 | 123.0 | 123.0 | 119.0 | 123.0 | 133.9 | 138.3 | 138.3 | 129.4 | 138.3 | 1466.7 |
| | cfs | 1501 | 1499 | 2000 | 2000 | 2000 | 2000 | 2000 | 2250 | 2249 | 2249 | 2250 | 2249 | 1466 8 |
| Min Release k | kaf | 89.3 | 92.2 | 119.0 | 123.0 | 123.0 | 119.0 | 123.0 | 133.9 | 138.3 | 138.3 | 129.4 | 138.3 | 1466.7 |
| | kaf | | | | 1070.0 | | | | | | | | | |
| | kaf | 829.4 | 939.5 | 1062.0 | 1057.7 | 1048.4 | 1054.8 | 1061.6 | 1033.3 | 984.1 | 938.4 | 909.3 | 893.5 | |
| | | | | 3639.35 | | | 3638.77 | | 3636.97 | | | | 3622.52 | |
| Net Change Content k | kaf | 31.2 | 110.1 | 122.5 | -4.3 | -9.3 | 6.4 | 6.8 | -28.3 | -49.2 | -45.7 | -29.1 | -15.8 | 95.3 |
| Yellowtail Power 20 | 007 | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Total |
| Turbine Release k | kaf | 85.6 | 99.1 | 136.6 | 146.4 | 145.5 | 133.6 | 118.7 | 129.7 | 134.0 | 134.0 | 125.4 | 134.0 | 1522.6 |
| Generation g | gwh | 32.220 | 38.285 | 54.850 | 59.849 | 59.362 | 54.483 | 48.502 | 52.828 | 53.939 | 53.133 | 49.110 | 52.076 | 608.637 |
| End-Month Power Cap | mw | 262.6 | 275.6 | 286.9 | 286.5 | 285.7 | 286.3 | 286.8 | 284.5 | 280.0 | 275.5 | 272.3 | 270.6 | |
| % Max Gen | | 16 | 18 | 26 | 28 | 28 | 26 | 23 | 25 | 25 | 25 | 25 | 24 | |
| Ave kwh/af | | 376 | 386 | 402 | 409 | 408 | 408 | 409 | 407 | 403 | 397 | 392 | 389 | 400 |
| Upstream Generation g | qwh | 11.275 | 24.957 | 25.052 | 27.142 | 24.585 | 19.335 | 8.163 | 4.244 | 4.423 | 4.454 | 4.184 | 4.500 | 162.314 |
| | _ | 43.495 | 63.242 | 79.902 | 86.991 | 83.947 | 73.818 | 56.665 | 57.072 | 58.362 | 57.587 | 53.294 | | 770.951 |
| | | | | | | | | | | | | | | |





BIGHORN LAKE

WATER YEAR 2007