USDA United States Department of Agriculture

Natural Resources Conservation Service

Wyoming Basin Outlook Report April 1, 2003

Basin Outlook Reports
and
Federal - State - Private
Cooperative Snow Surveys

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How forecasts are made

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snow courses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be either above or below, the predicted value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making their operational decisions. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

Wyoming Water Supply Outlook Report

General

Precipitation, generally in the form of snow, fell at an above average rate this past month. However, snow water equivalent (SWE) across the state is below normal for this time of the year. SWE average for the State is about 96 percent of normal for this time of the year. Precipitation for the month was above average, precipitation varied from 1 percent above normal to 104 percent above normal. Except for the northwest and north central part of the State, basins report year-to-date precipitation below average. Reservoir levels vary from below average to average – average to above average in the northeast. Many of the larger reservoirs are below average. Generally, forecast runoff is well below average. Forecast runoff varies from 24 to 101 percent of average. There may be some direct diversion irrigated areas that will be significantly short of water. In some cases, reservoirs may not fill with the spring runoff, especially in the eastern portion of the State.

Snowpack

Snowfall has occurred at an above average rate during this past month. Although conditions did improve greatly, SWE is below normal in some portions for some portions of the State. SWE in the northwestern portion of the State is now at 94 percent of average (103 percent of last year). Northeast Wyoming SWE is currently about 105 percent of average (131 percent of last year). The state's southeast portion is currently about 96 percent of average SWE (146 percent of last year). And the southwest is about 90 percent of average (119 percent of last year).

Precipitation

March precipitation was generally very good across the State. The entire State received above average precipitation for the month. The northeast and the southwest were just above average while the rest of the State was received well above average Departures from normal for the year range from +01, in the Upper Bear, to +104 in the Shoshone and Clarks Fork. The State averages almost 6 percent below average for the year.

Basin	Departure from normal	Basin	Departure from normal
Snake River	+39%	Upper North Platte River	+49%
Yellowstone & Madison	+62%	Lower North Platte	+58%
Wind River	+51%	Little Snake River	+22%
Big Horn	+46%	Upper Green River	+62%
Shoshone & Clarks Fork	+104%	Lower Green River	+16%
Powder & Tongue River	+62%	Upper Bear River	+01%
Belle Fourche & Cheyenne	+06%		

Streams

Stream flow yield is expected to be below average to much below average across the State. Most probable yield for the State is forecast to be about 71 percent of average. The northwest part of the State is expected to yield about 75 percent of normal -- yield estimates vary from 51 to 89 percent of normal. Yield from the northeast portion of Wyoming will be below average (about 81 percent of average) -- yield estimates vary from 51 to 101 percent of average for the various forecast points. Runoff in the southeast portion of the state will be about 60

percent of normal -- yield estimates range from 24 to 76 percent of normal. Runoff in the southwest portion of Wyoming varies from 39 to 89 percent of average -- mean estimated yield for the forecast points in southwest Wyoming is about 70 percent of average.

Reservoirs

Reservoir storage varies from above average to well below average for this time of the year. See following table for further information about reservoir storage.

Major Reservoirs in Wyoming

BARE - DATA CURRENT AS OF:04/08/03 06:08:35

BASIN WIDE

RESERVOIR SUMMARY

FOR THE END OF MARCH 2003

BASIN AREA RESERVOIR	CURRENT AS % CAPACITY	LAST YR AS % CAPACITY	AVERAGE AS % CAPACITY	CURRENT AS % AVERAGE	CURRENT AS % LAST YR
WYOMING AND SURROUNDING STATES					
SHADEHILL	49	61	78	63	80
ANGOSTURA	79	87	90	88	92
DEERFIELD	101	98	89	113	103
PACTOLA	88	96	85	104	92
BELLE FOURCHE	73	88	73	100	84
JACKSON LAKE	35	20	57	61	178
GRASSY LAKE	85	64	81	105	132
FONTENELLE	53	39	41	129	136
BIG SANDY	20	13	54	37	151
EDEN			NO REPORT		
PILOT BUTTE	77	79	69	111	97
BULL LAKE	29	18	56	51	157
BOYSEN	48	48	80	60	101
BUFFALO BILL	53	44	60	88	119
KEYHOLE	68	80	59	115	84
SEMINOE	18	41	49	36	43
PATHFINDER	33	54	73	45	61
ALCOVA	86	85	87	99	101
GLENDO	51	73	84	60	70
GUERNSEY	37	39	45	82	95
WHEATLAND #2	17	19	55	35	100
PALISADES	45	41	67	67	109
HEBGEN LAKE	74	74	69	108	100
ENNIS LAKE	73	71	76	96	102
BIGHORN LAKE	45	49	60	75	92
TONGUE RIVER	61	34	38	159	177
FLAMING GORGE	70	75	78	90	93
WOODRUFF NARROWS	28	16	57	49	172
TOTAL OF 26 RESERVOIRS	52	56	68	76	93

Basin Summary of Snow Course Data

LOST - Data current as of:04/07/03 06:00:42

B A S I N S U M M A R Y O F
S N O W C O U R S E D A T A

APRIL 2003

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
WYOMING Snow Course and SNOTEL Stations						
ALBANY	9400	3/26/03	51	13.6	8.2	13.7
ASTER CREEK	7750	3/31/03	72	26.0	27.0	30.5
BALD MOUNTAIN SNOTEL	9380	4/01/03	---	19.4	15.8	19.9
BASE CAMP SNOTEL	7030	4/01/03	---	20.6	13.3	18.1
BATTLE MTN. SNOTEL	7440	4/01/03	---	11.8	10.5	11.0
BEARLODGE DIVIDE	4680	3/26/03	0	.0	1.9	1.3
BEARTOOTH LK. SNOTEL	9280	4/01/03	---	26.5	20.9	23.6
BEAR TRAP SNOTEL	8200	4/01/03	---	7.4	5.8	5.2
BIG GOOSE	7760	3/29/03	45	9.8	4.7	7.1
BIG GOOSE SNOTEL	7760	4/01/03	47	12.5	8.3	10.7
BIG PARK	8620	3/26/03	54	16.3	14.5	19.4
BIG SANDY SNOTEL	9080	4/01/03	47	11.9	12.1	14.7
BLACKWATER SNOTEL	9780	4/01/03	---	26.1	21.0	24.8
BLIND BULL SNOTEL	8900	4/01/03	78	23.9	21.0	28.3
BLIND PARK SNOTEL	6870	4/01/03	---	8.2	6.3	8.7
BLUE RIDGE	9620	3/28/03	58	11.0	7.4	11.7
BONE SPGS. SNOTEL	9350	4/01/03	---	17.3	13.0	16.4
BROOKLYN LK. SNOTEL	10220	4/01/03	---	18.0	14.2	23.9
BRYAN FLAT	6420	3/24/03	17	6.6	8.2	8.7
BUCK CREEK	7960	3/29/03	40	10.3	6.0	10.6
BURGESS JCT. SNOTEL	7880	4/01/03	---	12.5	8.9	11.7
BURROUGHS CRK SNOTEL	8750	4/01/03	---	18.2	14.2	14.8
CANYON SNOTEL	8090	4/01/03	---	13.4	12.9	13.9
CARTER MOUNTAIN	7950	3/31/03	29	6.0	2.4	4.9
CASPER MTN. SNOTEL	7850	4/01/03	---	14.7	9.4	14.6
CASTLE CREEK	8400	3/27/03	25	4.8	4.0	4.8
CCC CAMP	7000	3/27/03	37	11.1	10.5	12.7
CHALK CK #1 SNOTEL	9100	4/01/03	57	18.7	20.9	24.9
CHALK CK #2 SNOTEL	8200	4/01/03	46	15.1	16.3	16.2
CLOUD PEAK SNOTEL	9850	4/01/03	---	16.5	13.1	13.5
COLE CANYON SNOTEL	5910	3/27/03	15	4.9	6.2	--
COLD SPRINGS SNOTEL	9630	4/01/03	32	8.8	5.3	9.0
COTTONWOOD CR SNOTEL	7700	4/01/03	---	23.2	17.9	24.2
DARBY CANYON	8250	3/31/03	65	22.7	18.6	24.5
DEER PARK SNOTEL	9700	4/01/03	52	15.1	11.8	17.1
DITCH CREEK	6870	3/25/03	11	3.5	3.4	4.1
DIVIDE PEAK SNOTEL	8860	4/01/03	---	21.7	14.1	20.0
DOME LAKE SNOTEL	8880	4/01/03	---	14.6	10.4	12.6
DU NOIR	8760	3/26/03	26	5.4	6.2	8.3
EAST RIM DIV SNOTEL	7930	4/01/03	---	10.9	10.5	13.3
ELBO RANCH	7100	4/01/03	32	10.1	10.2	11.6
ELKHART PARK SNOTEL	9400	4/01/03	---	13.6	10.1	13.6
EVENING STAR SNOTEL	9200	4/01/03	---	30.4	24.0	30.1

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
FOUR MILE MEADOWS	7860	4/01/03	40	12.3	9.0	12.8
FOXPARK	9060	3/26/03	34	8.1	4.7	7.6
GEYSER CREEK	8500	3/26/03	22	4.8	5.0	7.1
GLADE CREEK	7040	3/31/03	55	18.7	19.0	24.3
GRANITE CRK SNOTEL	6770	4/01/03	---	14.9	12.6	18.6
GRANNIER MEADOWS	8860	3/28/03	48	10.8	7.7	14.1
GRASSY LAKE SNOTEL	7270	4/01/03	85	32.8	28.5	36.1
GRAVE SPRINGS SNOTEL	8550	4/01/03	---	7.0	7.1	9.4
GREYS BOUNDARY	5720	3/27/03	23	7.9	10.5	11.3
GROS VENTRE SNOTEL	8750	4/01/03	47	13.1	13.0	14.4
GROVER PARK DIVIDE	7000	3/27/03	30	8.7	9.0	11.2
HAIRPIN TURN	9480	3/31/03	48	13.01	8.6	16.3
HANSEN S.M. SNOTEL	8360	4/01/03	---	9.7	5.4	6.5
HAMS FORK SNOTEL	7840	4/01/03	---	11.9	10.0	12.0
HASKINS CREEK	8980	3/27/03	98	31.4	23.0	30.0
HOBBS PARK SNOTEL	10100	4/01/03	---	14.7	11.1	15.1
HUCKLEBERRY DIVIDE	7300	3/31/03	57	18.8	16.6	21.3
INDIAN CREEK SNOTEL	9430	4/01/03	---	24.0	21.3	28.2
JACKPINE CREEK	7350	3/31/03	58	20.2	18.4	22.2
KELLEY R.S. SNOTEL	8180	4/01/03	---	13.8	12.7	17.1
KENDALL R.S. SNOTEL	7740	4/01/03	---	13.1	10.1	14.6
KIRWIN SNOTEL	9550	4/01/03	48	12.3	9.8	11.5
LAKE CAMP	7780	3/31/03	32	8.8	8.9	10.4
LA PRELE SNOTEL	8380	4/01/03	---	8.8	6.7	11.0
LARSEN CREEK	9020	3/27/03	37	9.6	9.1	12.7
LEWIS LAKE SNOTEL	7850	4/01/03	---	34.6	29.6	35.8
LEWIS LAKE DIVIDE	7850	3/31/03	102	40.3	36.1	42.4
LIBBY LODGE	8750	3/31/03	33	10.31	6.5	10.9
LITTLE BEAR RUN	6240	3/26/03	8	2.4	2.4	2.4
LITTLE WARM SNOTEL	9370	4/01/03	---	10.2	10.3	12.0
LOOMIS PARK SNOTEL	8240	4/01/03	---	18.5	16.0	17.5
LUPINE CREEK	7380	3/27/03	31	7.2	7.7	9.9
MALLO	6420	3/26/03	19	5.9	4.4	6.5
MARQUETTE SNOTEL	8760	4/01/03	---	13.2	7.1	9.0
MEDICINE LODGE LAKES	9340	3/28/03	47	12.0	7.8	11.1
MIDDLE FORK	7420	3/28/03	37	7.3	3.8	6.0
MIDDLE POWDER SNOTEL	7760	4/01/03	---	8.8	6.8	11.8
MORAN	6750	4/01/03	25	8.8	9.4	12.4
MOSS LAKE	9800	3/28/03	73	21.5	12.0	23.6
NEW FORK SNOTEL	8340	4/01/03	---	10.9	9.0	11.3
NORTH BARRETT CREEK	9400	3/28/03	80	24.6	17.0	21.5
NORTH FRENCH SNOTEL	10130	4/01/03	---	31.1	15.9	29.5
NORTH RAPID CK SNTL	6130	4/01/03	---	5.9	6.4	8.3
NORTH TONGUE	8450	3/28/03	52	13.7	8.1	13.0
OLD BATTLE SNOTEL	9920	4/01/03	---	29.3	20.4	32.4
OLD FAITHFUL	7400	3/30/03	37	10.7	12.6	13.9
OWL CREEK SNOTEL	8980	4/01/03	---	7.1	4.6	5.6
PARKERS PEAK SNOTEL	9400	4/01/03	75	25.0	19.8	21.9
PHILLIPS BENCH SNTL	8200	4/01/03	72	25.2	21.8	29.2
POCKET CREEK	9350	3/27/03	44	11.7	9.9	13.2

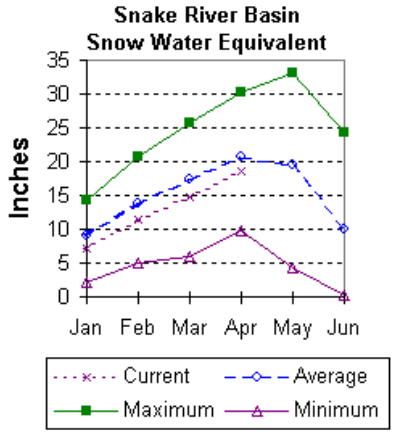
SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
POLE MOUNTAIN	8700	3/31/03	38	9.5	6.4	8.4
POWDER RVR.PASS SNTL	9480	4/01/03	---	10.9	8.7	10.9
PURGATORY GULCH	8970	3/27/03	46	12.8	10.4	11.8
RANGER CREEK	8120	3/28/03	34	10.0	6.4	8.9
RENO HILL SNOTEL	8500	4/01/03	---	12.8	9.7	14.3
REUTER CANYON	6280	3/27/03	12	3.4	7.2	8.6
ROWDY CREEK	8300	3/28/03	68	20.8	17.1	21.6
RYAN PARK	8400	3/28/03	41	12.6	9.4	10.8
SAGE CK BASIN SNTL	7850	4/01/03	---	11.3	9.8	11.6
SALT RIVER SNOTEL	7600	4/01/03	---	12.0	11.2	14.6
SAND LAKE SNOTEL	10050	4/01/03	---	25.3	21.2	32.7
SANDSTONE RS SNOTEL	8150	4/01/03	---	13.6	8.0	14.8
SHELL CREEK SNOTEL	9580	4/01/03	---	15.9	12.7	14.9
SHERIDAN R.S.	7750	3/26/03	22	5.0	5.6	5.8
SNAKE RV STA SNOTEL	6920	3/31/03	47	16.5	16.2	19.2
SNIDER BASIN SNOTEL	8060	4/01/03	48	13.7	9.8	14.7
SNOW KING MTN	7660	3/24/03	33	10.2	12.1	14.7
SOUTH BRUSH SNOTEL	8440	4/01/03	---	13.9	10.7	13.2
SOUTH PASS SNOTEL	9040	4/01/03	---	14.5	11.5	16.7
SPRING CRK. SNOTEL	9000	4/01/03	79	25.9	20.4	26.9
ST LAWRENCE ALT SNTL	8620	4/01/03	---	8.0	4.7	7.4
SUCKER CREEK SNOTEL	8880	4/01/03	---	15.2	10.8	11.8
SYLVAN LAKE SNOTEL	8420	4/01/03	---	21.0	18.6	22.8
SYLVAN ROAD SNOTEL	7120	4/01/03	---	14.0	10.6	12.9
T CROSS RANCH	7900	3/27/03	33	8.0	7.0	7.2
TETON PASS W.S.	7740	4/01/03	71	26.0	21.0	27.6
THUMB DIVIDE SNOTEL	7980	4/01/03	---	15.6	15.4	19.2
THUMB DIVIDE	7980	3/31/03	45	13.9	14.9	19.1
TIE CREEK SNOTEL	6870	4/01/03	28	8.7	5.7	6.1
TIMBER CREEK SNOTEL	7950	4/01/03	---	6.5	3.4	5.8
TOGWOTEE PASS SNOTEL	9580	4/01/03	79	24.4	21.2	25.2
TOWNSEND CRK SNOTEL	8700	4/01/03	---	10.6	5.8	8.8
TRIPLE PEAK SNOTEL	8500	4/01/03	---	25.2	20.4	25.2
TURPIN MEADOWS	6900	4/01/03	33	10.5	7.4	10.2
TWO OCEAN SNOTEL	9240	4/01/03	---	32.3	27.4	28.4
UPPER SPEARFISH	6500	3/25/03	20	5.8	3.7	6.7
WEBBER SPRING SNOTEL	9250	4/01/03	---	22.1	15.8	26.4
WHISKEY PARK SNOTEL	8950	4/01/03	---	27.3	20.0	30.4
WILLOW CREEK SNOTEL	8450	4/01/03	---	29.8	23.9	30.6
WINDY PEAK SNOTEL	7900	4/01/03	---	10.1	5.7	8.1
WOLVERINE SNOTEL	7650	4/01/03	34	12.7	7.2	11.6
WOOD ROCK G.S.	8440	3/29/03	53	12.0	6.4	10.2
YOUNTS PEAK SNOTEL	8350	4/01/03	56	17.3	14.3	17.3

(d) denotes discontinued site.

Snake River Basin (1)

Snow

The Snake River basin snow water equivalent (SWE) is below normal. Snake above Jackson Lake is 90 percent of average (108% of last year at this time). Pacific Creek is 105 percent of average (123% of last year at this time). Gros Ventre River is 88 percent of average (102% of last year at this time). Hoback River is 87 percent of average (108% of last year at this time), Greys River is 92 percent of average (117% of last year at this time). Salt River is 91 percent of average (117% of last year at this time). Snake River Basin above Palisades is 90 percent of average (112% of last year at this time). See the Basin Summary of Snow Courses at the beginning of this report for a detailed listing of snow course information.

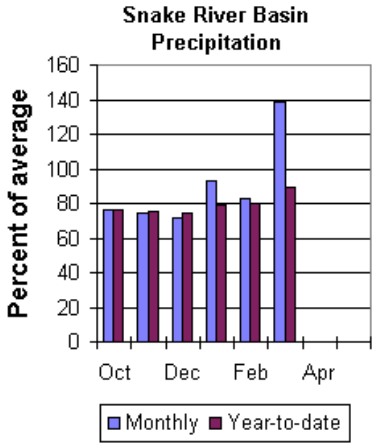


Precipitation.

Precipitation across the basin was near average last month. Monthly precipitation, for the basin, was 139 percent of average (133% of last year). Last months percentages range from 73 to 194 percent of average. Water-year-to-date precipitation is 89 percent of normal for the Snake River basin (107 percent of last year at this time) Year-to-date percentages range from 68 to 99 percent of average.

Reservoir.

Usable reservoir storage - usable storage excludes dead storage - is as follows. Grassy Lake storage is about 85 percent of capacity (105 percent of average). Grassy lake is currently storing 12,900 acre feet compared to 9,800 last year. Jackson Lake storage is about 35 percent of capacity (61 percent of average). Jackson Lake is currently storing about 294,80000 acre feet compared to 165,600 acre feet last year. Palisades Reservoir storage is about 45 percent of capacity (67 percent of average). Palisades is currently storing about 628,600 acre feet compared to 577,400 acre feet last year.



Streamflow.

The most probable runoff, based on the 50 percent chance yield, for April through September runoff is forecast below average for the basin. The Snake near Moran is expected to yield 775,000 acre-feet (86 percent of normal). Yield from the Snake River above Palisades Reservoir is estimated to be 2,320,000 acre-feet (85 percent of normal). The 50 percent chance yield near Heise is expected to be 3,320,000 acre-feet (80 percent of normal). Pacific Creek at Moran is expected to yield about 156,000 acre-feet (88 percent of average). Greys River above Palisades Reservoir is estimated to yield 310,000 acre-feet (79 percent of normal). Salt River near Etna is estimated to have a yield of 290,000 acre-feet (69 percent of normal).

SNAKE RIVER BASIN
Streamflow Forecasts - April 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	50% (Most Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
SNAKE near Moran (1,2)	APR-JUL	580	660	700	86	740	820	815
	APR-SEP	635	730	775	86	820	915	904
SNAKE above Palisades (2)	APR-JUL	1800	1930	2020	85	2110	2240	2370
	APR-SEP	2050	2210	2320	85	2430	2590	2735
PALISADES RESERVOIR INFLOW (1,2)	APR-JUL	2210	2530	2680	81	2830	3150	3331
	APR-SEP	2580	2950	3120	81	3290	3660	3875
SNAKE near Heise (2)	APR-JUL	2440	2680	2840	80	3000	3240	3561
	APR-SEP	2850	3130	3320	80	3510	3790	4159
PACIFIC CREEK at Moran	APR-JUL	121	138	150	88	162	179	171
	APR-SEP	126	144	156	88	168	186	178
GREYS above Palisades	APR-JUL	215	245	265	78	285	315	338
	APR-SEP	255	290	310	79	330	365	394
SALT near Etna	APR-JUL	168	208	235	69	263	303	342
	APR-SEP	212	260	290	69	320	370	419

SNAKE RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
GRASSY LAKE	15.2	12.9	9.8	12.3
JACKSON LAKE	847.0	294.8	165.6	486.6
PALISADES	1400.0	628.6	577.4	941.5

SNAKE RIVER BASIN
Watershed Snowpack Analysis - April 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
SNAKE above Jackson Lake	9	108	90
PACIFIC CREEK	3	123	105
GROS VENTRE RIVER	4	102	88
HOBACK RIVER	6	108	87
GREYS RIVER	5	117	92
SALT RIVER	5	117	91
SNAKE above Palisades	30	112	90

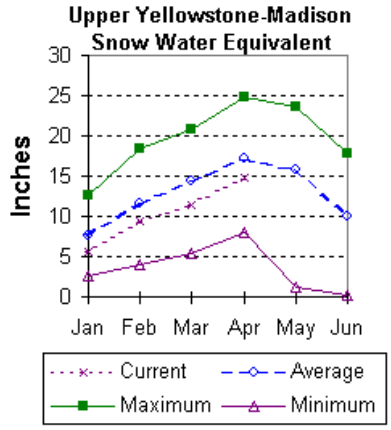
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Upper Yellowstone and Madison River Basins (2)

Snow

Snowfall in these basins this year has been below average. Snow water equivalent (SWE) is about 75 percent of average (85 percent of last year) in the Madison drainage -- Snow monitoring devices are at lower elevations in the Madison than upper Yellowstone River basin. SWE in the Yellowstone drainage is about 97 percent of average (111 percent of last year at this time). See the "Snow Course Basin Summary" at the beginning of this document for more details on specific sites.

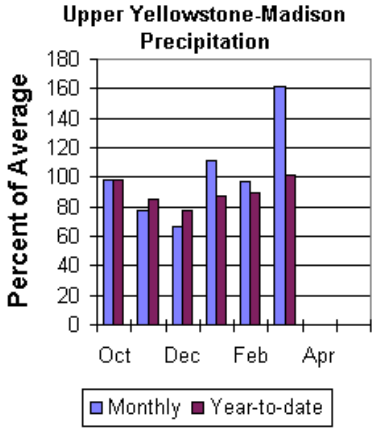


Precipitation

Last month's precipitation in the Madison and Yellowstone drainage was about 162 percent of average for the 5 reporting stations -- percentage range was from 78 to 200 percent of average. Water-year-to-date precipitation is about 101 percent of average (108 percent of last year's amount). Year to date percentage ranges from 84 to 125 percent

Reservoir

Current usable storage for Ennis Lake is about 29,900 acre-feet (73 percent of capacity) – 96 percent of average. Hebgen Lake is storing about 280,400 acre-feet of water (74 percent of capacity) – 108 percent of average. Hebgen Lake is storing about 102 percent and Ennis Lake was storing about 100 percent of last year's volume.



Streamflow

All the following forecasts are based on the 50 percent chance runoff for the April through September runoff period. Yellowstone at Lake Outlet is expected to yield about 630,000 acre feet (78 percent of normal). Yellowstone at Corwin Springs will yield about 1,650,000 acre-feet (84 percent of normal). Yellowstone near Livingston will yield about 1,930,000 acre feet (85 percent of normal). Hebgen lake inflow is estimated to be 345,000 acre feet (69 percent of normal). See the following page for detailed runoff volumes.

UPPER YELLOWSTONE & MADISON RIVER BASINS
Streamflow Forecasts - April 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
YELLOWSTONE at Lake Outlet	APR-JUL	375	435	475	81	515	575	590
	APR-SEP	505	580	630	78	680	755	805
YELLOWSTONE RIVER at Corwin Springs	APR-JUL	1160	1300	1400	85	1500	1640	1650
	APR-SEP	1370	1530	1650	84	1770	1930	1970
YELLOWSTONE RIVER near Livingston	APR-JUL	1430	1550	1630	86	1710	1830	1900
	APR-SEP	1690	1830	1930	85	2030	2170	2280
HEBGEN Reservoir Inflow	APR-JUL	200	240	265	68	290	330	390
	APR-SEP	270	315	345	69	375	420	500

UPPER YELLOWSTONE & MADISON RIVER BASINS
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
ENNIS LAKE	41.0	29.9	29.2	31.2
HEBGEN LAKE	377.5	280.4	279.9	259.6

UPPER YELLOWSTONE & MADISON RIVER BASINS
Watershed Snowpack Analysis - April 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
MADISON RIVER in WY	8	85	75
YELLOWSTONE RIVER in WY	12	111	97

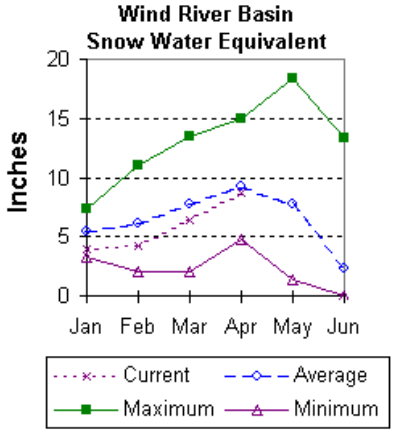
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Wind River Basin (3)

Snow

The last couple months snow water equivalent (SWE) has improved significantly. SWE in the Wind River above Dubois is 95 percent of average (112 percent of last year). The Little Wind SWE is 101 percent of average water content (144 percent of last year), and the Popo Agie drainage SWE is about 94 percent of average (142 percent of last year). The Wind River basin, above Boysen Reservoir, SWE is about 95 percent of average (about 127 percent of last year). See the Basin Summary of Snow Course Data at the front of this report for details.

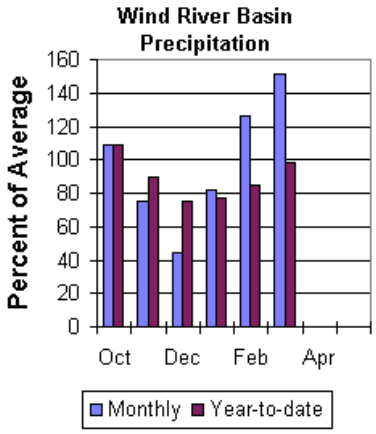


Precipitation

Last month's precipitation in the basin varied from 23 to 335 percent of average. Precipitation for the basin was about 151 percent of average for the 8 reporting stations. Water year-to-date precipitation is 98 percent of normal. The current water-year-to-date average is about 132 percent of last year at this time. Year to date figures range from 80 to 119 percent of average.

Reservoirs

Current usable storage varies from 29 to 77 percent of average. Bull Lake is currently storing about 43,800 acre feet (18 percent of capacity) -- normally the reservoir is at 56 percent of capacity at this time of the year. Boysen Reservoir is storing about 48 percent of capacity 285,900 acre feet) -- normally the reservoir is at 93 percent of capacity at this time of the year. Pilot Butte is storing 77 percent of capacity (24,300 acre feet) -- normally the reservoir is at 69 percent of capacity at this time of the year.



Streamflow

Water supply is estimated to be much below normal this year. The following values reflect the 50 percent chance yields for the April through September runoff period. Dinwoody Creek near Burris is estimated to yield 67,000 acre feet (72 percent of average). The Wind River above Bull Lake Creek is expected to yield 420,000 acre feet (79 percent of average). Wind River at Riverton will yield about 405,000 acre feet (63 percent of average). Boysen Reservoir inflow will yield about 435,000 acre feet (54 percent of normal). Bull Lake Creek near Lenore is expected to yield about 120,000 acre feet (66 percent of average). Little Popo Agie River near Lander is expected to yield about 35,000 acre feet (66 percent of average). South Fork of Little Wind near Fort Washakie will yield about 56,000 acre feet (67 percent of average). Little Wind River near Riverton will yield about 215,000 acre feet (68 percent of average).

WIND RIVER BASIN
Streamflow Forecasts - April 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	50% (Most Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
DINWOODY CREEK nr Burris	APR-JUL	27	37	44	66	51	61	67
	APR-SEP	46	58	67	72	76	88	94
WIND RIVER abv Bull Lake Cr (2)	APR-JUL	230	290	330	76	370	430	435
	APR-SEP	310	375	420	79	465	530	535
BULL LAKE CR near Lenore (2)	APR-JUL	59	84	100	68	116	141	148
	APR-SEP	68	99	120	66	141	172	182
WIND RIVER at Riverton (2)	APR-JUL	155	270	350	64	430	545	545
	APR-SEP	200	320	405	63	490	610	640
LT POPO AGIE RIVER nr Lander	APR-JUL	13.8	23	30	65	37	46	46
	APR-SEP	17.8	28	35	66	42	52	53
SF LT WIND nr Fort Washakie	APR-JUL	25	39	48	66	57	71	73
	APR-SEP	30	45	56	67	67	82	84
LT WIND RIVER nr Riverton	APR-JUL	50	134	190	68	245	330	280
	APR-SEP	67	155	215	68	275	365	315
BOYSEN RESERVOIR Inflow (2)	APR-JUL	134	295	405	57	515	675	717
	APR-SEP	139	315	435	54	555	730	809

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

WIND RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BULL LAKE	151.8	43.8	27.9	85.3
BOYSEN	596.0	285.9	283.7	475.6
PILOT BUTTE	31.6	24.3	25.1	21.9

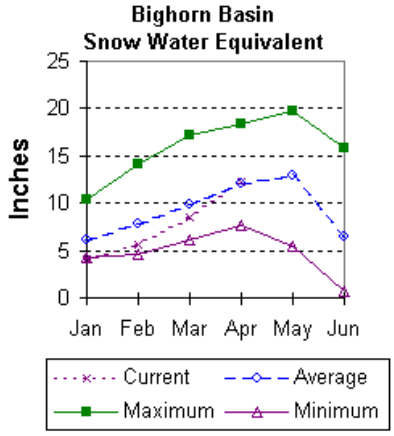
WIND RIVER BASIN
Watershed Snowpack Analysis - April 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
WIND RIVER above Dubios	7	110	95
LITTLE WIND	2	144	101
POPO AGIE	7	142	94
WIND above Boysen Resv	14	125	95

Bighorn River Basin (4)

Snow

Snowpack in this basin is near average for this time of year. The Nowood River drainage SWE is 94 percent of average (136 percent of last year). Greybull River SWE is 109 percent of average (142 percent of last year). Shell Creek SWE is 104 percent of average (131 percent of last year). The basin SWE, as a whole, is currently 102 percent of average (134 percent of last year). For more information see Basin Summary of Snow Courses at beginning of report.

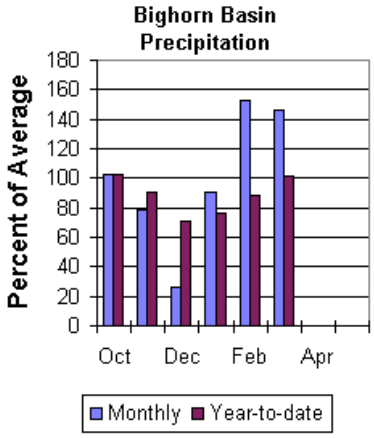


Precipitation

Last month's precipitation was 146 percent of the monthly average (167 percent of last year) for the 10 reporting sites. Sites ranged from 82 to 335 percent of average for the month. Year-to-date precipitation is 101 percent of normal; that is 124 percent of last year at this time. Year to date percentages range from 60 to 119.

Reservoir

Boysen Reservoir usable storage is currently 285,900-acre feet (60 percent of average) - usable storage excludes dead storage. Bighorn Lake usable storage is now at 75 percent of average (610,900-acre feet). Boysen is currently storing 101 percent of last year at this time and Big Horn Lake is storing 92 percent of last year's volume.



Streamflow

The 50 percent chance April through September runoff is anticipated to be below normal. Boysen Reservoir inflow is forecast to be about 435,000-acre feet (54 percent of average). Greybull River near Meeteesee should yield 140,000-acre feet (70 percent of average). Shell Creek near Shell should yield 60,000-acre feet (83 percent of average) and Bighorn River at Kane should yield 565,000-acre feet (51 percent of average).

BIGHORN RIVER BASIN
Streamflow Forecasts - April 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	50% (Most Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
BOYSEN RESERVOIR Inflow (2)	APR-JUL	134	295	405	57	515	675	717
	APR-SEP	139	315	435	54	555	730	809
GREYBULL RIVER nr Meeteetse	APR-JUL	75	93	105	71	117	135	148
	APR-SEP	99	124	140	70	156	181	200
SHELL CREEK nr Shell	APR-JUL	40	46	50	83	54	60	60
	APR-SEP	49	56	60	83	64	71	72
BIGHORN RIVER at Kane (2)	APR-JUL	290	445	550	55	655	810	1000
	APR-SEP	275	445	565	51	685	855	1110

BIGHORN RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BOYSEN	596.0	285.9	283.7	475.6
BIGHORN LAKE	1356.0	610.9	662.0	809.9

BIGHORN RIVER BASIN
Watershed Snowpack Analysis - April 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
NOWOOD RIVER	3	136	94
GREYBULL RIVER	2	142	109
SHELL CREEK	4	131	104
BIGHORN (Boysen-Bighorn)	9	134	102

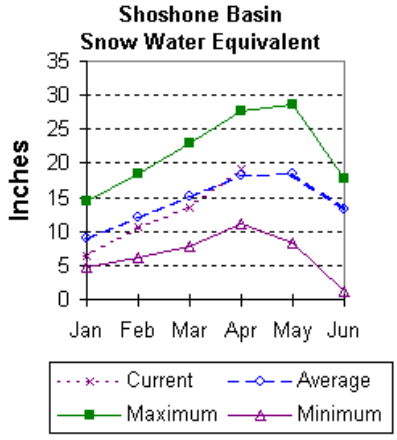
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Shoshone and Clarks Fork River Basin (5)

Snow

Snow Water Equivalent (SWE) is 105 percent of average (131 percent of last year) in the Shoshone River basin. The Clarks Fork River basin SWE is 107 percent of average (127 percent of last year). For more information see the Basin Summary of Snow Course Data at the beginning of this report.

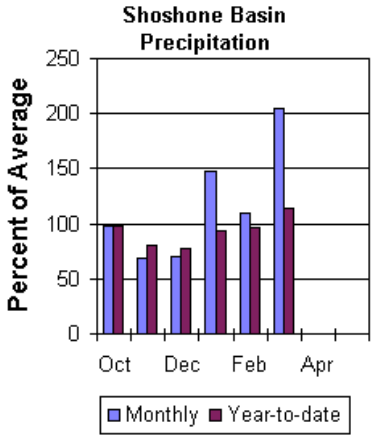


Precipitation

Precipitation for the month was 204 percent of normal for the 8 reporting stations. Percentages ranged from 153 to 404 percent of average. The basin year-to-date precipitation is now 104 percent of average (115 percent of last year). Year-to-date percentages range from 97 to 142 percent of average.

Reservoir

Current usable storage in Buffalo Bill Reservoir is 88 percent of average (119 percent of last year's storage) – the reservoir is about 53 percent of capacity. Usable storage excludes dead storage. Currently, about, 342,300 acre-feet are stored in the reservoir compared to 287,500 acre feet last year. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.



Streamflow

The fifty percent yield (April through September period) for North Fork Shoshone River at Wapiti is expected to be 440,000 acre-feet (85 percent of average). South Fork of the Shoshone River near Valley is estimated to yield of 235,000 acre-feet (89 percent of average), and South Fork above Buffalo Bill Reservoir is expected to be 200,000 acre-feet (89 percent of average). At the Buffalo Bill Reservoir, the fifty percent chance yield for the Shoshone River is expected to be about 705,000 acre-feet (88 percent of average). The fifty-percent chance yield for the Clarks Fork of the Yellowstone near Belfry, Montana is expected to be about 465,000 acre-feet (78 percent of average).

SHOSHONE & CLARKS FORK RIVER BASINS
Streamflow Forecasts - April 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	50% (Most Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
NF SHOSHONE RIVER at Wapiti	APR-JUL	330	365	390	85	415	450	460
	APR-SEP	375	415	440	85	465	505	520
SF SHOSHONE RIVER nr Valley	APR-JUL	157	180	195	87	210	235	225
	APR-SEP	190	215	235	89	255	280	265
SF SHOSHONE RIVER abv Buffalo Bill	APR-JUL	114	156	185	86	215	255	215
	APR-SEP	123	169	200	89	230	275	225
BUFFALO BILL DAM Inflow (2)	APR-JUL	480	565	620	86	675	760	720
	APR-SEP	555	645	705	88	765	855	805
CLARKS FORK RIVER nr Belfry	APR-JUL	340	390	425	79	460	510	540
	APR-SEP	375	430	465	78	500	555	595

SHOSHONE & CLARKS FORK RIVER BASINS
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BUFFALO BILL	646.6	342.3	287.5	390.9

SHOSHONE & CLARKS FORK RIVER BASINS
Watershed Snowpack Analysis - April 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
SHOSHONE RIVER	7	131	105
CLARKS FORK in WY	7	127	107

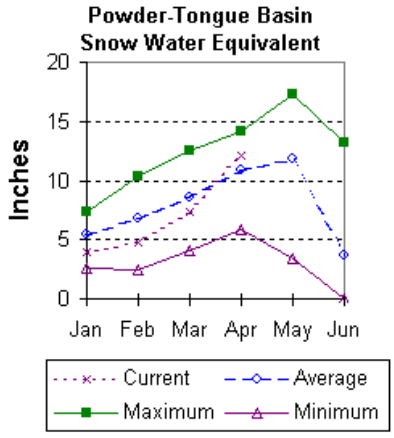
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Powder and Tongue River Basins (6)

Snow

Snow water equivalent (SWE) in the Upper Tongue River drainage is 114 percent of normal (145 percent of last year). The Goose Creek drainage SWE is about 116 percent of average (145 percent of last year). Clear Creek drainage has about 131 percent of normal SWE (142 percent of last year). Crazy Woman Creek SWE is about 100 percent of average (125 percent of last year). SWE in the upper Powder River drainage is 97 percent of average (127 percent of last year). The Powder River basin SWE, in Wyoming, is about 111 percent of average (134 percent of last year). For more information see Basin Summary of Snow Courses at beginning of report.

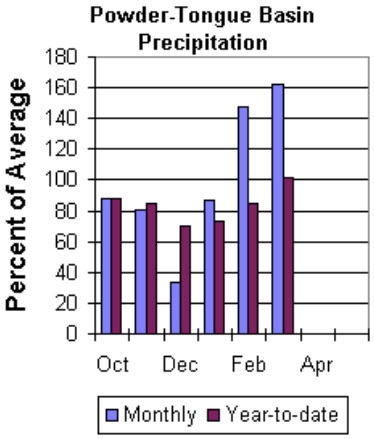


Precipitation

Monthly precipitation was 162 percent of average for the 10 reporting stations. Monthly percentages range from 57 to 267 percent of average. Precipitation for the year ranges from 60 to 132 percent of average at the reporting stations. Year-to-date precipitation is about 102 percent of average in the basin; this is 119 percent of last year at this time.

Reservoir

Tongue River Reservoir usable storage is currently at 159 percent of average storage for this time of year (47,900 acre feet) – the reservoir is about 61 percent of capacity (total capacity is 79,100 acre feet). Last year at this time the reservoir was storing about 27,000 acre feet – average storage is about 30,100 acre feet for this time of the year. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.



Streamflow

The following runoff values are for the 50 percent probability during the April through September forecast period. The estimated yield for Tongue River near Dayton is 85,000-acre feet (78 percent of normal). Tongue river Reservoir inflow is estimated to be 160,000 acre feet (64 percent of average). Middle Fork of the Powder River near Barnum is estimated to yield 9,500-acre feet (51 percent of average). The North Fork of the Powder near Hazelton should yield about 6,800 acre-feet (65 percent of normal). The estimated yield for Clear Creek near Buffalo is 38,000 acre-feet (97 percent of average). Rock Creek near Buffalo will yield about 23,000 acre-feet (96 percent of normal), and Piney Creek at Kearny should yield about 47,000 acre-feet (90 percent of average).

POWDER & TONGUE RIVER BASINS
Streamflow Forecasts - April 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	50% (Most Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
TONGUE RIVER nr Dayton (2)	APR-JUL	61	70	76	79	82	91	96
	APR-SEP	70	79	85	78	91	100	109
TONGUE RIVER RESERVOIR Inflow (2)	APR-JUL	93	121	140	64	159	187	220
	APR-SEP	113	141	160	64	179	205	250
MIDDLE FORK POWDER nr Barnum	APR-JUL	1.9	6.0	8.8	49	11.6	15.7	17.8
	APR-SEP	2.4	6.6	9.5	51	12.4	16.6	18.7
NORTH FORK POWDER nr Hazelton	APR-JUL	4.00	5.40	6.40	67	7.40	8.80	9.60
	APR-SEP	4.2	5.7	6.8	65	7.9	9.4	10.4
CLEAR CREEK nr Buffalo	APR-JUL	25	30	33	97	36	41	34
	APR-SEP	29	34	38	97	42	47	39
ROCK CREEK nr Buffalo	APR-JUL	12.3	16.3	19.0	96	22	26	19.9
	APR-SEP	16.2	20	23	96	26	30	24
PINEY CREEK at Kearny	APR-JUL	20	35	45	92	55	70	49
	APR-SEP	21	37	47	90	57	73	52

POWDER & TONGUE RIVER BASINS
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
TONGUE RIVER	79.1	47.9	27.0	30.1

POWDER & TONGUE RIVER BASINS
Watershed Snowpack Analysis - April 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
UPPER TONGUE RIVER	9	145	114
GOOSE CREEK	2	145	116
CLEAR CREEK	2	142	131
CRAZY WOMAN CREEK	1	125	100
UPPER POWDER RIVER	3	127	97
POWDER RIVER in WY	5	134	111

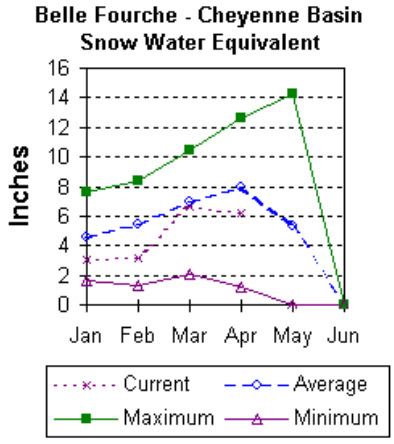
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Belle Fourche and Cheyenne River Basins (7)

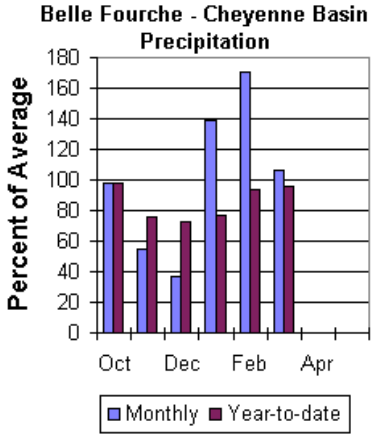
Snow.

The Belle Fourche River Basin snow water equivalent (SWE) is much below average. SWE is currently 78 percent of average snow pack; 104 percent of last years amount at this time. See Basin summary of Snow Course Data at the beginning of this report for a detailed listing.



Precipitation.

Precipitation, for the month of March was 106 percent of average in the Black Hills. Monthly percentages range from 67 to 339 percent. Year-to-date precipitation is 96 percent of average and 113 percent of last year's amount.



Reservoir.

Usable reservoir storage is generally above average in the basin. Angostura is currently storing 88 percent of average (96,800-acre feet), about 79 percent of capacity. Belle Fourche reservoir is storing 100 percent of average (130,600-acre feet), about 73 percent of capacity. Deerfield reservoir is storing 113 percent of average (15,300-acre feet), about 101 percent of capacity. Keyhole reservoir is storing 115 percent of average (131,000-acre feet), 68 percent of capacity. Pactola reservoir is storing 104 percent of average (48,500-acre feet), 88 percent of capacity. Shadehill reservoir is storing 63 percent of average (39,800-acre feet), 49 percent of capacity.

Streamflow

Water supply is estimated to be below normal this year. The following values reflect the 50 percent chance yields for the April through July runoff period. Deerfield Reservoir inflow is forecast at 4,700 acre feet (88 percent of average). Pactola is forecast at 19,000 acre feet (101 percent of average).

BELLE FOURCHE & CHEYENNE RIVER BASINS
Streamflow Forecasts - April 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
DEERFIELD RESERVOIR Inflow	APR-JUL	1.75	3.50	4.70	88	5.90	7.60	5.32
PACTOLA RESERVOIR Inflow	APR-JUL	3.6	12.8	19.0	101	25	34	18.9

BELLE FOURCHE & CHEYENNE RIVER BASINS
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
ANGOSTURA	122.1	96.8	105.7	110.1
BELLE FOURCHE	178.4	130.6	156.4	130.9
DEERFIELD	15.2	15.3	14.9	13.5
KEYHOLE	193.8	131.0	155.9	113.5
PACTOLA	55.0	48.5	53.0	46.8
SHADEHILL	81.4	39.8	49.9	63.1

BELLE FOURCHE & CHEYENNE RIVER BASINS
Watershed Snowpack Analysis - April 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
BELLE FOURCHE	7	104	78

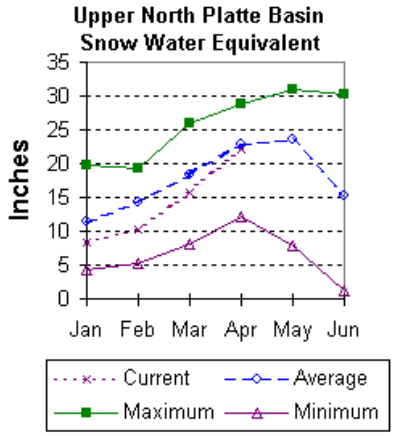
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Upper North Platte River Basin (8)

Snow

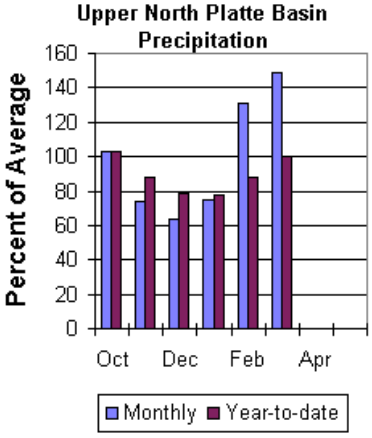
The snow courses above Seminoe Reservoir have about 97 percent of average snow water equivalent (SWE) recorded for this time of the year (148 percent of last year). SWE in the drainage area above Northgate is about 102 percent of average and 156 percent of last year at this time. SWE in the Encampment River drainage is about 91 percent of normal and 137 percent of last year. Brush Creek SWE for the year is about 105 percent of normal and 160 percent of last year's SWE. Medicine Bow and Rock Creek drainage SWE is about 81 percent of average and 137 percent of last year at this time. For more information see Basin Summary of Snow Courses at the beginning of this report.



Precipitation

Eight reporting stations indicate last month's precipitation was 149 percent of average and about 171 percent of last year's amount. Precipitation varied from 103 to 350 percent of average. Total water-year-to-date precipitation is about 100 percent of average for the basin, which is about 137 percent of last year's amount. Year to date percentage ranges from 89 to 112 percent of average for the 9 reporting stations.

Reservoirs



Current usable storage in Seminoe Reservoir is about 36 percent of average, and about 43 percent of last year's amount. Seminoe Reservoir is estimated to be storing 181,000 acre-feet (18 percent of capacity). Last year, at this time, the reservoir had 420,900 acre-feet in storage.

Streamflow

All the following yields are based on the fifty percent chance April through September yield. Yield for the North Platte River near Northgate is expected to be about 200,000 acre-feet (74 percent of average). Encampment River near Encampment is estimated to yield 125,000 acre-feet (76 percent of normal). Rock Creek near Arlington is estimated to yield 43,000 acre-feet (75 percent of average). Sweetwater River near Alcova is estimated to yield 40,000 acre feet (50 percent of normal). Seminoe Reservoir inflow should be about (615,000 acre-feet (72 percent of normal). See the following table for more detailed information on projected runoff.

UPPER NORTH PLATTE RIVER BASIN
Streamflow Forecasts - April 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>>					30-Yr Avg. (1000AF)
		========== Chance Of Exceeding * ==========					
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
NORTH PLATTE RIVER nr Northgate	APR-JUL	106	145	175	71	208	262	245
	APR-SEP	102	160	200	74	240	300	270
ENCAMPMENT RIVER nr Encampment	APR-JUL	85	106	120	77	134	155	156
	APR-SEP	87	110	125	76	140	163	165
ROCK CREEK nr Arlington	APR-JUL	29	35	40	76	45	53	53
	APR-SEP	31	38	43	75	48	57	57
SWEETWATER RIVER nr Alcova	APR-JUL	16.5	28	35	47	51	74	74
	APR-SEP	19.2	32	40	50	57	81	80
SEMINOE RESERVOIR Inflow	APR-JUL	310	465	570	71	675	830	800
	APR-SEP	365	515	615	72	715	865	860

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

UPPER NORTH PLATTE RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
SEMINOE	1016.7	181.0	420.9	495.9

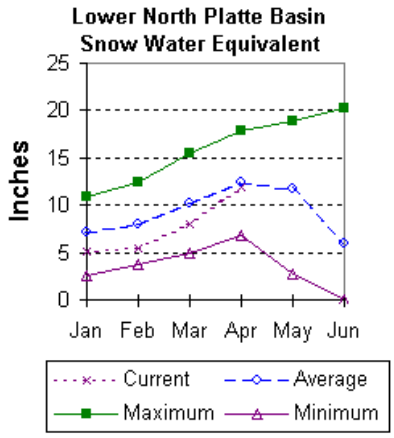
UPPER NORTH PLATTE RIVER BASIN
Watershed Snowpack Analysis - April 1, 2003

Watershed	Number of Data Sites	This Year as % of	
		Last Yr	Average
N PLATTE above Northgate	7	156	102
ENCAMPMENT RIVER	4	137	91
BRUSH CREEK	5	160	105
MEDICINE BOW & ROCK CREEK	3	137	81
N PLATTE above Seminoe	19	148	97

Lower North Platte River Basin (9)

Snow

SWE for the North Platte River basin in Wyoming averages 95 percent of normal (148 % of last year). The Sweetwater drainage SWE is currently 83 percent of average (125 percent of last year). Deer and LaPrele Creek SWE is 89 percent of average (142 percent of last year. SWE for the North Platte above the Laramie River drainage is 95 percent of average (145 % of last year). SWE for the Laramie River above the mouth is 95 percent of average (145 % of last year). SWE for the Laramie River above Laramie is 103 percent of average (167 % of last year). SWE for the Little Laramie River is 85 percent of average (146 percent of last year). For more information see Basin Summary of Snow Courses at beginning of report.

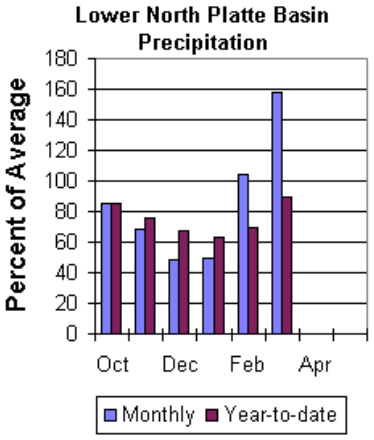


Precipitation

Of the 16 reporting stations, percentages for the month range from 68 to 490. Last month's precipitation for the basin was 191 percent of average (223 percent of last year). The water year-to-date precipitation for the basin is currently 89 percent of average (129 percent of last year). Year to date percentages range from 79 to 106.

Reservoir

The Lower North Platte River basin reservoir storage is well below average. Usable Reservoir storage is as follows: Alcova 158,100 acre feet (99 percent of average); Glendo 256,200 acre feet (60 percent of average); Guernsey 16,800 acre feet (82 percent of average); Pathfinder 334,300 acre feet (45 percent of average); Seminoe 181,000 acre feet (36 percent of average). Wheatland No.2 19,000 acre feet (35 percent of average).



Streamflow

Yields from 24 to 74 percent are expected in the basin during the April through September forecast period. The following yields are based on the fifty percent chance probability runoff. The Sweetwater near Alcova is forecast to yield about 40,000 acre-feet (50 percent of average). Deer Creek at Glenrock is expected to yield about 16,200 acre feet (40% percent of average). LaPrele Creek above the reservoir is estimated to yield about 11,800 acre feet (49 percent of average). North Platte River below Guernsey Reservoir is expected to yield about 650,000 acre feet (64 percent of normal), and below Glendo Reservoir is anticipated to yield about 630,000 acre feet (64 percent of average). Laramie River near Woods should yield about 100,000 acre feet (74 percent of average). The Little Laramie near Filmore should produce about 45,000 acre-feet (70 percent of average).

LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS
Streamflow Forecasts - April 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	50% (Most Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
SWEETWATER RIVER nr Alcova	APR-JUL	16.5	28	35	47	51	74	74
	APR-SEP	19.2	32	40	50	57	81	80
DEER CREEK at Glenrock	APR-JUL	3.6	11.0	16.0	43	21	28	38
	APR-SEP	3.5	11.1	16.2	40	21	29	41
LaPRELE CREEK abv Reservoir	APR-JUL	4.7	8.8	11.6	48	17.4	26	24
	APR-SEP	4.8	9.0	11.8	49	17.6	26	24
NORTH PLATTE - Alcova to Orin Gain	APR-JUL	18.0	30	38	25	70	116	152
	APR-SEP	19.0	30	38	24	70	117	161
NORTH PLATTE RIVER blw Glendo	APR-JUL	350	510	615	64	720	880	960
	APR-SEP	350	520	630	64	740	910	990
NORTH PLATTE RIVER blw Guernsey	APR-JUL	290	485	620	64	755	950	970
	APR-SEP	310	510	650	64	790	990	1010
LARAMIE RIVER nr Woods	APR-JUL	33	67	90	73	113	147	123
	APR-SEP	37	74	100	74	126	163	135
LITTLE LARAMIE RIVER nr Filmore	APR-JUL	25	34	40	68	46	55	59
	APR-SEP	28	38	45	70	52	62	64

LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
ALCOVA	184.3	158.1	156.4	160.1
GLENDO	506.4	256.2	368.5	427.8
GUERNSEY	45.6	16.8	17.6	20.6
PATHFINDER	1016.5	334.3	548.4	743.7
SEMINOE	1016.7	181.0	420.9	495.9
WHEATLAND #2		NO REPORT		

LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS
Watershed Snowpack Analysis - April 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
SWEETWATER	4	125	83
DEER & LaPRELE CREEKS	3	142	89
N PLATTE abv Laramie R.	26	145	95
LARAMIE RIVER abv Laramie	9	167	103
LITTLE LARAMIE RIVER	4	146	85
LARAMIE RIVER above mouth	12	160	97
NORTH PLATTE	33	148	95

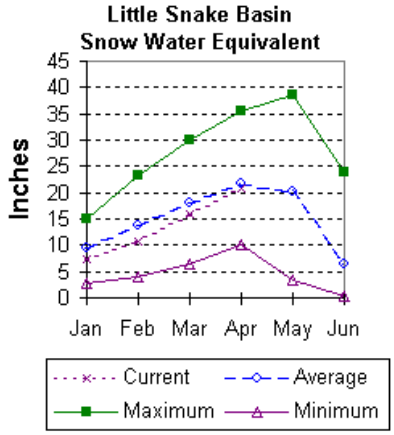
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Little Snake River Basin (10)

Snow

Snowfall has been below average across the basin this year. Currently, snow water equivalent (SWE) in the Little Snake River drainage is 96 percent of average (133 percent of last year at this time). For more information see Basin Summary of Snow Courses at beginning of this report.

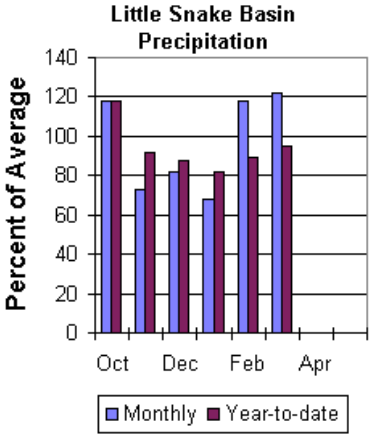


Precipitation

Precipitation across the basin was below average this past month. Last month's precipitation was 122 percent of average (143 percent of last year) for the 5 reporting stations. Monthly precipitation ranged from 96 to 500 percent of average. The Little Snake River basin water-year-to-date precipitation is currently 95 percent of average (128 percent of last year). Year-to-date percentages range from 92 to 99 percent of average.

Streamflow

Runoff yield in the Little Snake River drainage is expected to be below normal this year. Stream yield is based on the 50 percent probability for the April through July forecast period. The Little Snake River near Slater should yield about 126,000 acre-feet (79 percent of normal). Little Snake River near Dixon is estimated to yield 260,000 acre-feet (79 percent of normal).



LITTLE SNAKE RIVER BASIN
Streamflow Forecasts - April 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Little Snake River nr Slater	APR-JUL	85	108	126	79	145	175	159
LITTLE SNAKE R nr Dixon	APR-JUL	150	215	260	79	305	370	330

LITTLE SNAKE RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

LITTLE SNAKE RIVER BASIN
Watershed Snowpack Analysis - April 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
LITTLE SNAKE RIVER	8	133	96

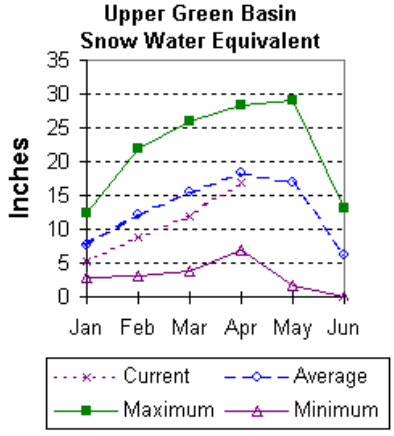
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Upper Green River Basin (11)

Snow

The Upper Green River Basin snow water equivalent (SWE), above Fontenelle Reservoir, is 92 percent of average (119 percent of last year). The Green River basin SWE above Warren Bridge is 93 percent of normal (112 percent of last year). SWE on the west side of the Upper Green River basin is about 91 percent of normal, 120 percent of this time last year. Newfork River SWE is now 95 percent of normal (125 percent of last year). Big Sandy-Eden Valley SWE is about 78 percent of average (101 percent of last year). For more information see the Basin Summary of Snow Courses at the beginning of this report.

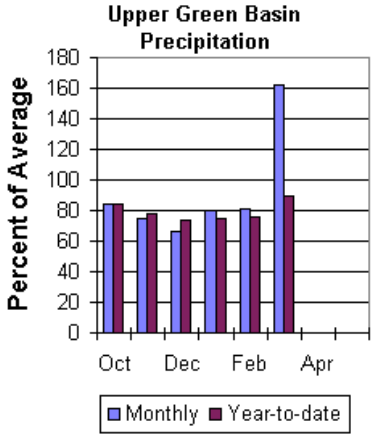


Precipitation

The 8 reporting precipitation sites in the basin were 149 percent of average (171 percent of last month's average) . Precipitation varied from 103 to 250 percent of average. Water year-to-date precipitation is about 100 percent of average (137 percent of last year). Year to date percentage of average ranges from 89 to 112 percent for the reporting stations.

Reservoir

Current usable storage in Big Sandy Reservoir is about 7,700 acre feet (54 percent of average) -- 37 percent of last year and 20 percent of capacity. The water level in Eden Reservoir is below the gage used to measure storage volume. Fontenelle Reservoir is storing 135,400 acre-feet (41 percent of average and 53 percent of the total capacity). Flaming Gorge Reservoir is currently storing 2,629,000 acre feet (78 percent of average) -- 90 percent of last year and 70 percent of capacity. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.



Streamflow

The following forecast is based on the fifty-percent chance April through July runoff in the Upper Green River basin. Runoff is forecast to be below average. Green River at Warren Bridge is expected to yield about 235,000 acre-feet (89 percent of normal). Pine Creek above Fremont Lake is expected to yield 93,000 acre-feet (89 percent of normal). New Fork River near Big Piney is expected to yield about 300,000 acre-feet (76 percent of normal). Fontenelle Reservoir Inflow is estimated to be 640,000 acre-feet (74 percent of average), and Big Sandy near Farson is expected to be about 41,000 acre-feet (71 percent of normal).

UPPER GREEN RIVER BASIN
Streamflow Forecasts - April 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>>					30-Yr Avg. (1000AF)
		Chance Of Exceeding *					
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
Green River at Warren Bridge	APR-JUL	190	220	235	89	250	280	265
Pine Creek abv Fremont Lake	APR-JUL	78	87	93	89	99	108	104
New Fork River nr Big Piney	APR-JUL	195	255	300	76	345	405	395
Fontenelle Reservoir Inflow	APR-JUL	501	582	640	74	701	796	860
Big Sandy River nr Farson	APR-JUL	24	34	41	71	48	58	58

UPPER GREEN RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BIG SANDY	38.3	7.7	5.1	20.7
EDEN		NO REPORT		
FONTENELLE	344.8	183.9	135.4	143.0

UPPER GREEN RIVER BASIN
Watershed Snowpack Analysis - April 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
GREEN above Warren Bridge	4	110	93
UPPER GREEN (West Side)	7	120	91
NEWFORK RIVER	3	125	95
BIG SANDY/EDEN VALLEY	2	101	78
GREEN above Fontenelle	14	119	92

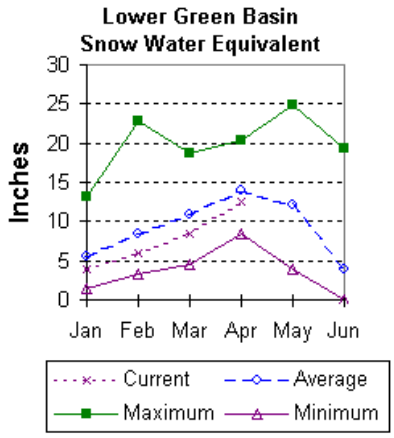
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Lower Green River Basin (12)

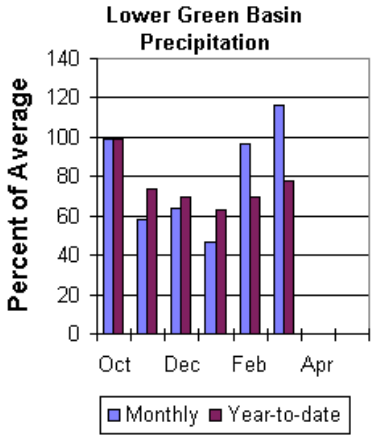
Snow

Snow water equivalent (SWE) in the Hams Fork is currently 86 percent of average (113% of last year). Blacks Fork SWE is currently 87 percent of average (117 percent of last year). The Henry's Fork SWE is now about 87 percent of average (127 percent of last year). The basin SWE, as a whole, is 90 percent of average (118 percent of last year). For more information see Basin Summary of Snow Courses at beginning of this report.



Precipitation

Precipitation was above average for the month (116 percent) for the 3 reporting stations. Precipitation ranged from 37 to 156 percent of average for the month. The basin year-to-date precipitation is currently 78 percent of average (111 percent of last year). Year to date percentages range from 71 to 89.



Reservoir

Usable storage in Fontenelle Reservoir is currently 183,900 feet; this is 41 percent of average (129% of last year) - usable storage excludes dead storage. Usable storage in Flaming Gorge is currently 2,629,000 acre feet, this is 78 percent of average (90% of last year). Usable storage in Viva Naughton is currently 23,500 acre feet; this is 66 percent of average (85% of last year0

Streamflow

The following forecast values are based on a 50 percent chance probability for the April through July forecast period. Green River near Green River is forecast to yield about 650,000-acre feet (74 percent of average). Blacks Fork near Robertson is forecast to yield 62,000-acre feet (65 percent of average). East Fork of Smiths Fork near Robertson is estimated to yield 18,800 acre-feet (61 percent of average). The estimated yield for Hams Fork near Frontier is 45,000-acre feet (69 percent of average). Viva Naughton Reservoir inflow will be about 58,000-acre feet (65 percent of average). Flaming Gorge Reservoir inflow will be about 810,000-acre feet (68 percent of average).

LOWER GREEN RIVER BASIN
Streamflow Forecasts - April 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	50% (Most Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Green River nr Green River, WY	APR-JUL	435	565	650	74	735	865	875
Blacks Fork nr Robertson	APR-JUL	39	53	62	65	71	85	95
EF of Smiths Fork nr Robertson	APR-JUL	14.9	17.1	18.8	61	21	24	31
Hams Fk blw Pole Ck nr Frontier	APR-JUL	30	39	45	69	52	63	65
Hams Fk Inflow to Viva Naughton Res	APR-JUL	32	47	58	65	69	84	89
Flaming Gorge Reservoir Inflow	APR-JUL	510	690	810	68	935	1115	1190

LOWER GREEN RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
FONTENELLE	344.8	183.9	135.4	143.0
FLAMING GORGE	3749.0	2629.0	2828.5	2920.0
VIVA NAUGHTON RES	42.4	23.5	26.8	27.8

LOWER GREEN RIVER BASIN
Watershed Snowpack Analysis - April 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
HAMS FORK RIVER	4	113	86
BLACKS FORK	5	117	87
HENRYS FORK	3	127	87
GREEN above Flaming Gorge	26	118	90

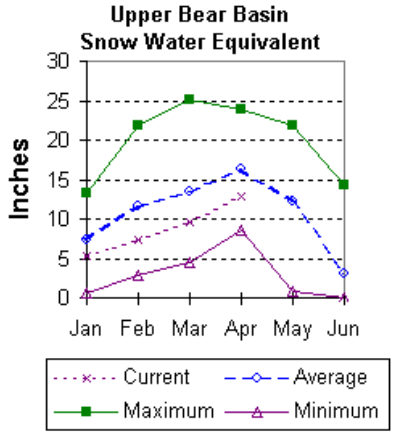
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Upper Bear River Basin (13)

Snow

Snow water equivalent (SWE), at snow courses in the Bear River above the Idaho State line, is 79 percent of average (103 percent of last year). SWE for the Bear River in Utah is estimated to be 79 percent of average; that is about 97 percent of last year at this time. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is estimated at 83 percent of average (111 percent of last year at this time.). See the Basin Summary of Snow Course Data at the beginning of this report for more detailed information.

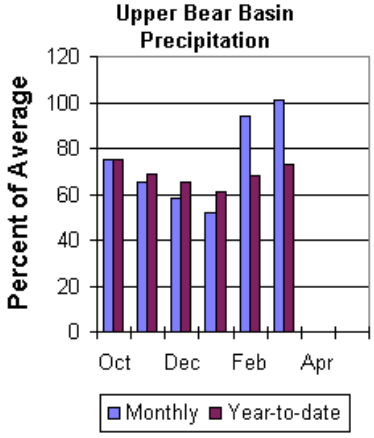


Precipitation

Precipitation for last month was 101 percent of average for the 2 reporting stations, 135 percent of last year's amount. The year-to-date precipitation, for the basin, is 75 percent of average; this is 110 percent of last year's amount.

Reservoir

Usable storage in Woodruff Narrows reservoir is currently 6,000 acre feet (28 percent of capacity) - usable storage excludes dead storage. Normally, the reservoir is storing 57 percent of capacity at this time of the year. Current storage is 49 percent of average.



Streamflow

The following is based on the 50 percent chance stream flow yields are for the April through September period. Smiths Fork near Border is estimated to yield 74,000 acre-feet (63 percent of normal. Bear River above the Utah-Wyoming State Line is expected to yield about 77,000 acre feet (62 percent of average), The Bear River near Woodruff is expected to yield about 55,000 acre-feet (about 39 percent of normal).

UPPER BEAR RIVER BASIN
Streamflow Forecasts - April 1, 2003

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	50% (Most Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Smiths Fork nr Border	APR-JUL	46	56	63	61	71	86	103
	APR-SEP	55	66	74	63	83	99	118
Bear R nr UT-WY State Line	APR-JUL	55	64	70	60	77	89	116
	APR-SEP	60	70	77	62	85	98	125
Woodruff Narrows Res inflow	APR-JUL	28	42	53	39	65	86	136
	APR-SEP	29	44	55	39	68	89	142

UPPER BEAR RIVER BASIN
Reservoir Storage (1000 AF) - End of March

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
WOODRUFF NARROWS	57.3	16.0	9.3	32.7

UPPER BEAR RIVER BASIN
Watershed Snowpack Analysis - April 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
UPPER BEAR RIVER in Utah	7	97	79
SMITHS & THOMAS FORKS	4	111	83
BEAR RIVER abv ID line	9	103	79
NORTHWEST	75	116	94
NORTHEST	19	131	105
SOUTHEAST	35	146	96
SOUTHWEST	35	118	90

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.