USDA United States Department of Agriculture

Natural Resources Conservation Service

Wyoming Basin Outlook Report January 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

Generally, snow water equivalent (SWE) across the state is below normal for this time of the year. SWE average for the State is about 76 percent of normal for this time of the year. Northwest portion of the State is 73 of percent normal. Northeast Wyoming is 79 of percent of normal, and the southeast part of the State is 76 percent of average. Southwestern Wyoming is 74 percent of average for this time of the year.

Precipitation for December varied from 18 to 74 percent below average for the State. Year-to-date precipitation is also below average for the year. Reservoir levels vary from just above average to well below average. Reservoirs in the North Platte River basin are well below average. Reservoirs in the northeast have above average storage. Forecast runoff varies from 17 to 98 percent of average.

Snowpack

Although the state received quite a bit of snow early this fall, little snowfall has occurred this past month. SWE is generally below average for the entire State. SWE in the northwestern portion of the State is now at 73 percent of average (92 percent of last year). Northeast Wyoming SWE is currently about 79 percent of average (102 percent of last year). The southeast portion is currently about 76 percent of average SWE (114 percent of last year). And the southwest is about 74 percent of average (87 percent of last year).

Precipitation

December precipitation was below normal over the entire State. Some of the State had a very severe shortage of precipitation. The following table displays the major river basins and their departure from normal for this month.

Basin	Departure from normal	Basin	Departure from normal
Snake River	-28%	Upper North Platte River	-36%
Yellowstone & Madison	-33%	Lower North Platte	-52%
Wind River	-56%	Little Snake River	-18%
Big Horn	-74%	Upper Green River	-34%
Shoshone & Clarks Fork	-30%	Lower Green River	-36%
Powder & Tongue River	-67%	Upper Bear River	-42%
Belle Fourche & Cheyenne	-63%		

Streams

Stream flow yield is expected to be below average across the State. Most probable yield for the State is forecast to be about 67 percent of average (varies from 17 to 98 percent of average). The northwest part of the State is expected to yield about 72 percent of normal -- yield estimates vary from 54 to 83 percent of normal. Yield from the northeast portion of Wyoming will be below average (about 76 percent of average) -- yield estimates vary from 43 to 98 percent of average for the various forecast points. The southeast portion of the state will be about 52 percent of normal -- yield estimates range from 17 to 86 percent of normal. The southwest portion of Wyoming varies from 57 to 86 percent of average -- mean estimated yield for the forecast points in southwest Wyoming is about 67 percent of average.

Reservoirs

Although several reservoirs did not report, reservoir storage for those reporting is generally 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:01/07/03 06:02:49

B A S I N W I D E
R E S E R V O I R S U M M A R Y

FOR THE END OF DECEMBER 2002

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	39	65	62	63	60
ANGOSTURA	61	80	79	77	76
DEERFIELD	95	98	81	117	97
PACTOLA	83	95	83	100	87
BELLE FOURCHE	48	70	51	95	69
JACKSON LAKE	29	16	57	51	179
GRASSY LAKE	81	61	76	106	134
FONTENELLE	62	42	61	102	146
BIG SANDY	9	0	48	19	0
EDEN			NO REPORT		
PILOT BUTTE	77	82	64	121	94
BULL LAKE	29	19	57	50	152
BOYSEN	37	45	88	42	82
BUFFALO BILL	50	43	65	77	116
KEYHOLE	60	80	52	114	75
SEMINOE	20	50	62	32	40
PATHFINDER	30	48	63	48	62
ALCOVA	85	85	84	102	100
GLENDO	29	48	56	52	60
GUERNSEY	21	24	16	131	85
WHEATLAND #2	12	19	43	29	64
PALISADES	32	31	74	43	101
HEBGEN LAKE	79	78	71	112	101
ENNIS LAKE	70	75	77	92	94
BIGHORN LAKE	47	56	67	70	84
TONGUE RIVER	40	26	28	140	152
FLAMING GORGE	70	77	81	87	92
WOODRUFF NARROWS	12	0	41	30	0
TOTAL OF 27 RESERVOIRS	48	55	70	69	88

Basin Summary of Snow Course Data

S N O W C O U R S E D A T A

JANUARY 2003

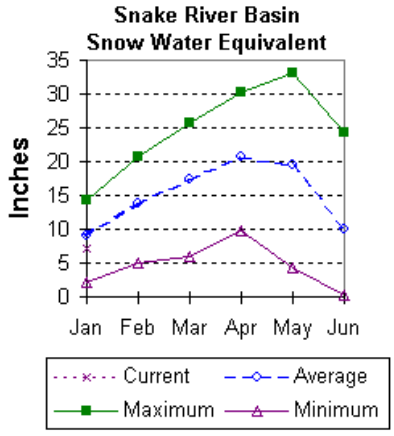
SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
WYOMING Snow Course and SNOTEL Stations						
ASTER CREEK	7750	1/02/03	44	9.7	11.0	13.1
BALD MOUNTAIN SNOTEL	9380	1/01/03	---	7.0	7.5	9.7
BASE CAMP SNOTEL	7030	1/01/03	---	7.0	5.9	8.2
BATTLE MTN. SNOTEL	7440	1/01/03	---	4.8	4.9	4.1
BEARTOOTH LK. SNOTEL	9280	1/01/03	---	8.6	9.2	11.5
BEAR TRAP SNOTEL	8200	1/01/03	---	1.7	2.5	2.6
BIG GOOSE SNOTEL	7760	1/01/03	---	3.6	3.3	4.4
BIG SANDY SNOTEL	9080	1/01/03	25	5.0	7.3	6.9
BLACKWATER SNOTEL	9780	1/01/03	---	8.4	8.4	12.0
BLIND BULL SNOTEL	8900	1/01/03	39	7.7	11.4	13.2
BLIND PARK SNOTEL	6870	1/01/03	---	2.3	1.7	3.5
BONE SPGS. SNOTEL	9350	1/01/03	---	5.7	6.4	7.8
BROOKLYN LK. SNOTEL	10220	1/01/03	---	5.4	5.4	10.8
BURGESS JCT. SNOTEL	7880	1/01/03	---	3.9	2.9	5.5
BURROUGHS CRK SNOTEL	8750	1/01/03	---	6.7	6.4	6.7
CANYON SNOTEL	8090	1/01/03	---	4.6	6.1	6.1
CASPER MTN. SNOTEL	7850	1/01/03	---	4.2	4.2	6.9
CHALK CK #1 SNOTEL	9100	1/01/03	37	7.2	9.8	10.1
CHALK CK #2 SNOTEL	8200	1/01/03	29	5.2	6.4	6.7
CLOUD PEAK SNOTEL	9850	1/01/03	---	5.1	5.1	5.7
COLE CANYON SNOTEL	5910	1/01/03	---	.8	.6	--
COLD SPRINGS SNOTEL	9630	1/01/03	---	2.9	1.8	4.6
COTTONWOOD CR SNOTEL	7700	1/01/03	---	8.8	8.4	9.7
DARBY CANYON	8250	12/30/02	39	9.0	7.3	10.5
DEER PARK SNOTEL	9700	1/01/03	---	4.5	7.0	6.7
DIVIDE PEAK SNOTEL	8860	1/01/03	---	6.6	6.8	9.2
DOME LAKE SNOTEL	8880	1/01/03	---	4.6	4.6	6.1
EAST RIM DIV SNOTEL	7930	1/01/03	---	3.8	4.5	5.9
ELBO RANCH	7100	1/01/03	22	4.1	4.6	--
ELKHART PARK SNOTEL	9400	1/01/03	---	5.0	6.1	6.3
EVENING STAR SNOTEL	9200	1/01/03	---	8.8	10.3	13.7
GLADE CREEK	7040	1/03/03	39	8.9	7.8	10.3
GRANITE CRK SNOTEL	6770	1/01/03	---	6.7	7.2	7.6
GRASSY LAKE SNOTEL	7270	1/01/03	57	11.7	11.8	14.7
GRAVE SPRINGS SNOTEL	8550	1/01/03	---	1.4	2.6	4.0
GROS VENTRE SNOTEL	8750	1/01/03	27	5.1	6.6	6.9
HANSEN S.M. SNOTEL	8360	1/01/03	---	3.6	1.7	3.3
HAMS FORK SNOTEL	7840	1/01/03	---	5.2	5.5	5.5
HOBBS PARK SNOTEL	10100	1/01/03	---	5.3	4.4	7.6
HUCKLEBERRY DIVIDE	7300	1/02/03	40	8.0	7.6	9.3
INDIAN CREEK SNOTEL	9430	1/01/03	---	8.6	11.4	12.5
JACKPINE CREEK	7350	12/30/02	33	7.4	7.6	9.3
KELLEY R.S. SNOTEL	8180	1/01/03	---	5.3	7.3	7.6

1 SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
KENDALL R.S. SNOTEL	7740	1/01/03	---	4.6	4.9	6.7
KIRWIN SNOTEL	9550	1/01/03	---	3.8	4.0	5.9
LAKE CAMP	7780	12/31/02	19	3.0	2.8	4.2
LA PRELE SNOTEL	8380	1/01/03	---	2.6	2.3	5.3
LEWIS LAKE SNOTEL	7850	1/01/03	---	10.9	12.9	14.8
LEWIS LAKE DIVIDE	7850	1/02/03	56	12.8	14.9	17.5
LITTLE WARM SNOTEL	9370	1/01/03	---	3.9	4.4	5.3
LOOMIS PARK SNOTEL	8240	1/01/03	---	6.9	7.8	8.0
LUPINE CREEK	7380	12/26/02	12	2.0	3.1	4.3
MARQUETTE SNOTEL	8760	1/01/03	---	3.5	2.0	5.0
MIDDLE POWDER SNOTEL	7760	1/01/03	---	1.9	2.6	5.5
MORAN	6750	1/03/03	22	4.9	5.0	5.7
NEW FORK SNOTEL	8340	1/01/03	---	4.0	4.5	5.4
NORRIS BASIN	7500	12/31/02	16	2.7	3.4	5.1
NORTH FRENCH SNOTEL	10130	1/01/03	---	10.0	6.1	13.4
NORTH RAPID CK SNTL	6130	1/01/03	---	3.0	2.4	3.3
OLD BATTLE SNOTEL	9920	1/01/03	---	9.5	10.4	14.6
OLD FAITHFUL	7400	12/31/02	24	4.6	4.9	6.0
OWL CREEK SNOTEL	8980	1/01/03	---	3.0	1.3	2.7
PARKERS PEAK SNOTEL	9400	1/01/03	---	9.0	8.6	10.6
PHILLIPS BENCH SNTL	8200	1/01/03	45	9.3	11.6	12.6
POWDER RVR.PASS SNTL	9480	1/01/03	---	3.9	4.8	5.3
RENO HILL SNOTEL	8500	1/01/03	---	4.1	3.9	6.6
SAGE CK BASIN SNTL	7850	1/01/03	---	4.7	4.9	5.3
SALT RIVER SNOTEL	7600	1/01/03	---	4.6	5.3	5.4
SAND LAKE SNOTEL	10050	1/01/03	---	7.2	8.6	14.9
SANDSTONE RS SNOTEL	8150	1/01/03	---	4.3	3.7	5.3
SHELL CREEK SNOTEL	9580	1/01/03	---	5.7	7.3	7.3
SNAKE RIVER STATION	6920	1/03/03	36	7.8	6.3	8.9
SNAKE RV STA SNOTEL	6920	1/01/03	---	6.9	6.7	7.9
SNIDER BASIN SNOTEL	8060	1/01/03	24	4.2	4.1	6.9
SOUTH BRUSH SNOTEL	8440	1/01/03	---	4.8	4.1	5.1
SOUTH PASS SNOTEL	9040	1/01/03	---	4.6	5.9	8.2
SPRING CRK. SNOTEL	9000	1/01/03	45	8.8	12.9	12.5
ST LAWRENCE ALT SNTL	8620	1/01/03	---	2.4	1.0	3.8
SUCKER CREEK SNOTEL	8880	1/01/03	---	4.2	4.0	5.2
SYLVAN LAKE SNOTEL	8420	1/01/03	---	8.4	8.4	10.5
SYLVAN ROAD SNOTEL	7120	1/01/03	---	5.7	3.7	6.2
THUMB DIVIDE SNOTEL	7980	1/01/03	---	6.3	6.3	7.6
THUMB DIVIDE	7980	1/02/03	29	6.0	5.8	8.1
TIE CREEK SNOTEL	6870	1/01/03	---	2.1	1.1	2.5
TIMBER CREEK SNOTEL	7950	1/01/03	---	1.9	.5	3.0
TOGWOTEE PASS SNOTEL	9580	1/01/03	41	8.6	10.3	11.7
TOWNSEND CRK SNOTEL	8700	1/01/03	---	3.0	1.9	4.4
TRIPLE PEAK SNOTEL	8500	1/01/03	---	8.2	10.1	11.9
TWO OCEAN SNOTEL	9240	1/01/03	---	12.0	12.6	13.5
WEBBER SPRING SNOTEL	9250	1/01/03	---	7.0	8.1	11.5
WHISKEY PARK SNOTEL	8950	1/01/03	---	9.0	8.9	11.1
WILLOW CREEK SNOTEL	8450	1/01/03	---	10.9	10.2	14.3
WINDY PEAK SNOTEL	7900	1/01/03	---	3.0	1.4	3.5
WOLVERINE SNOTEL	7650	1/01/03	---	3.0	3.6	5.8
YOUNTS PEAK SNOTEL	8350	1/01/03	---	5.9	5.9	7.9

Snake River Basin (1)

Snow

The Snake River basin snow water equivalent (SWE) is below normal. Snake above Jackson Lake is 82 percent (97% of last year at this time). Pacific Creek is 87 percent of average (102% of last year at this time). Gros Ventre River is 74 percent of average (81% of last year at this time). Hoback River is 73 percent of average (81% of last year at this time), Greys River is 69 percent of average (80% of last year at this time). Salt River is 83 percent of average (102% of last year at this time). Snake River Basin above Palisades is 79 percent of average (91% 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.

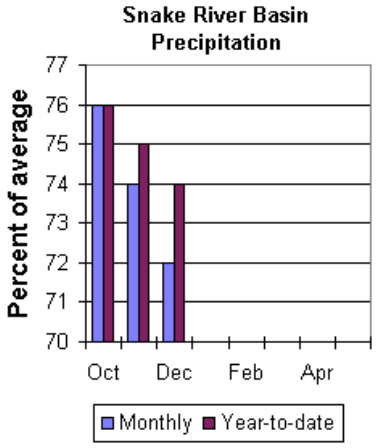


Precipitation.

Precipitation across the basin was below average last month. Monthly precipitation, for the basin, was 72 percent of average (723 percent of last year). Last months percentages range from 11 to 92 percent of average. Water-year-to-date precipitation is 74 percent of normal for the Snake River basin (78 percent of last year at this time) Year-to-date percentages range from 65 to 91 percent of average.

Reservoir.

Current usable reservoir storage compared to average for the three storage reservoirs in the basin is below average, except for Grassy Lake. Grassy Lake storage is about 106 percent of average (12,300 acre feet compared to 9,200 last year). Jackson Lake storage is 51 percent of average (245,700 acre feet compared to 137,400 acre feet last year). Palisades Reservoir storage is about 43 percent of average (443,200 acre feet compared to 439,300 acre feet last year).



Streamflow.

The most probable, 50 percent chance, April through September runoff yield forecast is below average for the basin. The Snake near Moran is expected to yield 710,000 acre-feet (79 percent of normal). Yield from the Snake River above Palisades Reservoir is estimated to be 2,210,000 acre-feet (81 percent of normal). The 50 percent chance yield near Heise is expected to be 3,350,000 acre-feet (81 percent of normal). Pacific Creek at Moran is expected to yield about 132,000 acre-feet (74 percent of average). Greys River above Palisades Reservoir is estimated to yield 315,000 acre-feet (80 percent of normal). Salt River near Etna is estimated to have a yield of 335,000 acre-feet (80 percent of normal).

SNAKE RIVER BASIN
Streamflow Forecasts - January 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-SEP	474	636	710	79	784	946	904
SNAKE above Palisades (2)	APR-SEP	1637	1978	2210	81	2442	2783	2735
PALISADES RESERVOIR INFLOW (1,2)	APR-SEP	2072	2813	3150	81	3487	4228	3875
SNAKE near Heise (2)	APR-SEP	2437	2981	3350	81	3719	4263	4159
PACIFIC CREEK at Moran	APR-SEP	88	114	132	74	150	176	178
GREYS above Palisades	APR-SEP	205	270	315	80	360	425	394
SALT near Etna	APR-SEP	201	281	335	80	389	469	419

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
GRASSY LAKE	15.2	12.3	9.2	11.6
JACKSON LAKE	847.0	245.7	137.4	481.7
PALISADES	1400.0	443.2	439.3	1036.5

SNAKE RIVER BASIN
Watershed Snowpack Analysis - January 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
SNAKE above Jackson Lake	9	97	82
PACIFIC CREEK	3	102	87
GROS VENTRE RIVER	2	79	74
HOBACK RIVER	5	81	73
GREYS RIVER	4	80	69
SALT RIVER	3	102	83
SNAKE above Palisades	21	90	79

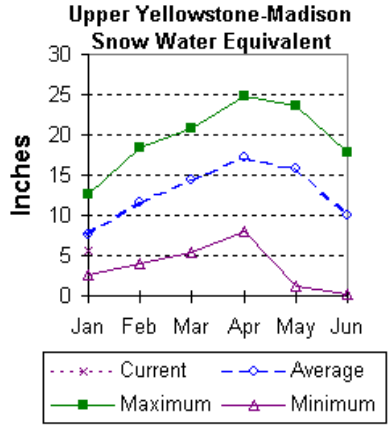
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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 for this time of the year. Snow water equivalent (SWE) is about 70 percent of average (76 percent of last year) in the Madison drainage. SWE in the Yellowstone drainage is about 81 percent of average (91 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.

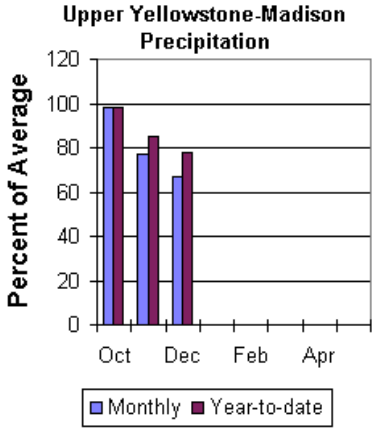


Precipitation

December precipitation in the Madison and Yellowstone drainage was about 67 percent of average (65 percent of previous year) for the 5 reporting stations -- percentage range was from 27 to 87 percent of average. Water-year-to-date precipitation is about 66 percent of average (79 percent of last year's amount). Year to date percentage ranges from 56 to 98 percent

Reservoir

Usable storage in Ennis Lake is estimated to be 28,900 acre-feet (70 percent of capacity) – 92 percent of average.



Hebgen Lake is storing about 299,400 acre-feet of water (79 percent of capacity) – 112 percent of average. Hebgen Lake is storing about 101 percent and Ennis Lake is storing about 94 percent of last year's volume.

Streamflow

All the following forecasts are the 50 percent chance runoff for the April through September runoff period. Yellowstone at Lake Outlet is expected to yield about 600,000 acre feet (75 percent of normal). Yellowstone at Corwin Springs will yield about 1,465,000 acre-feet (74 percent of normal). Yellowstone near Livingston will yield about 1,690,000 acre feet (74 percent of normal). Hebgen la ke inflow is estimated to be 400,000 acre feet (80 percent of normal). See the following page for detailed runoff volumes.

UPPER YELLOWSTONE & MADISON RIVER BASINS
Streamflow Forecasts - January 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)
YELLOWSTONE at Lake Outlet	APR-SEP	420	527	600	75	673	780	805
YELLOWSTONE RIVER at Corwin Springs	APR-SEP	1026	1287	1465	74	1643	1904	1970
YELLOWSTONE RIVER near Livingston	APR-SEP	1216	1498	1690	74	1882	2164	2280
HEBGEN Reservoir Inflow	APR-SEP	300	359	400	80	441	500	500

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
ENNIS LAKE	41.0	28.9	30.7	31.5
HEBGEN LAKE	377.5	299.4	295.9	267.6

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

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
MADISON RIVER in WY	9	76	70
YELLOWSTONE RIVER in WY	11	92	75

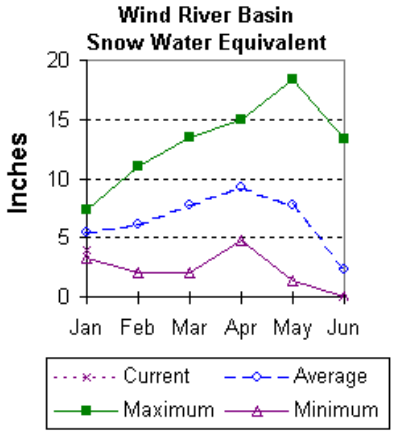
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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 Wind River basin has below average snow water equivalent (SWE) for this time of the year. SWE in the Wind River above Dubois is 81 percent of average (91 percent of last year). The Little Wind SWE is 68 percent of average water content (143 percent of last year), and the Popo Agie drainage SWE is about 65 percent of average (91 percent of last year). The Wind River basin, above Boysen Reservoir, SWE is about 72 percent of average (about 100 percent of last year). See the Basin Summary of Snow Course Data at the front of this report for details.

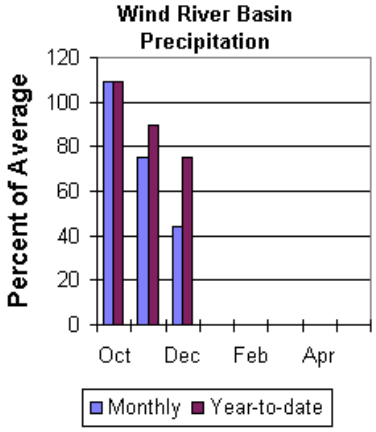


Precipitation

December precipitation in the basin varied from 10 to 64 percent of average. December precipitation for the basin was about 45 percent of average for the 8 reporting stations; that is about 51 percent of last year's amount. Water year-to-date precipitation is 75 percent of normal. The current water-year-to-date average is about 109 percent of last year at this time. Year to date figures range from 59 to 96 percent of average.

Reservoirs

Current storage varies from 42 to 121 percent of average. Usable storage in Bull Lake is currently about 43,300 acre feet (29 percent of capacity) -- normally the reservoir is at 57 percent of capacity at this time of the year. Boysen Reservoir is storing about 37 percent of capacity 218,800 acre feet) -- normally the reservoir is at 88 percent of capacity at this time of the year. Pilot Butte is storing 77 percent of capacity (24,400 acre feet) -- normally the reservoir is at 64 percent of capacity at this time of the year.



Streamflow

Water supply is estimated to be well below normal this year. The following values reflect the 50 percent chance yields for the April through September runoff period. The Wind River above Bull Lake Creek is expected to yield 335,000 acre feet (63 percent of average). Wind River at Riverton will yield about 410,000 acre feet (77 percent of average). Boysen Reservoir inflow will yield about 495,000 acre feet (61 percent of normal). Bull Lake Creek near Lenore is expected to yield about 140,000 acre feet (77 percent of average). Little Popo Agie River near Lander is expected to yield about 30,000 acre feet (57 percent of average). South Fork of Little Wind near Fort Washakie will yield about 54,000 acre feet (64 percent of average). Little Wind River near Riverton will yield about 195,000 acre feet (62 percent of average).

WIND RIVER BASIN
Streamflow Forecasts - January 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)
DINWOODY CREEK nr Burris	APR-SEP	35	51	61	65	71	87	94
WIND RIVER abv Bull Lake Cr (2)	APR-SEP	230	337	410	77	483	590	535
BULL LAKE CR near Lenore (2)	APR-SEP	61	96	120	66	144	179	182
WIND RIVER at Riverton (2)	APR-SEP	113	284	400	63	516	687	640
LT POPO AGIE RIVER nr Lander	APR-SEP	8.1	21	30	57	43	62	53
SF LT WIND nr Fort Washakie	APR-SEP	24	42	54	64	66	84	84
LT WIND RIVER nr Riverton	APR-SEP	24	126	195	62	264	366	315
BOYSEN RESERVOIR Inflow (2)	APR-SEP	236	273	415	51	557	767	809

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BULL LAKE	151.8	43.3	28.4	86.3
BOYSEN	596.0	218.8	266.2	523.4
PILOT BUTTE	31.6	24.4	26.0	20.2

WIND RIVER BASIN
Watershed Snowpack Analysis - January 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
WIND RIVER above Dubios	3	86	81
LITTLE WIND	2	144	68
POPO AGIE	4	91	65
WIND above Boysen Resv	7	95	72

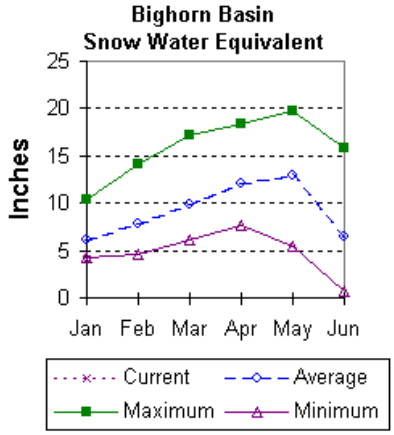
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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.

Bighorn River Basin (4)

Snow

Snowpack in this basin is well below average for this time of year. The Nowood drainage SWE is 54 percent of average (78 percent of last year). Greybull River SWE is 64 percent of average (127 percent of last year). Shell Creek SWE is 74 percent of average (87 percent of last year). The basin SWE, as a whole, is currently 67 percent of average (90 percent of last year). For more information see Basin Summary of Snow Courses at beginning of report.

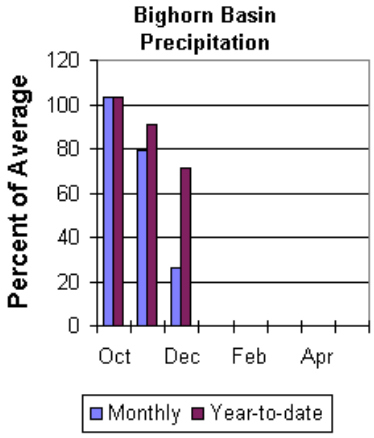


Precipitation

December precipitation was 26 percent of the monthly average (59 percent of last year). Sites ranged from 0 to 56 percent of average for the month. Year-to-date precipitation is 71 percent of normal; that is 87 percent of last year at this time. Year to date percentages, from the 10 reporting stations, range from 38 to 100.

Reservoir

Boysen Reservoir is currently storing 218,800-acre feet (42 percent of average). Bighorn Lake is now at 70 percent of average (635,600-acre feet). Boysen is currently storing 82 percent of last year at this time and Big Horn Lake is storing 84 percent of last year's volume.



Streamflow

The 50 percent chance April through September runoff is anticipated to be below normal. The Boysen Reservoir inflow is forecast to yield 495,000 acre feet (61 percent of average); the Greybull River nr Meeteese should yield 130,000 acre feet (65 percent of average); Shell Creek near Shell should yield 60,000 acre feet (83 percent of average) and the Bighorn River at Kane should yield 600,000 acre feet (54 percent of average).

BIGHORN RIVER BASIN
Streamflow Forecasts - January 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)
BOYSEN RESERVOIR Inflow (2)	APR-SEP	236	273	415	51	557	767	809
GREYBULL RIVER nr Meeteetse	APR-SEP	98	117	130	65	143	162	200
SHELL CREEK nr Shell	APR-SEP	49	56	60	83	64	71	72
BIGHORN RIVER at Kane (2)	APR-SEP	286	319	525	47	731	1034	1110

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BOYSEN	596.0	218.8	266.2	523.4
BIGHORN LAKE	1356.0	635.6	753.1	911.1

BIGHORN RIVER BASIN
Watershed Snowpack Analysis - January 1, 2003

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
NOWOOD RIVER	2	78	54
GREYBULL RIVER	2	127	64
SHELL CREEK	3	87	74
BIGHORN (Boysen-Bighorn)	7	90	67

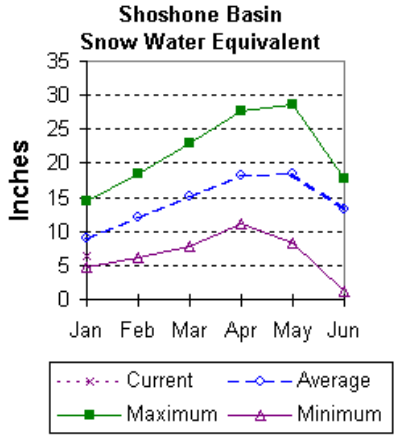
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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 74 percent of the January average (105 percent of last year) in the Shoshone River basin. The Clarks Fork River basin SWE is 68 percent of average (88 percent of last year). For more information see the Basin Summary of Snow Course Data at the beginning of this report.

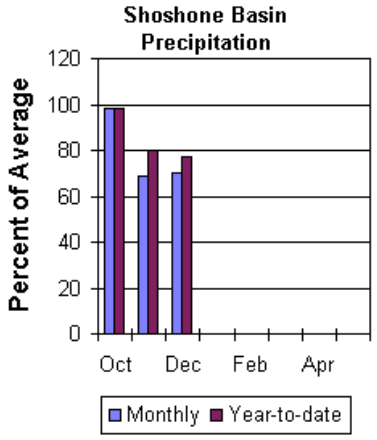


Precipitation

Precipitation for the month of December was 70 percent of normal (95 percent of last year). Monthly percentages range from 0 to 83 percent of average. The basin year-to-date precipitation is now 77 percent of average (98 percent of last year). Year-to-date percentages range from 68 to 98 percent of average.

Reservoir

Current usable storage in Buffalo Bill Reservoir is about 77 percent of average (116 percent of last year's storage) – the reservoir is about 50 percent of capacity. Currently, about 320,100 acre-feet are stored in the reservoir compared to 276,100 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 the North Fork Shoshone River at Wapiti is expected to be 420,000 acre-feet (81 percent of average). South Fork of the Shoshone River near Valley is estimated to yield of 175,000 acre-feet (66 percent of average), and South Fork above Buffalo Bill Reservoir is expected to be 140,000 acre-feet (62 percent of average). At the Buffalo Bill Reservoir, the fifty percent chance yield for the Shoshone River is expected to be about 590,000 acre-feet (73 percent of average). The fifty-percent chance yield for the Clarks Fork of the Yellowstone near Belfry, Montana is expected to be about 420,000 acre-feet (71 percent of average).

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

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>>					30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
NF SHOSHONE RIVER at Wapiti	APR-SEP	348	391	420	81	449	492	520
SF SHOSHONE RIVER nr Valley	APR-SEP	115	151	175	66	199	235	265
SF SHOSHONE RIVER abv Buffalo Bill	APR-SEP	54	105	140	62	175	226	225
BUFFALO BILL DAM Inflow (2)	APR-SEP	375	503	590	73	677	805	805
CLARKS FORK RIVER nr Belfry	APR-SEP	306	374	420	71	466	534	595

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BUFFALO BILL	646.6	320.1	276.1	418.4

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

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
SHOSHONE RIVER	6	105	74
CLARKS FORK in WY	7	88	68

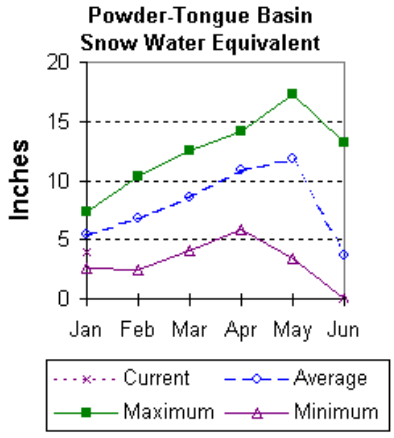
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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 77 percent of normal (101 percent of last year). The Goose Creek drainage is 78 percent of average (104 percent of last year). Clear Creek drainage is 97 percent of normal SWE (128 percent of last year). Crazy Woman Creek is 74 percent of average (81 percent of last year). The Upper Powder River drainage is 56 percent of average (76 percent of last year). The Powder River basin snow water equivalent (SWE), in Wyoming, is about 72 percent of average (97 percent of last year). For more information see Basin Summary of Snow Courses at beginning of report.

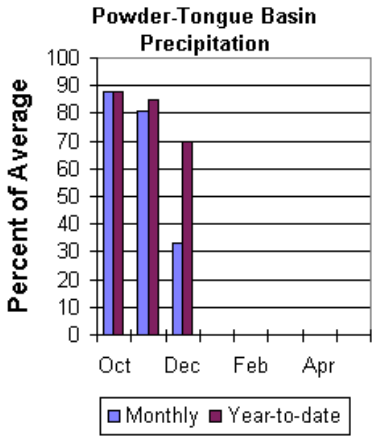


Precipitation

December precipitation was 33 percent of average for the 10 reporting stations (65 percent of last year). Monthly percentages range from 9 to 132 percent of average. Precipitation for the year ranges from 38 to 95 percent of average at the reporting stations. Year-to-date precipitation is about 70 percent of average in the basin; this is 79 percent of last year at this time.

Reservoir

Tongue River Reservoir is currently at 140 percent of average storage for this time of year (31,500 acre feet) – the reservoir is about 40 percent of capacity (total capacity is 79,100 acre feet). Last year at this time the reservoir was storing about 20,700 acre feet – average storage is about 22,500 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 88,000-acre feet (81 percent of normal). Middle Fork of the Powder River near Barnum is estimated to yield 8,000-acre feet (43 percent of average). The North Fork of the Powder near Hazelton should yield about 6,700 acre-feet (64 percent of normal). The estimated yield for Clear Creek near Buffalo is 32,000 acre-feet (82 percent of average). Rock Creek near Buffalo will yield about 20,000 acre-feet (83 percent of normal), and Piney Creek at Kearny should yield about 31,000 acre-feet (60 percent of average).

POWDER & TONGUE RIVER BASINS
Streamflow Forecasts - January 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-SEP	57	76	88	81	100	119	109
MIDDLE FORK POWDER nr Barnum	APR-SEP	4.7	6.7	8.0	43	11.1	15.7	18.7
NORTH FORK POWDER nr Hazelton	APR-SEP	4.1	5.7	6.7	64	7.7	9.3	10.4
CLEAR CREEK nr Buffalo	APR-SEP	23	29	32	82	36	41	39
ROCK CREEK nr Buffalo	APR-SEP	14.1	17.6	20	83	22	26	24
PINEY CREEK at Kearny	APR-SEP	5.5	21	31	60	41	57	52

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
TONGUE RIVER	79.1	31.5	20.7	22.5

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

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
UPPER TONGUE RIVER	7	101	77
GOOSE CREEK	2	104	78
CLEAR CREEK	2	128	97
CRAZY WOMAN CREEK	1	81	74
UPPER POWDER RIVER	3	76	56
POWDER RIVER in WY	5	97	72

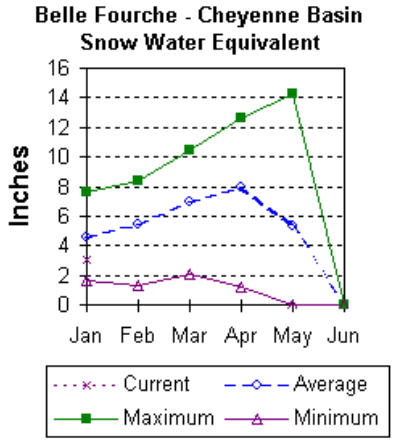
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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)

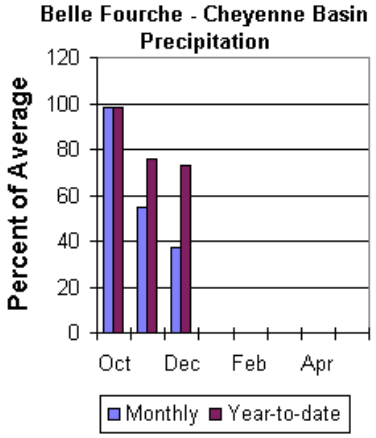
Snow.

The Belle Fourche River Basin snow water equivalent (SWE) is much below average. SWE is currently 66 percent of average snow pack; 135 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 December was 37 percent of average in the Black Hills. Monthly percentages range from 6 to 74 percent. Year-to-date precipitation is 73 percent of average and 96 percent of last year's amount.



Reservoir.

Usable reservoir storage is generally above average in the basin. Angostura is currently storing 77 percent of average (74,700-acre feet), about 61 percent of capacity. Belle Fourche reservoir is storing 95 percent of average (86,400-acre feet), about 48 percent of capacity. Deerfield reservoir is storing 117 percent of average (14,400-acre feet), about 95 percent of capacity. Keyhole reservoir is storing 114 percent of average (115,600-acre feet), 60 percent of capacity. Pactola reservoir is storing 100 percent of average (45,800-acre feet), 83 percent of capacity. Shadehill reservoir is storing 63 percent of average (31,700-acre feet), 39 percent of capacity.

Streamflow

Water supply is estimated to be near normal this year. The following values reflect the 50 percent chance yields for the March through July runoff period. Deerfield Reservoir inflow is forecast at 6,150 acre feet (98 percent of average). Pactola is forecast at 19,800 acre feet (94 percent of average).

BELLE FOURCHE & CHEYENNE RIVER BASINS
Streamflow Forecasts - January 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	MAR-JUL	2.22	4.56	6.15	98	7.74	10.08	6.30
PACTOLA RESERVOIR Inflow	MAR-JUL	0.9	12.2	19.8	94	27	39	21

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
ANGOSTURA	122.1	74.7	97.8	96.4
BELLE FOURCHE	178.4	86.4	124.6	90.6
DEERFIELD	15.2	14.4	14.9	12.3
KEYHOLE	193.8	115.6	154.6	101.7
PACTOLA	55.0	45.8	52.4	45.8
SHADEHILL	81.4	31.7	52.8	50.7

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

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
BELLE FOURCHE	1	135	66

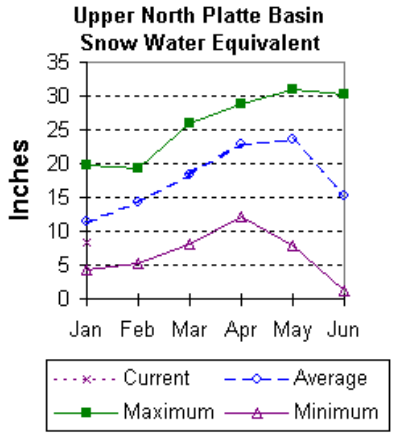
*** 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.**

(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 74 percent of average snow water equivalent (SWE) recorded for this time of the year (114 percent of last year). SWE in the drainage area above Northgate is about 89 percent of average and 133 percent of last year at this time. SWE in the Encampment River drainage is about 69 percent of normal and 93 percent of last year. Brush Creek SWE for the year is about 80 percent of normal and 145 percent of last year's SWE. Medicine Bow and Rock Creek drainage SWE is about 49 percent of average and 90 percent of last year at this time. For more information see Basin Summary of Snow Courses at the beginning of this report.

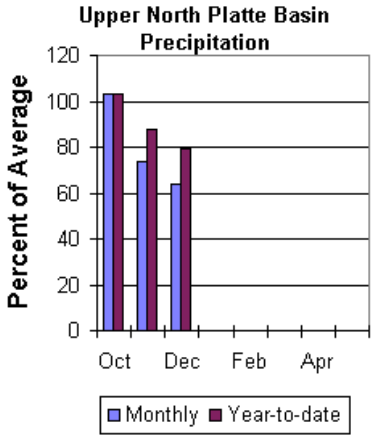


Precipitation

Eight reporting stations indicate December precipitation was 64 percent of average and about 69 percent of last year's amount. December precipitation varied from 4 to 84 percent of average. Total water-year-to-date precipitation is about 79 percent of average for the basin, which is about 110 percent of last year's amount. Year to date percentage ranges from 66 to 92 percent of average.

Reservoirs

Seminoe Reservoir is currently storing about 32 percent of normal for this time of the year. Currently, the reservoir is storing 40 percent of last year's amount. Seminoe Reservoir is estimated to be storing 202,600 acre-feet (20 percent of capacity). Last year, at this time, the reservoir had 511,500 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 110,000 acre-feet (67 percent of normal). Rock Creek near Arlington is estimated to yield 42,000 acre-feet (74 percent of average). Seminoe Reservoir inflow should be about (545,000 acre-feet (63 percent of normal). See the following table for more detailed information on projected runoff.

UPPER NORTH PLATTE RIVER BASIN
Streamflow Forecasts - January 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-SEP	54	141	200	74	259	346	270
Encampment River nr Encampment	APR-SEP	38	81	110	67	139	182	165
Rock Creek nr Arlington	APR-SEP	24	34	42	74	51	65	57
Seminoe Reservoir inflow	APR-JUL	92	338	505	63	672	918	800
	APR-SEP	169	393	545	63	697	921	860

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
SEMINOE	1016.7	202.6	511.5	631.1

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

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
N PLATTE above Northgate	5	133	89
ENCAMPMENT RIVER	3	93	69
BRUSH CREEK	2	145	80
MEDICINE BOW & ROCK CREEK	2	90	49
N PLATTE above Seminoe	13	114	74

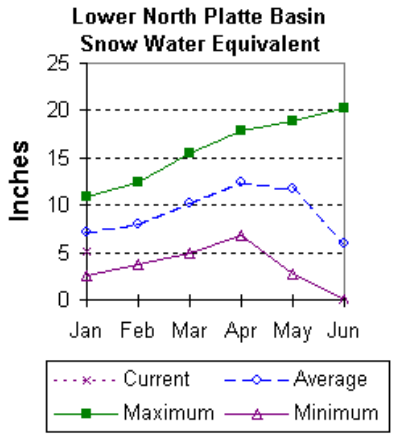
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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 North Platte River Basin (9)

Snow

SWE for the North Platte River basin in Wyoming averages 71 percent of normal (111 % of last year). The Sweetwater drainage SWE is currently 61 percent (71 percent of last year). Deer and LaPrele Creek SWE is 56 percent of average (108 percent of last year. SWE for the North Platte above the Laramie River drainage is 72 percent of average (108 % of last year). SWE for the Laramie River above the mouth is 65 percent of average (114 % of last year). SWE for the Laramie River above Laramie is 72 percent of average (119 % of last year). SWE for the Little Laramie River is 50 percent of average (100 percent of last year). For more information see Basin Summary of Snow Courses at beginning of report.

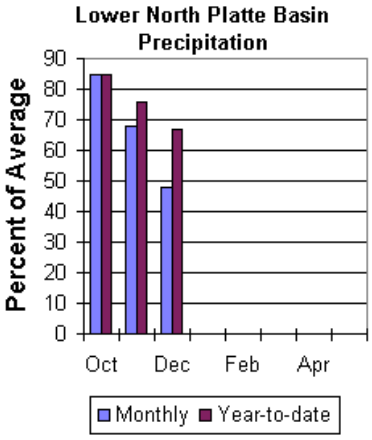


Precipitation

Of the 12 reporting stations, percentages for the month range from 0 to 214. December precipitation for the basin was 48 percent of average (82 percent of last year). The water year-to-date precipitation for the basin is currently 67 percent of average (90 percent of last year). Year to date percentages range from 59 to 80.

Reservoir

The Lower North Platte River basin reservoir storage is well below to well above average. Reservoir storage is as follows: Alcova 156,900 acre feet (102 percent of average); Glendo 147,100 acre feet (52 percent of average); Guernsey 9,400 acre feet (131 percent of average); Pathfinder 303,800 acre feet (48 percent of average); Seminoe 202,600 acre feet (32 percent of average). Wheatland No.2 12,200 acre feet (29 percent of average). North Platte Project users currently has 85,300 acre feet storage, Kendrick Project users are storing 584,000 acre feet, and Glendo Project users have 24,600 acre feet in storage.



Streamflow

Yields from 17 to 72 percent are expected in the basin during the forecast period. The following yields are based on the fifty percent chance probability runoff for the April through September forecast period. The Sweetwater near Alcova is forecast to yield about 28,500 acre-feet (36 percent of average). Deer Creek at Glenrock is expected to yield about 17 percent of average (7,000 acre-feet). LaPrele Creek above the reservoir is estimated to yield 20 percent of average (4,900 acre-feet). North Platte River below Guernsey Reservoir is expected to yield about 53 percent of normal (530,000 acre-feet), and below Glendo Reservoir is anticipated to yield about 53 percent of average (525,000 acre-feet). Laramie River near Woods should yield about 70 percent of average (95,000 acre-feet). The Little Laramie near Filmore should produce about 46,000 acre-feet (72 percent of average).

LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS
Streamflow Forecasts - January 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)	50% (Most Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	
Sweetwater River nr Alcova	APR-JUL	4.4	7.5	24	32	41	65	74
	APR-SEP	8.8	11.5	29	36	46	71	80
Deer Creek at Glenrock	APR-SEP	0.2	3.1	7.0	17	12.6	24	41
La Prele Creek ab La Prele Reservoir	APR-SEP	0.1	1.8	4.9	20	10.5	25	24
Alcova to Orin Gain	APR-JUL	11.0	22	30	20	69	126	152
	APR-SEP	13.0	24	31	19	70	128	161
North Platte River blw Glendo Reserv	APR-JUL	257	413	520	54	627	783	960
	APR-SEP	247	413	525	53	637	803	990
North Platte River blw Guernsey Resv	APR-JUL	192	387	520	54	653	848	970
	APR-SEP	190	392	530	53	668	870	1010
Laramie River nr Woods	APR-SEP	25	67	95	70	123	165	135
Little Laramie River nr Filmore	APR-SEP	22	36	46	72	56	70	64

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
ALCOVA	184.3	156.9	156.2	154.4
GLENDO	506.4	147.1	244.9	282.9
GUERNSEY	45.6	9.4	11.0	7.2
PATHFINDER	1016.5	303.8	487.1	635.7
SEMINOE	1016.7	202.6	511.5	631.1
WHEATLAND #2	98.9	12.2	19.0	42.2

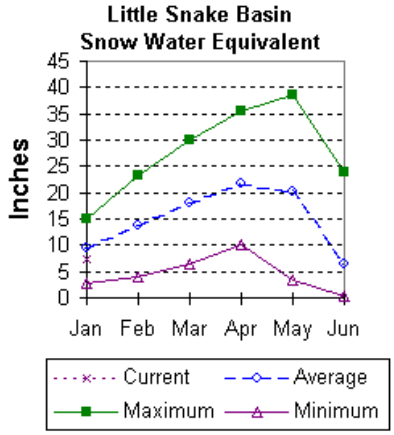
LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS
Watershed Snowpack Analysis - January 1, 2003

Watershed	Number of Data Sites	This Year as % of: Last Yr	Average
SWEETWATER	2	71	61
DEER & LaPRELE CREEKS	2	108	56
N PLATTE abv Laramie R.	17	108	72
LARAMIE RIVER abv Laramie	3	119	72
LITTLE LARAMIE RIVER	1	100	50
LARAMIE RIVER above mouth	4	114	65
NORTH PLATTE	17	111	71

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 78 percent of average (101 percent of last year at this time). For more information see Basin Summary of Snow Courses at beginning of this report.

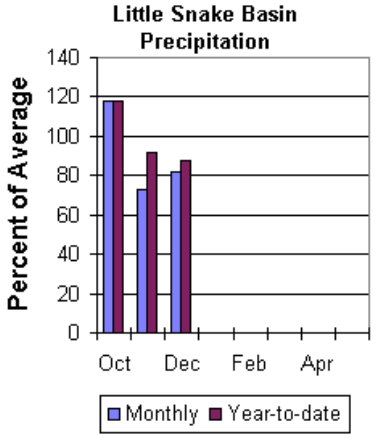


Precipitation

Precipitation across the basin was below average this past month. December precipitation was 82 percent of average (104 percent of last year) for the 5 reporting stations. December precipitation ranged from 66 to 132 percent of average. The Little Snake River basin water-year-to-date precipitation is currently 88 percent of average (108 percent of last year). Year-to-date percentages range from 81 to 107 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 120,000 acre-feet (76 percent of normal). Little Snake River near Dixon is estimated to yield 250,000 acre-feet (76 percent of normal).



LITTLE SNAKE RIVER BASIN
Streamflow Forecasts - January 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	60	93	120	76	150	200	159
LITTLE SNAKE R nr Dixon	APR-JUL	133	203	250	76	297	367	330

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

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

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

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
LITTLE SNAKE RIVER	6	101	78

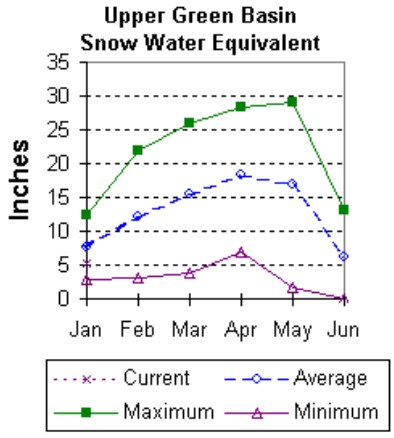
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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 Green River Basin (11)

Snow

Snow water equivalent (SWE) is well below normal in the upper Green River drainage this year. The Green River basin SWE above Warren Bridge is 74 percent of normal (86 percent of last year). SWE on the west side of the Upper Green River basin is about 66 percent of normal, 75 percent of this time last year. Newfork River SWE is now 77 percent of normal (85 percent of last year). Big Sandy-Eden Valley SWE is about 70 percent of average (79 percent of last year). For more information see the Basin Summary of Snow Courses at the beginning of this report.

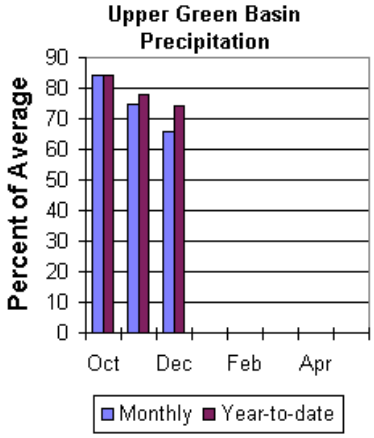


Precipitation

The 11 reporting precipitation sites in the basin were 66 percent of the December average (63 percent of last year at this time). December precipitation varied from 28 to 80 percent of average. Water year-to-date precipitation is about 74 percent of average (75 percent of last year). Year to date percentage of average ranges from 59 to 90 percent for the reporting stations.

Reservoir

Usable storage in Big Sandy Reservoir is currently about 3,400 acre feet (48 percent of average) -- 141 percent of last year and 29 percent of capacity. Edan Reservoir is too low to measure. Fontenelle Reservoir is storing 213,300 acre-feet (61 percent of average and 62 percent of the total capacity). Flaming Gorge Reservoir is currently storing 2,632,000 acre feet (81 percent of average) -- 87 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 fifty-percent chance April through July runoff in the Upper Green River basin is forecast below average. Green River at Warren Bridge is expected to yield about 185,000 acre-feet (70 percent of normal). Pine Creek above Fremont Lake is expected to yield 78,000 acre-feet (75 percent of normal). New Fork River near Big Piney is expected to yield about 265,000 acre-feet (67 percent of normal). Fontenelle Reservoir Inflow is estimated to be 510,000 acre-feet (59 percent of average), and Big Sandy near Farson is expected to be about 38,000 acre-feet (66 percent of normal).

UPPER GREEN RIVER BASIN
Streamflow Forecasts - January 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	102	151	185	70	219	268	265
Pine Creek abv Fremont Lake	APR-JUL	53	68	78	75	88	103	104
New Fork River nr Big Piney	APR-JUL	120	206	265	67	324	410	395
Fontenelle Reservoir Inflow	APR-JUL	321	428	510	59	599	742	860
Big Sandy River nr Farson	APR-JUL	16.4	29	38	66	47	60	58

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BIG SANDY	38.3	3.4	0.0	18.3
EDEN		NO REPORT		
FONTENELLE	344.8	213.3	145.8	209.7

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

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
GREEN above Warren Bridge	4	82	74
UPPER GREEN (West Side)	5	75	66
NEWFORK RIVER	2	85	77
BIG SANDY/EDEN VALLEY	1	68	72
GREEN above Fontenelle	11	79	70

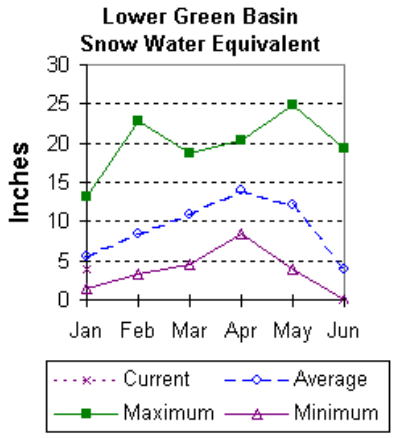
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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)

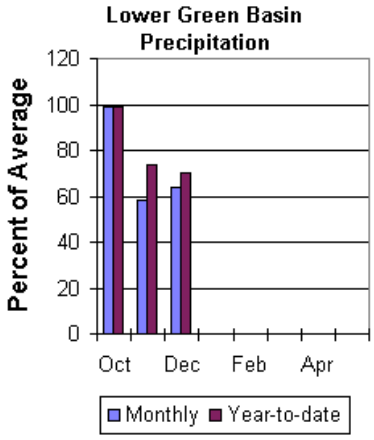
Snow

The Henrys Fork drainage, as of January 1, is 61 percent of average (77% of last year). SWE in the Hams Fork, as of January 1, is 75 percent of average (79% of last year). Blacks Fork SWE is currently 73 percent of average (85 percent of last year). The basin, as a whole, is 89 percent of average (108 percent of last year). For more information see Basin Summary of Snow Courses at beginning of this report.



Precipitation

Precipitation was below average for the 3 reporting stations during December (64 percent of average). Precipitation ranged from 52 to 88 percent of average for the month. The basin year-to-date precipitation is currently 70 percent of average (80 percent of last year). Year to date percentages range from 60 to 98.



Reservoir

Fontenelle Reservoir is currently storing 213,300 acre feet; this is 102 percent of average (146 percent of last year). Flaming Gorge is currently storing 2,632,000 acre feet, this is 87 percent of average (92 percent of last year). Viva Naughton is currently storing 25,900 acre feet; this is 82 percent of average (89 percent of last year).

Streamflow

Expected yields vary from 57 to 71 percent of average across the basin.
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 515,000-acre feet (59 percent of average). Blacks Fork near Robertson is forecast to yield 58,000-acre feet (61 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 46,000-acre feet (71 percent of average). Viva Naughton Reservoir inflow will be about 60,000-acre feet (67 percent of average). Flaming Gorge Reservoir inflow will be about 680,000-acre feet (57 percent of average).

LOWER GREEN RIVER BASIN
Streamflow Forecasts - January 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 nr Green River, WY	APR-JUL	207	390	515	59	640	823	875
Blacks Fork nr Robertson	APR-JUL	27	45	58	61	71	89	95
EF of Smiths Fork nr Robertson	APR-JUL	13.9	16.6	18.8	61	21	25	31
Hams Fk blw Pole Ck nr Frontier	APR-JUL	26	37	46	71	56	72	65
Hams Fk Inflow to Viva Naughton Res	APR-JUL	33	43	60	67	77	103	89
Flaming Gorge Reservoir Inflow	APR-JUL	254	508	680	57	852	1106	1190

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
FONTENELLE	344.8	213.3	145.8	209.7
FLAMING GORGE	3749.0	2632.0	2873.4	3027.0
VIVA NAUGHTON RES	42.4	25.9	29.0	31.6

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

Watershed	Number of Data Sites	This Year as % of ========== Last Yr	Average
HAMS FORK RIVER	3	79	75
BLACKS FORK	2	85	73
HENRYS FORK	2	77	61
GREEN above Flaming Gorge	18	79	71

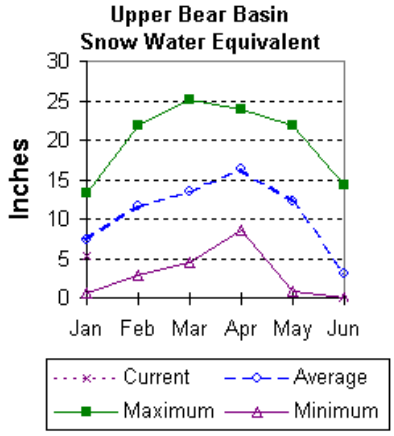
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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 73 percent of average (77 percent of last year). SWE for the Bear River in Utah is estimated to be 76 percent of average; that is about 81 percent of last year at this time. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is estimated at 73 percent of average (77 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.

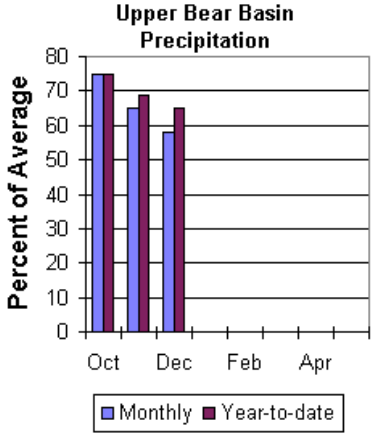


Precipitation

Precipitation for the month of December was 58 percent of average for the 2 reporting stations; this is 58 percent of the previous December. The year-to-date precipitation, for the basin, is 65 percent of average; this is 81 percent of last year's amount.

Reservoir

Usable storage in Woodruff Narrows reservoir is about 7,000 acre feet (30 percent of average). Reservoir storage is about 12 percent of capacity.



Streamflow

The following 50 percent chance stream flow yields are for the April through September period. Smiths Fork near Border is estimated to yield 100,000 acre-feet (85 percent of normal. Bear River above the Utah-Wyoming State Line is expected to yield about 107,000 acre feet (86 percent of average), The Bear River near Woodruff is expected to yield about 130,000 acre-feet (about 84 percent of normal).

UPPER BEAR RIVER BASIN
Streamflow Forecasts - January 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)	
SMITHS FK nr Border, WY	APR-SEP	60	81	100	85	123	167	118
Bear R nr UT-WY State Line	APR-SEP	74	92	107	86	124	154	125
BEAR R nr Woodruff, UT	APR-SEP	64	98	130	84	173	264	154

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
WOODRUFF NARROWS	57.3	7.0	---	23.6

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

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
UPPER BEAR RIVER in Utah	5	81	76
SMITHS & THOMAS FORKS	3	77	73
BEAR RIVER abv ID line	6	78	73
NORTHWEST	57	91	73
NORTHEST	11	102	79
SOUTHEAST	20	114	76
SOUTHWEST	25	86	74

* 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.