USDA United States Department of Agriculture

Natural Resources Conservation Service

Wyoming Basin Outlook Report March 1, 2001

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 much below normal for this time of the year. SWE averages for the State are about 67 percent of normal for this time of the year. Northwest portion of the State is 56 of percent normal. Northeast Wyoming is 71 of percent of normal, and the southeast part of the State is 80 percent of average. Southwestern Wyoming is 71 percent of average for this time of the year.

Precipitation for February was generally below average for the State. Year-to-date precipitation is below average for all except the Belle Fourche drainage – this area is still feeling the effects of the heavy snow last fall. Reservoir levels vary from about 30 percent of average to 159 percent of average. Generally, the larger capacity reservoirs are above average storage. Forecast runoff varies from 33 to 103 percent of average. The mean of all the forecast points in the State is about 62 percent of average (38 percent below average).

Snowpack

Near average snow during the month of February kept most of the SWE percentages almost the same as last month. SWE is generally below average for the entire State. SWE in the northwestern portion of the State is now at 56 percent of average (65 percent of last year). Northeast Wyoming SWE is currently about 71 percent of average (88 percent of last year). The southeast portion is currently about 80 percent of average SWE (88 percent of last year). And the southwest is about 71 percent of average (79 percent of last year).

Precipitation

February precipitation was below normal over the State, except in the Black Hills. The Belle Fourche received 113 percent of normal for February. This was the bright spot in the state as far as precipitation goes. Most of the basins received less than 80 percent of average 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	-30%	Upper North Platte River	-4%
Yellowstone & Madison	-22%	Lower North Platte	-20%
Wind River	-27%	Little Snake River	-25%
Big Horn	-20%	Upper Green River	-27%
Shoshone & Clarks Fork	-10%	Lower Green River	-27%
Powder & Tongue River	-26%	Upper Bear River	-24%
Belle Fourche & Cheyenne	+13%		

Streams

Stream flow yield is expected to be below average across the State. Most probable yield for the State is forecast to be about 62 percent of average (varies from 33 to 103 percent of average). The northwest part of the State is expected to yield about 57 percent of normal -- yield estimates vary from 33 to 73 percent of normal through the northwest region of the State. Yield from the northeast portion of Wyoming will be below average (about 54 percent of average) -- yield estimates vary from 47 to 64 percent of average for the various forecast points. The southeast portion of the state will be about 76 percent of normal -- yield estimates range from 61 to 103 percent

of normal. The southwest portion of Wyoming varies from 33 to 77 percent of average -- mean estimated yield for the forecast points in southwest Wyoming is about 65 percent of average.

Reservoirs

Although several reservoirs did not report, reservoir storage for those reporting is generally above average for this time of the year. See following table for further information about reservoir storage.

Major Reservoirs in Wyoming

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 FEBRUARY 2001

BASIN AREA RESERVIOR	CURRENT AS % CAPACITY	LAST YR AS % CAPACITY	AVERAGE AS % CAPACITY	CURRENT AS % AVERAGE	CURRENT AS % LAST YR
ALCOVA	85	85	85	100	100
ANGOSTURA	74	93	83	89	80
BELLE FOURCHE	87	97	63	137	89
BIG SANDY	14	0	48	30	0
BIGHORN LAKE	62	69	60	104	90
BOYSEN	73	88	93	78	82
BUFFALO BILL	56	68	61	93	82
BULL LAKE	41	63	56	74	66
DEERFIELD	99	97	87	114	103
EDEN	0	0	35	0	0
FLAMING GORGE		AVERAGE NOT ESTABLISHED			
FONTENELLE	28	38	50	56	73
GLENDO	64	75	76	85	85
GRASSY LAKE	84	82	72	116	102
GUERNSEY	34	35	30	112	96
HEBGEN LAKE	78	85	66	119	92
JACKSON LAKE	75	77	57	133	98
KEYHOLE	82	90	53	157	92
PACTOLA	98	98	84	118	100
PALISADES	50	89	76	65	56
PATHFINDER	74	94	58	128	78
PILOT BUTTE	74	71	56	132	104
SEMINOE	64	79	40	159	81
SHADEHILL	49	66	61	79	74
TONGUE RIVER	49	54	44	111	91
VIVA NAUGHTON RES	73	81	66	112	90
WHEATLAND #2	34	71	44	79	49
WOODRUFF NARROWS		AVERAGE NOT ESTABLISHED			
GLENDO PROJECT USERS	74	84	69	107	88
KENDRICK PROJECT	81	82	68	119	98
NORTH PLATTE PROJ	59	94	60	99	63

Basin Summary of Snow Course Data

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

MARCH 2001

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
WYOMING Snow Course and SNOTEL Stations						
ALBANY	9400	2/26/01	37	8.6	11.0	12.9
ASTER CREEK	7750	2/27/01	52	12.4	22.3	25.3
BALD MOUNTAIN SNOTEL	9380	3/01/01	---	11.0	16.7	17.0
BASE CAMP SNOTEL	7030	3/01/01	---	8.0	15.3	15.7
BATTLE MTN. SNOTEL	7440	3/01/01	---	9.2	9.8	9.9
BEARLODGE DIVIDE	4680	3/02/01	19	4.3	.3	2.2
BEARTOOTH LK. SNOTEL	9280	3/01/01	---	9.9	18.1	19.9
BEAR TRAP SNOTEL	8200	3/01/01	---	4.2	4.8	5.9
BIG GOOSE	7760	2/28/01	16	2.2	4.7	5.6
BIG GOOSE SNOTEL	7760	3/01/01	---	4.6	6.2	---
BIG PARK	8620	2/26/01	45	11.5	14.4	16.9
BIG SANDY SNOTEL	9080	3/01/01	---	8.7	9.8	12.1
BLACKWATER SNOTEL	9780	3/01/01	---	11.1	14.9	18.0
BLIND BULL SNOTEL	8900	3/01/01	51	12.8	22.2	24.3
BLIND PARK PILLOW	6870	3/01/01	---	6.2	5.7	9.1
BLUE RIDGE	9620	2/28/01	24	4.8	5.7	10.3
BONE SPGS. SNOTEL	9350	3/01/01	---	8.1	12.5	13.4
BOXELDER	7280	2/25/01	23	5.0	4.7	5.9
BROOKLYN LK. SNOTEL	10220	3/01/01	---	14.3	15.3	19.9
BRYAN FLAT	6420	2/27/01	28	5.6	7.6	8.3
BUCK CREEK	7960	2/25/01	33	8.8	8.4	7.8
BURGESS JCT. SNOTEL	7880	3/01/01	---	6.0	9.2	9.7
BURROUGHS CRK SNOTEL	8750	3/01/01	---	7.4	10.5	13.1
CANYON SNOTEL	8090	3/01/01	---	7.5	11.4	10.7
CARTER MOUNTAIN	7950	2/24/01	8	.8	1.2	3.7
CASPER MTN. SNOTEL	7850	3/01/01	---	9.6	12.0	12.3
CASTLE CREEK	8400	2/27/01	19	2.8	4.2	4.0
CCC CAMP	7000	2/27/01	33	7.7	11.3	10.9
CHALK CK #1 SNOTEL	9100	3/01/01	---	14.3	17.0	18.6
CHALK CK #2 SNOTEL	8200	3/01/01	---	9.8	11.0	12.3
CLOUD PEAK SNOTEL	9850	3/01/01	---	7.8	12.2	11.1
COLD SPRINGS SNOTEL	9630	3/01/01	---	2.8	4.9	7.0
COTTONWOOD CR SNOTEL	7700	3/01/01	---	13.9	19.5	18.5
DARBY CANYON	8250	2/27/01	56	14.1	18.6	19.8
DEER PARK SNOTEL	9700	3/01/01	---	9.5	11.2	---
DITCH CREEK	6870	3/01/01	20	4.9	1.7	---
DIVIDE PEAK SNOTEL	8860	3/01/01	---	11.9	13.5	16.8
DOME LAKE SNOTEL	8880	3/01/01	---	7.4	8.8	11.3
DU NOIR	8760	2/26/01	20	3.8	4.3	7.0
EAST RIM DIV SNOTEL	7930	3/01/01	---	7.4	9.7	12.0
ELBO RANCH	7100	2/28/01	26	5.0	8.6	10.2
ELKHART PARK SNOTEL	9400	3/01/01	---	9.4	10.2	11.4
EVENING STAR SNOTEL	9200	3/01/01	---	11.6	21.4	22.5

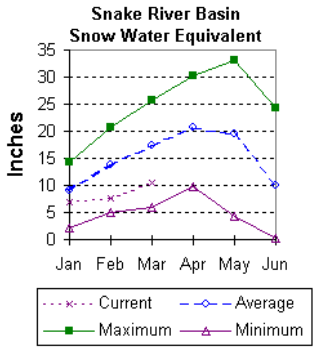
FOUR MILE MEADOWS	7860	2/28/01	29	6.6	9.0	11.1
FOXPARK	9060	2/26/01	29	6.7	7.6	6.5
GEYSER CREEK	8500	2/27/01	16	2.9	3.4	6.2
GLADE CREEK	7040	2/27/01	49	12.1	17.8	20.3
GRANITE CRK SNOTEL	6770	3/01/01	---	10.6	14.1	15.4
GRANNIER MEADOWS	8860	2/28/01	28	6.1	8.0	12.3
GRASSY LAKE SNOTEL	7270	3/01/01	---	18.3	26.7	29.6
GRAVE SPRINGS SNOTEL	8550	3/01/01	---	4.9	6.0	7.6
GREYS BOUNDARY	5720	2/27/01	35	8.9	10.4	10.3
GROS VENTRE SNOTEL	8750	3/01/01	---	8.0	9.0	12.9
GROVER PARK DIVIDE	7000	2/27/01	24	5.8	9.5	10.5
HAIRPIN TURN	9480	2/26/01	42	10.9	12.2	14.5
HANSEN S.M. SNOTEL	8360	3/01/01	---	3.6	5.1	5.7
HAMS FORK SNOTEL	7840	3/01/01	---	7.7	11.2	10.5
HASKINS CREEK	8980	2/26/01	76	22.3	23.9	25.6
HOBBS PARK SNOTEL	10100	3/01/01	---	5.7	8.3	12.1
HUCKLEBERRY DIVIDE	7300	2/27/01	45	10.5	16.8	18.7
INDIAN CREEK SNOTEL	9430	3/01/01	---	14.5	19.0	22.9
JACKPINE CREEK	7350	2/27/01	50	13.2	17.5	19.2
KELLEY R.S. SNOTEL	8180	3/01/01	---	8.9	12.0	14.2
KENDALL R.S. SNOTEL	7740	3/01/01	---	7.6	12.5	12.5
KIRWIN SNOTEL	9550	3/01/01	---	4.7	6.3	8.1
LA BONTE	8450	3/05/01	24	5.3	3.2	5.3
LAKE CAMP	7780	2/27/01	26	4.7	9.9	8.2
LA PRELE SNOTEL	8380	3/01/01	---	8.4	8.0	8.4
LARSEN CREEK	9020	2/26/01	28	6.5	9.8	11.2
LEWIS LAKE SNOTEL	7850	3/01/01	---	14.9	22.3	29.5
LEWIS LAKE DIVIDE	7850	2/27/01	69	18.5	---	35.3
LIBBY LODGE	8750	2/26/01	34	8.4	9.0	9.9
LITTLE BEAR RUN	6240	3/01/01	21	4.8	2.9	---
LITTLE WARM SNOTEL	9370	3/01/01	---	6.0	8.8	9.2
LOOMIS PARK SNOTEL	8240	3/01/01	---	10.2	14.6	14.9
LUPINE CREEK	7380	2/27/01	19	4.4	6.2	8.9
MALLO	6420	2/28/01	30	7.9	4.6	7.4
MARQUETTE SNOTEL	8760	3/01/01	---	2.8	4.6	6.5
MEDICINE LODGE LAKES	9340	2/26/01	30	5.7	9.1	9.6
MIDDLE FORK	7420	2/28/01	20	3.2	.8	4.8
MIDDLE POWDER SNOTEL	7760	3/01/01	---	6.3	8.5	9.7
MORAN	6750	2/28/01	31	7.4	11.6	11.8
MOSS LAKE	9800	2/26/01	49	14.2	13.7	20.7
MOUNT TOM	5560	3/01/01	29	8.1	3.2	4.9
NEW FORK SNOTEL	8340	3/01/01	---	7.6	8.9	9.9
NORRIS BASIN	7500	2/26/01	29	6.1	12.1	9.9
NORTH BARRETT CREEK	9400	2/26/01	56	14.9	14.4	17.4
NORTH FRENCH SNOTEL	10130	3/01/01	---	20.8	21.3	20.4
NORTH RAPID CK PILL.	6130	3/01/01	---	6.5	5.2	---
NORTH TONGUE	8450	2/26/01	28	5.5	10.2	10.7
OLD BATTLE SNOTEL	9920	3/01/01	---	19.7	21.4	26.2
OLD FAITHFUL	7400	2/28/01	24	5.0	11.2	13.7
ONION GULCH	8780	2/25/01	21	2.6	5.0	7.3
OWL CREEK SNOTEL	8980	3/01/01	---	2.8	2.7	3.7
PARKERS PEAK SNOTEL	9400	3/01/01	---	11.7	15.1	18.0

PHILLIPS BENCH SNOT.	8200	3/01/01	---	14.8	19.6	24.2
POCKET CREEK	9350	2/26/01	38	9.5	9.1	10.7
POISON MEADOWS	8500				---	24.5
POLE MOUNTAIN	8700	2/26/01	32	8.1	4.9	6.3
POWDER RVR.PASS SNOT	9480	3/01/01	---	4.8	7.7	8.8
PURGATORY GULCH	8970	2/26/01	38	10.4	8.2	8.9
RANGER CREEK	8120	2/26/01	22	3.5	7.7	7.7
RENO HILL SNOTEL	8500	3/01/01	---	9.8	9.8	10.8
REUTER CANYON	6280	3/02/01	48	16.3	5.0	8.3
ROWDY CREEK	8300	2/27/01	44	11.2	19.1	19.2
RYAN PARK	8400	2/26/01	34	8.4	7.6	9.7
SALT RIVER SNOTEL	7600	3/01/01	---	7.3	11.7	12.1
SAND LAKE SNOTEL	10050	3/01/01	---	19.7	18.5	26.8
SANDSTONE SNOTEL	8150	3/01/01	---	9.3	13.2	12.2
SAWMILL DIVIDE	9260	2/28/01	30	6.3	10.0	10.9
SHELL CREEK SNOTEL	9580	3/01/01	---	8.0	12.4	12.6
SHERIDAN R.S.	7750	2/26/01	14	2.6	4.5	5.3
SNAKE RIVER STATION	6920	2/27/01	43	10.6	16.2	18.2
SNAKE RV STA SNOTEL	6920	3/01/01	---	9.4	14.6	16.2
SNIDER BASIN SNOTEL	8060	3/01/01	---	7.8	10.8	12.8
SNOW KING MTN	7660				11.2	12.8
SOLDIER PARK	8780	2/28/01	14	.8	3.2	4.6
SOUR DOUGH	8460	2/25/01	21	1.8	4.2	5.5
SOUTH BRUSH SNOTEL	8440	3/01/01	---	8.3	8.8	9.4
SOUTH PASS SNOTEL	9040	3/01/01	---	8.2	11.3	14.0
SPRING CRK. SNOTEL	9000	3/01/01	---	14.3	20.5	23.3
ST LAWRENCE ALT SNOT	8620	3/01/01	---	2.6	2.8	6.2
SUCKER CREEK SNOTEL	8880	3/01/01	---	6.1	9.6	9.7
SYLVAN LAKE SNOTEL	8420	3/01/01	---	10.8	16.0	18.5
SYLVAN ROAD SNOTEL	7120	3/01/01	---	6.1	11.7	11.2
T CROSS RANCH	7900	2/27/01	22	3.5	6.1	6.7
TETON PASS W.S.	7740	3/01/01	49	14.5	21.0	22.4
THUMB DIVIDE SNOTEL	7980	3/01/01	---	6.0	12.3	14.3
THUMB DIVIDE	7980	2/27/01	31	6.2	12.1	17.1
TIE CREEK SNOTEL	6870	3/01/01	---	3.6	5.6	---
TIMBER CREEK SNOTEL	7950	3/01/01	---	1.9	1.4	4.9
TOGWOTEE PASS SNOTEL	9580	3/01/01	58	14.0	16.9	20.8
TOWNSEND CRK SNOTEL	8700	3/01/01	---	4.4	4.6	8.0
TRIPLE PEAK SNOTEL	8500	3/01/01	---	12.8	20.3	21.7
TURPIN MEADOWS	6900	2/28/01	22	5.1	8.3	9.5
TWO OCEAN SNOTEL	9240	3/01/01	---	15.7	20.6	22.2
TYRELL RANGER STA.	8300	2/28/01	21	1.6	4.2	7.0
UPPER SPEARFISH	6500	2/23/01	29	7.4	4.2	6.0
WARREN PEAK SNOTEL	6520				9.2	9.1
WEBBER SPRING SNOTEL	9250	3/01/01	---	14.5	16.9	22.3
WHISKEY PARK SNOTEL	8950	3/01/01	---	17.2	20.7	23.6
WILLOW CREEK SNOTEL	8450	3/01/01	---	15.5	24.6	25.8
WINDY PEAK SNOTEL	7900	3/01/01	---	6.9	5.6	6.2
WOLVERINE SNOTEL	7650	3/01/01	---	6.4	10.5	10.1
WOOD ROCK G.S.	8440	2/28/01	23	4.7	7.5	8.3
YOUNTS PEAK SNOTEL	8350	3/01/01	---	7.0	12.9	14.8

Snake River Basin (1)

Snow

Percentage of average snow water equivalent (SWE) for each drainage in the basin is: Snake above Jackson Lake -- 57 percent (65% of last year at this time), Pacific Creek -- 63 percent (65% of last year at this time), Gros Ventre River -- 62 percent (80% of last year at this time), Hoback River -- 62 percent (71% of last year at this time), Greys River – 61 percent (66% of last year at this time), Salt River -- 65 percent (66% of last year at this time). Snake River Basin above Palisades is 60 percent of average (68% 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.

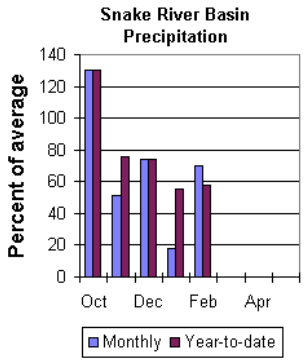


Precipitation.

Precipitation across the basin was much below average for last month. Monthly precipitation, for the basin, was 70 percent of average (63 percent of last year). February percentages range from 49 to 108 percent of average. Water-year-to-date precipitation is 58 percent of normal for the Snake River basin (77 percent of last year at this time) Year-to-date percentages range from 43 to 81 percent of average.

Reservoir.

Current storage compared to average for the three storage reservoirs in the basin is as follows: Grassy Lake —116 percent of average (12,800 acre feet compared to 12,500 last year), Jackson lake — 133 percent of average (638,300 acre feet compared to 653,500 acre feet last year), and Palisades Reservoir —65 percent of average (695,600 acre feet compared to 1,247,100 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 590,000 acre-feet (68 percent of normal). Yield from the Snake River above Palisades Reservoir is estimated to be 1,820,000 acre-feet (68 percent of normal). The 50 percent chance yield near Heise is expected to be 2,550,000 acre-feet (63 percent of normal). Pacific Creek at Moran is expected to yield about 111,000 acre-feet (67 percent of average). Greys River above Palisades Reservoir is estimated to yield 235,000 acre-feet (61 percent of normal). Salt River near Etna is estimated to have a yield of 235,000 acre-feet (59 percent of normal).

SNAKE RIVER BASIN
Streamflow Forecasts - March 1, 2001

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)
SNAKE near Moran (1,2)	APR-SEP	411	534	590	68	646	769	869
SNAKE above Palisades (2)	APR-SEP	1459	1674	1820	68	1966	2181	2671
PALISADES RESERVOIR INFLOW (1,2)	APR-SEP	1677	2167	2390	64	2613	3103	3763
SNAKE near Heise (2)	APR-SEP	1934	2301	2550	63	2799	3166	4049
PACIFIC CREEK at Moran	APR-SEP	76	97	111	67	125	146	166
GREYS above Palisades	APR-SEP	161	205	235	61	265	309	388
SALT near Etna	APR-SEP	128	192	235	59	278	342	399

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
GRASSY LAKE	15.2	12.8	12.5	11.0
JACKSON LAKE	847.0	638.3	653.5	481.0
PALISADES	1400.0	695.6	1247.1	1063.1

SNAKE RIVER BASIN
Watershed Snowpack Analysis - March 1, 2001

Watershed	Number of Data Sites	This Year as % of: Last Yr	Average
SNAKE above Jackson Lake	9	65	57
PACIFIC CREEK	3	65	63
GROS VENTRE RIVER	3	80	62
HOBACK RIVER	6	71	62
GREYS RIVER	5	66	61
SALT RIVER	5	66	65
SNAKE above Palisades	29	68	60

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

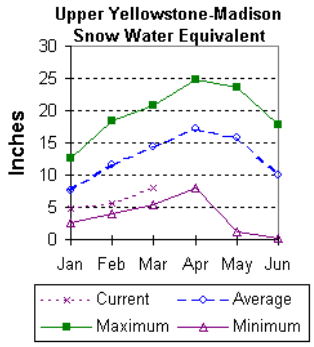
The average is computed for the 1961-1990 base period.

(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

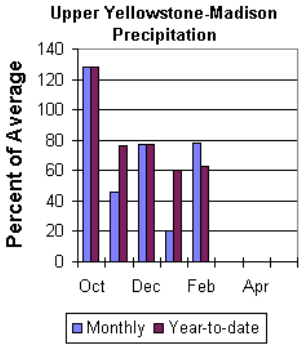
Snowfall in these basins this year has been well below average for this time of the year. Snow water equivalent (SWE) is about 53 percent of average (59 percent of last year) in the Madison drainage. SWE in the Yellowstone drainage is about 57 percent of average (62 percent of last year at this time). See the "Snow Course Basin Summary" at the beginning of this document for more details on specific sites.



Precipitation

February precipitation in the Madison and Yellowstone drainage was about 78 percent of average (63 percent of previous year) for the 6 reporting stations -- percentage range was from 57 to 114 percent of average. Water-year-to-date precipitation is about 63 percent of average (74 percent of last year's amount). Year to date percentage ranges from 43 to 85 percent

Reservoir



Ennis Lake is storing 30,600 acre-feet (69 percent of capacity) – 90 percent of average. Hebgen Lake is storing about 295,400 acre-feet of water (66 percent of capacity) – 119 percent of average. Ennis Lake is storing about 109 percent and Hebgen Lake is storing about 92 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 440,000 acre feet (56 percent of normal). Yellowstone at Corwin Springs will yield about 1,250,000 acre-feet (65 percent of normal). Yellowstone near Livingston will yield about 1,435,000 acre feet (64 percent of normal). Hebgen lake inflow is estimated to be 355,000 acre feet (73 percent of normal). See the following page for detailed runoff volumes.

UPPER YELLOWSTONE & MADISON RIVER BASINS
Streamflow Forecasts - March 1, 2001

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)
YELLOWSTONE at Lake Outlet	APR-SEP	333	396	440	56	516	627	792
YELLOWSTONE RIVER at Corwin Spgs.	APR-SEP	1085	1182	1250	65	1351	1499	1937
YELLOWSTONE RIVER near Livingston	APR-SEP	1255	1367	1435	64	1547	1711	2241
HEBGEN Reservoir Inflow	APR-SEP	270	321	355	73	389	440	486

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
ENNIS LAKE	41.0	30.6	28.2	34.1
HEBGEN LAKE	377.5	295.4	320.6	247.8

UPPER YELLOWSTONE & MADISON RIVER BASINS
Watershed Snowpack Analysis - March 1, 2001

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
MADISON RIVER in WY	9	59	53
YELLOWSTONE RIVER in WY	12	62	57

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

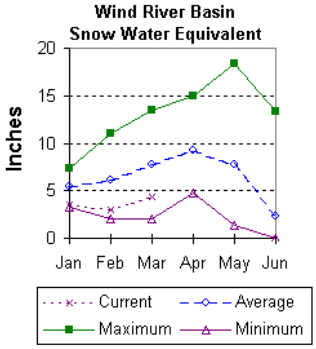
The average is computed for the 1961-1990 base period.

(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

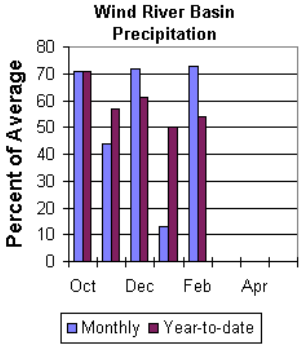
The Wind River basin has much below average snow water equivalent (SWE) for this time of the year. SWE in the Wind River above Dubois is 60 percent of average (76 percent of last year). The Little Wind SWE is 45 percent of average water content (75 percent of last year), and the Popo Agie drainage SWE is about 53 percent of average (84 percent of last year). The Wind River basin, above Boysen Reservoir, SWE is about 56 percent of average (about 78 percent of last year). See the Basin Summary of Snow Course Data at the front of this report for details.



Precipitation

February precipitation in the basin varied from 35 to 248 percent of average. February precipitation for the basin was about 73 percent of average for the 11 reporting stations; that is about 70 percent of last year's amount. Water year-to-date precipitation is 54 percent of normal. The current water-year-to-date average is about 76 percent of last year at this time. Year to date figures range from 41 to 117 percent of average.

Reservoirs



Current storage varies from 74 to 132 percent of average. Bull Lake is currently storing about 62,500 acre feet (56 percent of capacity) -- the reservoir is at 74 percent of average at this time of the year. Boysen Reservoir is storing about 73 percent of capacity 434,500 acre feet) -- the reservoir is at 78 percent of average for this time of the year. Pilot Butte is storing 74 percent of capacity (23,400 acre feet) -- the reservoir is at 132 percent of average for 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. The Wind River above Bull Lake Creek is expected to yield 325,000 acre feet (60 percent of average). Wind River at Riverton will yield about 315,000 acre feet (49 percent of average). Boysen Reservoir inflow will yield about 370,000 acre feet (46 percent of normal). Bull Lake Creek near Lenore is expected to yield about 110,000 acre feet (60 percent of average). Little Popo Agie River near Lander is expected to yield about 22,000 acre feet (42 percent of average). South Fork of Little Wind near Fort Washakie will yield about 50,000 acre feet (62 percent of average). Little Wind River near Riverton will yield about 190,000 acre feet (59 percent of average).

WIND RIVER BASIN
Streamflow Forecasts - March 1, 2001

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)
WIND RIVER abv Bull Lake Cr (2)	APR-SEP	264	301	325	60	368	431	538
WIND RIVER at Riverton (2)	APR-SEP	207	272	315	49	404	534	648
BOYSEN RESERVOIR Inflow (2)	APR-SEP	227	307	370	46	500	692	809
BULL LAKE CR near Lenore (2)	APR-SEP	86	101	110	60	126	150	183
LT POPO AGIE RIVER nr Lander	APR-SEP	14.0	18.7	22	42	30	41	52
SF LT WIND nr Fort Washakie	APR-SEP	32	43	50	62	61	78	81
LT WIND RIVER nr Riverton	APR-SEP	100	156	190	59	251	342	324

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BULL LAKE	151.8	62.5	95.2	85.0
BOYSEN	596.0	434.5	527.3	555.2
PILOT BUTTE	31.6	23.4	22.4	17.7

WIND RIVER BASIN
Watershed Snowpack Analysis - March 1, 2001

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
WIND RIVER above Dubios	7	76	60
LITTLE WIND	2	75	45
POPO AGIE	6	84	53
WIND above Boysen Resv	14	78	56

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

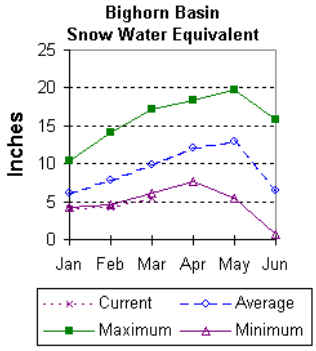
The average is computed for the 1961-1990 base period.

(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)

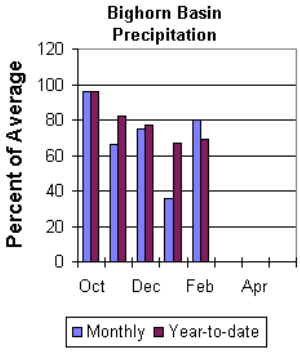
Snow

Snowpack in this basin is well below average for this time of year. The Nowood drainage SWE is 50 percent of average (61 percent of last year). Greybull River SWE is 51 percent of average (86 percent of last year). Shell Creek SWE is 60 percent of average (62 percent of last year). The basin SWE, as a whole, is currently 55 percent of average (64 percent of last year). For more information see Basin Summary of Snow Courses at beginning of report.



Precipitation

February precipitation was 80 percent of the monthly average (71 percent of last year). Sites ranged from 50 to 293 percent of average for the month. Year-to-date precipitation is 69 percent of normal; that is 76 percent of last year at this time. Year to date percentages, from the 13 reporting stations, range from 61 to 168.



Reservoir

Boysen Reservoir is currently storing 434,500-acre feet (78 percent of average). Bighorn Lake is now at 104 percent of average (842,400-acre feet). Boysen is currently storing 82 percent of last year at this time and Big Horn Lake is storing 90 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 370,000 acre feet (46 percent of average); the Greybull River nr Meeteese should yield 85,000 acre feet (42 percent of average); Shell Creek near Shell should yield 49,000 acre feet (65 percent of average) and the Bighorn River at Kane should yield 505,000 acre feet (45 percent of average).

BIGHORN RIVER BASIN
Streamflow Forecasts - March 1, 2001

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	227	307	370	46	500	692	809
GREYBULL RIVER nr Meeteetse	APR-SEP	70	78	85	42	99	119	201
SHELL CREEK nr Shell	APR-SEP	42	46	49	65	54	60	75
BIGHORN RIVER at Kane (2)	APR-SEP	292	416	505	45	693	971	1124

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BOYSEN	596.0	434.5	527.3	555.2
BIGHORN LAKE	1356.0	842.4	935.3	810.4

BIGHORN RIVER BASIN
Watershed Snowpack Analysis - March 1, 2001

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
NOWOOD RIVER	5	61	50
GREYBULL RIVER	2	86	51
SHELL CREEK	4	62	60
BIGHORN (Boysen-Bighorn)	11	64	55

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

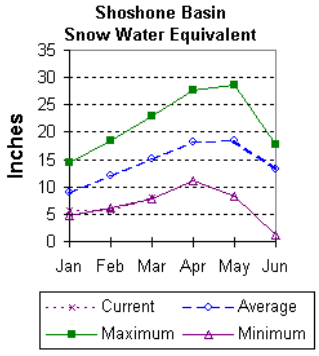
The average is computed for the 1961-1990 base period.

(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 53 percent of the March average (61 percent of last year) in the Shoshone River basin. The Clarks Fork River basin SWE is 55 percent of average (57 percent of last year). For more information see the Basin Summary of Snow Course Data at the beginning of this report.

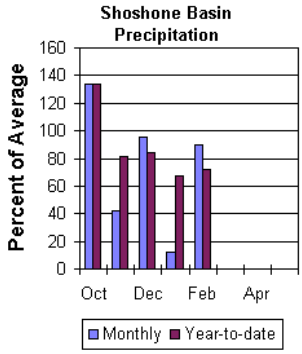


Precipitation

Precipitation for the month of February was 90 percent of normal (67 percent of last year). Monthly percentages range from 5 to 305 percent of average. The basin year-to-date precipitation is now 72 percent of average (72 percent of last year). Year-to-date percentages range from 56 to 114 percent of average.

Reservoir

Current storage in Buffalo Bill Reservoir is 93 percent of average (82 percent of last year's storage) – the reservoir is about 56 percent of capacity. Currently, about 362,500 acre-feet are stored in the reservoir compared to 441,800 acre feet last year – normally the reservoir stores about 391,200 acre feet at 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 fifty percent yield (April through September period) for North Fork Shoshone River at Wapiti is expected to be 285,000 acre-feet (55 percent of average). South Fork of the Shoshone River near Valley is estimated to yield of 120,000 acre-feet (45 percent of average), and South Fork above Buffalo Bill Reservoir is expected to be 75,000 acre-feet (33 percent of average). At the Buffalo Bill Reservoir, the fifty percent chance yield for the Shoshone River is expected to be about 420,000 acre-feet (52 percent of average). The fifty-percent chance yield for the Clarks Fork of the Yellowstone near Belfry, Montana is expected to be about 335,000 acre-feet (57 percent of average).

SHOSHONE & CLARKS FORK RIVER BASINS
Streamflow Forecasts - March 1, 2001

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)
NF SHOSHONE RIVER at Wapiti	APR-SEP	244	270	285	55	315	358	520
SF SHOSHONE RIVER nr Valley	APR-SEP	94	110	120	45	142	175	269
SF SHOSHONE RIVER abv Buffalo Bill	APR-SEP	46	64	75	33	111	163	229
BUFFALO BILL DAM Inflow (2)	APR-SEP	338	386	420	52	481	572	804
CLARKS FORK RIVER nr Belfry	APR-SEP	283	313	335	57	373	428	590

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BUFFALO BILL	646.6	362.5	441.8	391.2

SHOSHONE & CLARKS FORK RIVER BASINS
Watershed Snowpack Analysis - March 1, 2001

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
SHOSHONE RIVER	7	61	53
CLARKS FORK in WY	7	57	55

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

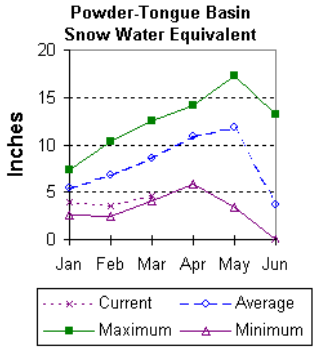
The average is computed for the 1961-1990 base period.

(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 60 percent of normal (66 percent of last year). The Goose Creek drainage is 62 percent of average (73 percent of last year). Clear Creek drainage is 52 percent of normal SWE (57 percent of last year). Crazy Woman Creek is 43 percent of average (54 percent of last year). The Upper Powder River drainage is 56 percent of average (69 percent of last year). The Powder River basin snow water equivalent (SWE), in Wyoming, is about 54 percent of average (63 percent of last year). For more information see Basin Summary of Snow Courses at beginning of report.

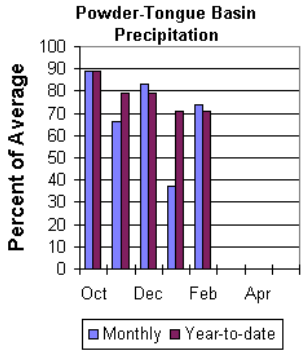


Precipitation

February precipitation was 74 percent of average for the 11 reporting stations (62 percent of last year). Monthly percentages range from 37 to 110 percent of average. Precipitation for the year ranges from 62 to 94 percent of average at the reporting stations. Year-to-date precipitation is about 71 percent of average in the basin; this is 75 percent of last year at this time.

Reservoir

Tongue River Reservoir is currently at 111 percent of average storage for this time of year (33,400 acre feet) – the reservoir is about 44 percent of capacity (total capacity is 68,000 acre feet). Last year at this time the reservoir was storing about 36,600 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 73,000-acre feet (64 percent of normal). Middle Fork of the Powder River near Barnum is estimated to yield 9,200-acre feet (47 percent of average). The North Fork of the Powder near Hazelton should yield about 5,800 acre-feet (57 percent of normal). The estimated yield for Clear Creek near Buffalo is 22,000 acre-feet (56 percent of average). Rock Creek near Buffalo will yield about 12,200 acre-feet (51 percent of normal), and Piney Creek at Kearny should yield about 23,700 acre-feet (47 percent of average).

POWDER & TONGUE RIVER BASINS
Streamflow Forecasts - March 1, 2001

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	54	66	73	64	85	102	115
MIDDLE FORK POWDER nr Barnum	APR-SEP	5.9	7.9	9.2	47	12.1	16.4	19.7
NORTH FORK POWDER nr Hazelton	APR-SEP	4.3	5.2	5.8	57	6.8	8.4	10.1
CLEAR CREEK nr Buffalo	APR-SEP	15.2	19.5	22	56	27	34	39
ROCK CREEK nr Buffalo	APR-SEP	9.4	11.0	12.2	51	14.5	17.8	24
PINEY CREEK at Kearny	APR-SEP	11.2	18.9	24	47	35	51	51

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
TONGUE RIVER	68.0	33.4	36.6	30.1

POWDER & TONGUE RIVER BASINS
Watershed Snowpack Analysis - March 1, 2001

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
UPPER TONGUE RIVER	8	66	60
GOOSE CREEK	2	73	62
CLEAR CREEK	4	57	52
CRAZY WOMAN CREEK	3	54	43
UPPER POWDER RIVER	4	69	56
POWDER RIVER in WY	8	63	54

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

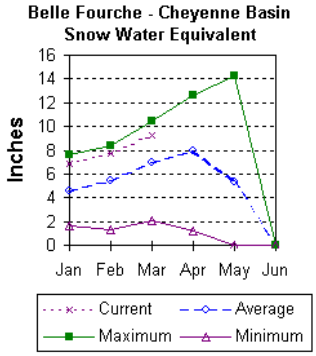
The average is computed for the 1961-1990 base period.

(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)

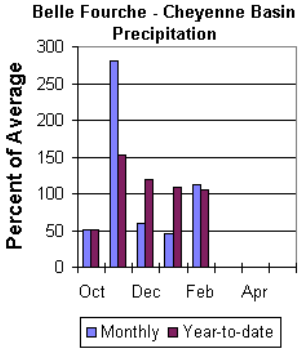
Snow.

The Belle Fourche River basin, as of March 1, is 132 percent of normal. This is 223 percent of what it was last year 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 February was 113 percent of average in the Black Hills (105 percent of last February). Monthly percentages range from 87 to 145 percent. Year-to-date precipitation is 105 percent of average and 163 percent of last year's amount. Year to date percentages range from 91 to 114. This is from the 3 reporting stations.



Reservoir.

Reservoir storage is generally above average in the basin. Angostura is currently storing 89 percent of average (90,900-acre feet). Belle Fourche reservoir is storing 137 percent of average (154,700-acre feet). Deerfield reservoir is storing 114 percent of average (15,100-acre feet). Keyhole reservoir is storing 157 percent of average (159,800-acre feet). Pactola reservoir is storing 118 percent of average (54,100-acre feet), and Shadehill reservoir is storing 79 percent of average (39,600-acre feet).

Streamflow

Streamflow forecasts for the Black Hills are not available for this month.

BELLE FOURCHE & CHEYENNE RIVER BASINS
Streamflow Forecasts - March 1, 2001

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)	
BELLE FOURCHE & CHEYENNE RIVER BASINS							

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
ANGOSTURA	122.1	90.9	113.6	101.7
BELLE FOURCHE	178.4	154.7	173.6	113.0
DEERFIELD	15.2	15.1	14.7	13.2
KEYHOLE	193.8	159.8	173.5	101.9
PACTOLA	55.0	54.1	54.1	46.0
SHADEHILL	81.4	39.6	53.5	50.0

BELLE FOURCHE & CHEYENNE RIVER BASINS
Watershed Snowpack Analysis - March 1, 2001

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
BELLE FOURCHE	6	223	132

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

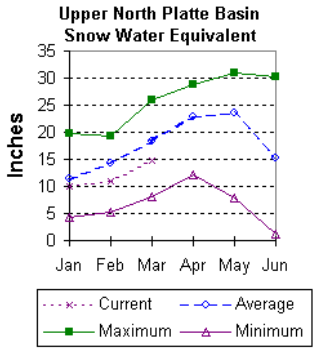
The average is computed for the 1961-1990 base period.

(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)

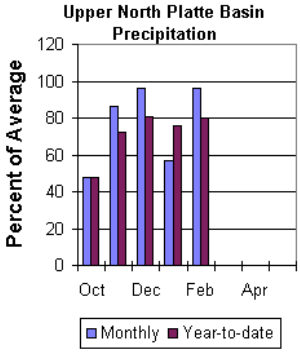
Snow

The snow courses above Seminoe Reservoir have about 80 percent of average snow water equivalent (SWE) recorded for this time of the year (89 percent of last year). SWE in the drainage area above Northgate is about 82 percent of average and 80 percent of last year at this time. SWE in the Encampment River drainage is about 76 percent of normal and 92 percent of last year. Brush Creek SWE for the year is about 86 percent of normal and 101 percent of last year's SWE. Medicine Bow and Rock Creek drainage SWE is about 72 percent of average and 101 percent of last year at this time. For more information see Basin Summary of Snow Courses at the beginning of this report.



Precipitation

Nine reporting stations indicate February precipitation was 96 percent of average and about 72 percent of last year's amount. February precipitation varied from 0 to 186 percent of average. Total water-year-to-date precipitation is about 80 percent of average for the basin, which is about 91 percent of last year's amount. Year to date percentage ranges from 44 to 103 percent of average for the 9 reporting stations.



Reservoirs

Seminoe Reservoir is currently storing about 159 percent of normal for this time of the year. The reservoir is storing 81 percent of last year's amount. Seminoe Reservoir is estimated to be storing 650,500 acre-feet (40 percent of capacity). Last year, at this time, the reservoir had 798,200 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 190,000 acre-feet (70 percent of average). Encampment River near Encampment is estimated to yield 125,000 acre-feet (80 percent of normal). Rock Creek near Arlington is estimated to yield 44,000 acre-feet (79 percent of average). Seminoe Reservoir inflow should be about (605,000 acre-feet (71 percent of normal). See the following table for more detailed information on projected runoff.

UPPER NORTH PLATTE RIVER BASIN
Streamflow Forecasts - March 1, 2001

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
North Platte River nr Northgate	APR-SEP	74	143	190	70	237	306	271
Encampment River nr Encampment	APR-SEP	81	107	125	80	143	169	156
North Platte River nr Sinclair	APR-SEP	223	397	515	72	633	807	719
Rock Creek nr Arlington	APR-SEP	28	37	44	79	51	63	56
Medicine Bow River ab Seminoe Reserv	APR-SEP	27	57	83	65	114	168	127
Seminoe Reservoir inflow	APR-JUL	265	444	565	72	686	865	788
	APR-SEP	292	478	605	71	732	918	851

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
SEMINOE	1016.7	650.5	798.2	409.0

UPPER NORTH PLATTE RIVER BASIN
Watershed Snowpack Analysis - March 1, 2001

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
N PLATTE above Northgate	7	80	82
ENCAMPMENT RIVER	4	92	76
BRUSH CREEK	5	101	86
MEDICINE BOW & ROCK CREEK	3	101	72
N PLATTE above Seminoe	19	89	80

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

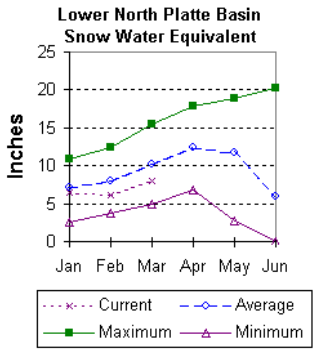
The average is computed for the 1961-1990 base period.

(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 79 percent of normal (89 % of last year). The Sweetwater drainage SWE is currently 55 percent (75 percent of last year). Deer and LaPrele Creek SWE is 97 percent of average (104 percent of last year. SWE for the North Platte above the Laramie River drainage is 79 percent of average (89 % of last year). SWE for the Laramie River above Laramie is 77 percent of average (82 % of last year). SWE for the Little Laramie River is 74 percent of average (89 percent of last year). SWE for the Laramie River above the mouth is 77 percent of average (85 % of last year). For more information see Basin Summary of Snow Courses at beginning of report.

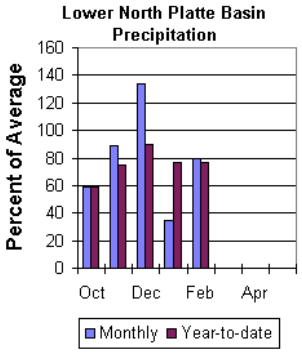


Precipitation

Of the 11 reporting stations, percentages for the month range from 37 to 190. February precipitation for the basin was 80 percent of average (64 percent of last year). The water year-to-date precipitation for the basin is currently 77 percent of average (92 percent of last year). Year to date percentages range from 46 to 137.

Reservoir

The Lower North Platte River basin reservoir storage is average to well above average. Reservoir storage is as follows: Alcova 156,800 acre feet (100 percent of average); Glendo 326,000 acre feet (85 percent of average); Guernsey 15,300 acre feet (112 percent of average); Pathfinder 753,300 acre feet (128 percent of average); Seminoe 650,500 acre feet (159 percent of average). Wheatland No.2 34,000 acre feet (79 percent of average).. Water allocated to project use is near average with North Platte Project users at 99 percent of average, Kendrick Project users at 119 percent of average, and Glendo Project users at 107 percent of average.



Streamflow

Yields from 61 to 103 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 45,000 acre-feet (61 percent of average). Deer Creek at Glenrock is expected to yield about 103 percent of average (40,000 acre-feet). LaPrele Creek above the reservoir is estimated to yield 96 percent of average (24,000 acre-feet). North Platte River below Guernsey Reservoir is expected to yield about 74 percent of normal (725,000 acre-feet), and below Glendo Reservoir is anticipated to yield about 74 percent of average (705,000 acre-feet). Laramie River near Woods should yield about 72 percent of average (97,000 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 - March 1, 2001

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	15.9	30	41	59	58	84	69
	APR-SEP	17.0	32	45	61	63	89	74
Deer Creek at Glenrock	APR-SEP	21	31	40	103	50	66	39
La Prele Creek ab La Prele Reservoir	APR-SEP	5.6	14.4	24	96	37	64	25
Laramie River nr Woods	APR-SEP	50	78	97	72	124	163	135
Little Laramie River nr Filmore	APR-SEP	25	38	46	72	54	67	64

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
ALCOVA	184.3	156.8	156.1	157.1
GLENDO	506.4	326.0	381.8	383.1
GUERNSEY	45.6	15.3	15.9	13.6
PATHFINDER	1016.5	753.3	960.5	590.0
SEMINOE	1016.7	650.5	798.2	409.0
WHEATLAND #2	98.9	34.0	70.0	43.2
NORTH PLATTE PROJ	1062.1	625.4	998.6	633.3
KENDRICK PROJECT	1201.7	970.4	989.9	818.1
GLENDO PROJECT USERS	183.2	136.0	154.7	126.8

LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS
Watershed Snowpack Analysis - March 1, 2001

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
SWEETWATER	3	75	55
DEER & LaPRELE CREEKS	4	104	97
N PLATTE abv Laramie R.	26	89	79
LARAMIE RIVER abv Laramie	8	82	77
LITTLE LARAMIE RIVER	4	89	74
LARAMIE RIVER above mouth	11	85	77
NORTH PLATTE	33	89	79

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

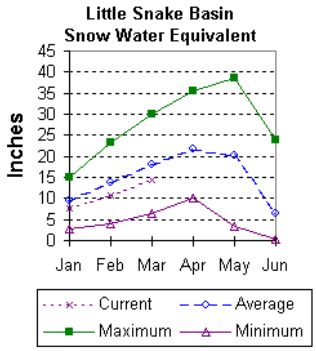
The average is computed for the 1961-1990 base period.

(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 80 percent of average (88 percent of last year at this time). For more information see Basin Summary of Snow Courses at beginning of this report.

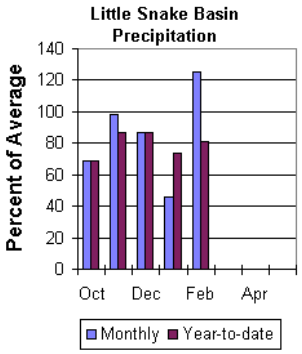


Precipitation

Precipitation across the basin was above average this past month. February precipitation was 125 percent of average (68 percent of last year) for the 5 reporting stations. February precipitation ranged from 104 to 163 percent of average. The Little Snake River basin water-year-to-date precipitation is currently 81 percent of average (90 percent of last year). Year-to-date percentages range from 75 to 90 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 117,000 acre-feet (76 percent of normal). Little Snake River near Dixon is estimated to yield 240,000 acre-feet (73 percent of normal).



LITTLE SNAKE RIVER BASIN
Streamflow Forecasts - March 1, 2001

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	71	97	117	76	139	174	155
LITTLE SNAKE R nr Dixon	APR-JUL	128	195	240	73	285	352	329

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

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

LITTLE SNAKE RIVER BASIN
Watershed Snowpack Analysis - March 1, 2001

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
LITTLE SNAKE RIVER	8	88	80

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

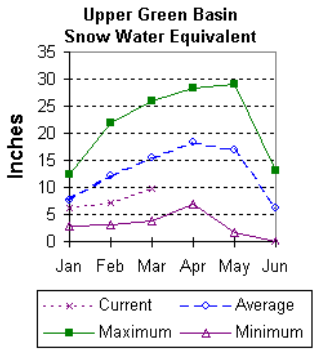
The average is computed for the 1961-1990 base period.

(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 about 64 percent of average (72 percent of last year). The Green River basin SWE above Warren Bridge is 63 percent of normal (75 percent of last year). SWE on the west side of the Upper Green River basin is about 60 percent of normal, 67 percent of this time last year. Newfork River SWE is now about 83 percent of normal (94 percent of last year). Big Sandy-Eden Valley SWE is about 65 percent of average (78 percent of last year). For more information see the Basin Summary of Snow Courses at the beginning of this report.

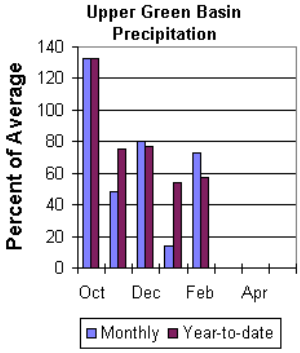


Precipitation

The 12 reporting precipitation sites in the basin were 73 percent of the February average (66 percent of last year at this time). February precipitation varied from 58 to 162 percent of average. Water year-to-date precipitation is about 57 percent of average (79 percent of last year). Year to date percentage of average ranges from 51 to 65 percent for the reporting stations.

Reservoir

Big Sandy Reservoir is storing 5,500 acre-feet (30 percent of average and 48 percent of the total capacity). Eden Reservoir is storing 0 acre-feet (0 percent of average and 0 percent of the total capacity). Fontenelle Reservoir is storing 95,900 acre-feet (56 percent of average and 50 percent of the total capacity). Flaming Gorge Reservoir is currently storing 2,996,000 acre feet -- 93 percent of last year and 80 percent of capacity. There is no average established for Flaming Gorge. 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 180,000 acre-feet (68 percent of normal). Pine Creek above Fremont Lake is expected to yield 80,000 acre-feet (77 percent of normal). New Fork River near Big Piney is expected to yield about 260,000 acre-feet (68 percent of normal). Fontenelle Reservoir Inflow is estimated to be 530,000 acre-feet (62 percent of average), and Big Sandy near Farson is expected to be about 42,000 acre-feet (74 percent of normal).

UPPER GREEN RIVER BASIN
Streamflow Forecasts - March 1, 2001

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)
Green River at Warren Bridge	APR-JUL	121	156	180	68	204	239	266
Pine Creek abv Fremont Lake	APR-JUL	64	73	80	77	87	96	104
New Fork River nr Big Piney	APR-JUL	154	217	260	68	303	366	385
Fontenelle Reservoir Inflow	APR-JUL	383	468	530	62	596	700	849
Big Sandy River nr Farson	APR-JUL	25	35	42	74	49	60	57

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BIG SANDY	38.3	5.5	---	18.4
EDEN	11.8	0.0	---	4.1
FLAMING GORGE	3749.0	2996.0	3208.0	---
FONTENELLE	344.8	95.9	130.8	172.0

UPPER GREEN RIVER BASIN
Watershed Snowpack Analysis - March 1, 2001

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
GREEN above Warren Bridge	4	75	63
UPPER GREEN (West Side)	7	67	60
NEWFORK RIVER	3	94	83
BIG SANDY/EDEN VALLEY	2	78	65
GREEN above Fontenelle	14	72	64

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

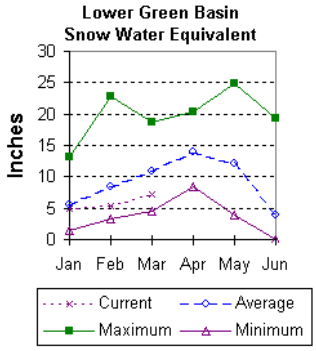
The average is computed for the 1961-1990 base period.

(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)

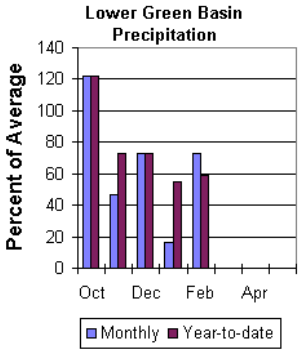
Snow

The Lower Green, as of March 1, is below average. SWE in the Hams Fork, as of March 1, is 66 percent of average (75% of last year). Blacks Fork SWE is currently 67 percent of average (60 percent of last year). The Henry's fork SWE is currently 91 percent of average (111 percent of last year). The basin, as a whole, is 66 percent of average (72 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 February. Precipitation ranged from 58 to 162 percent of average for the month. The entire basin received 73 percent of average for the month (66 percent of last year). The basin year-to-date precipitation is currently 57 percent of average (79 percent of last year). Year to date percentages range from 51 to 65.



Reservoir

Fontenelle Reservoir is currently storing 95,900 acre feet; this is 56 percent of average (73 % of last year). Flaming Gorge is currently storing 2,996,000 acre feet. There is no average established for Flaming Gorge. Viva Naughton is currently storing 31,100 acre feet (112 percent of average).

Streamflow

Expected yields vary from 48 to 74 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 530,000-acre feet (59 percent of average). Blacks Fork near Robertson is forecast to yield 70,000-acre feet (74 percent of average). East Fork of Smiths Fork near Robertson is estimated to yield 22,000 acre-feet (73 percent of average). The estimated yield for Hams Fork near Frontier is 35,000-acre feet (53 percent of average). Viva Naughton Reservoir inflow will be about 43,000-acre feet (48 percent of average). Flaming Gorge Reservoir inflow will be about 750,000-acre feet (63 percent of average).

LOWER GREEN RIVER BASIN
Streamflow Forecasts - March 1, 2001

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)
Green River nr Green River, WY	APR-JUL	294	435	530	59	625	766	899
Blacks Fork nr Robertson	APR-JUL	42	59	70	74	81	98	95
EF of Smiths Fork nr Robertson	APR-JUL	16.7	19.7	22	73	25	29	30
Hams Fk blw Pole Ck nr Frontier	APR-JUL	20	29	35	53	42	54	66
Hams Fk Inflow to Viva Naughton Res	APR-JUL	11.3	30	43	48	56	75	89
Flaming Gorge Reservoir Inflow	APR-JUL	423	618	750	63	883	1078	1196

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
FONTENELLE	344.8	95.9	130.8	172.0
FLAMING GORGE	3749.0	2996.0	3208.0	---
VIVA NAUGHTON RES	42.4	31.1	34.5	27.8

LOWER GREEN RIVER BASIN
Watershed Snowpack Analysis - March 1, 2001

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
HAMS FORK RIVER	4	75	66
BLACKS FORK	5	60	67
HENRYS FORK	3	111	91
GREEN above Flaming Gorge	26	72	66

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

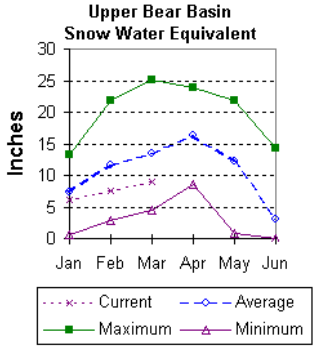
The average is computed for the 1961-1990 base period.

(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 67 percent of average (78 percent of last year). SWE for the Bear River in Utah is estimated to be 73 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 64 percent of average (74 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.

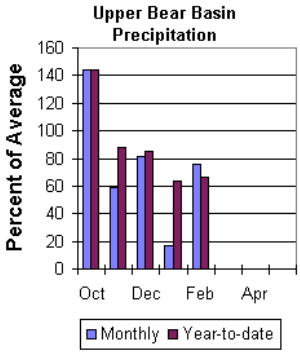


Precipitation

Precipitation for the month of February was 76 percent of average for the 2 reporting stations; this is 54 percent of the previous February. The year-to-date precipitation, for the basin, is 66 percent of average; this is 87 percent of last year's amount.

Reservoir

Woodruff Narrows reservoir is currently storing about 8,000 acre feet. Currently, the reservoir is storing about 16 percent of the volume stored in February of last year. Current storage is about 14 percent of the reservoir 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 72,000 acre-feet (61 percent of normal), and Thomas Fork drainage near the Idaho-Wyoming state line is estimated to yield 12,000 acre-feet or 33 percent of normal. Bear River near the Utah-Wyoming State Line is expected to yield about 91,000 acre feet (72 percent of average), The Bear River near Woodruff is expected to yield about 103,000 acre-feet (about 67 percent of normal).

UPPER BEAR RIVER BASIN
Streamflow Forecasts - March 1, 2001

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)
SMITHS FK nr Border, WY	APR-SEP	51	63	72	61	82	101	118
THOMAS FK nr WY-ID State Line (Disc.	APR-SEP	7.0	9.7	12.0	33	14.9	21	36
Bear R nr UT-WY State Line	APR-SEP	67	81	91	72	103	123	126
BEAR R nr Woodruff, UT	APR-SEP	57	81	103	67	131	185	154

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
WOODRUFF NARROWS	57.3	8.0	50.0	---

UPPER BEAR RIVER BASIN
Watershed Snowpack Analysis - March 1, 2001

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
UPPER BEAR RIVER in Utah	7	81	73
SMITHS & THOMAS FORKS	4	74	64
BEAR RIVER abv ID line	9	78	67
NORTHWEST	77	65	56
NORTHEST	19	88	71
SOUTHEAST	37	88	80
SOUTHWEST	35	79	71

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

The average is computed for the 1961-1990 base period.

(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.

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Wyoming
Basin Outlook Report

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