USDA United States Department of Agriculture

Natural Resources Conservation Service

Wyoming Basin Outlook Report January 1, 2002

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 averages for the State are about 77 percent of normal for this time of the year. Northwest portion of the State is 77 of percent normal. Northeast Wyoming is 66 of percent of normal, and the southeast part of the State is 66 percent of average. Southwestern Wyoming is 85 percent of average for this time of the year.

Precipitation for December was generally below average for the State, with the exception of the Green River and Bear River drainages. Year-to-date precipitation is below average for the year. Reservoir levels vary from below average to average. With the exception of the northeast, large capacity reservoirs are average to below average. Reservoirs in the northeast have above average storage. Generally, forecast runoff varies from 37 to 86 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 80 percent of average (122 percent of last year). Northeast Wyoming SWE is currently about 77 percent of average (100 percent of last year). The southeast portion is currently about 85 percent of average SWE (71 percent of last year). And the southwest is about 85 percent of average (101 percent of last year).

Precipitation

December precipitation was below normal over most of the State. Only the Green River and Bear River drainage had above normal precipitation, and that was just barely above normal. 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	-1%	Upper North Platte River	-30%
Yellowstone & Madison	-6%	Lower North Platte	-51%
Wind River	-15%	Little Snake River	-21%
Big Horn	-56%	Upper Green River	+4%
Shoshone & Clarks Fork	-32%	Lower Green River	+5%
Powder & Tongue River	-54%	Upper Bear River	+1%
Belle Fourche & Cheyenne	-80%		

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 37 to 86 percent of average). The northwest part of the State is expected to yield about 60 percent of normal -- yield estimates vary from 43 to 81 percent of normal. Yield from the northeast portion of Wyoming will be below average (about 50 percent of average) -- yield estimates vary from 37 to 63 percent of average for the various forecast points. The southeast portion of the state will be about 55 percent of normal -- yield estimates range from 37 to 77 percent of normal. The southwest portion of

Wyoming varies from 61 to 86 percent of average -- mean estimated yield for the forecast points in southwest Wyoming is about 75 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 DECEMBER 2001

BASIN AREA RESERVIOR	CURRENT AS % CAPACITY	LAST YR AS % CAPACITY	AVERAGE AS % CAPACITY	CURRENT AS % AVERAGE	CURRENT AS % LAST YR
ALCOVA	85	85	84	101	100
ANGOSTURA	80	70	79	101	115
BELLE FOURCHE	70	74	51	138	94
BIG SANDY	9	13	48	20	71
BIGHORN LAKE	56	65	67	83	85
BOYSEN	14	77	104	13	18
BUFFALO BILL	36	59	46	78	62
BULL LAKE	19	41	57	33	45
DEERFIELD	98	99	81	121	99
EDEN	4	0	31	13	0
ENNIS LAKE	75	75	77	97	100
FLAMING GORGE	77	80	78	98	96
FONTENELLE	42	44	61	70	96
GLENDO	38	47	56	68	81
GRASSY LAKE	61	83	76	79	73
GUERNSEY	24	22	16	153	109
HEBGEN LAKE	78	79	71	111	100
JACKSON LAKE	16	75	57	29	22
KEYHOLE	80	82	52	152	97
PACTOLA	95	98	83	114	97
PALISADES	31	41	74	42	76
PATHFINDER	48	69	63	77	70
PILOT BUTTE	80	75	64	125	107
SEMINOE	47	71	62	76	67
SHADEHILL	65	51	62	104	127
TONGUE RIVER	26	44	28	92	59
VIVA NAUGHTON RES	68	76	75	92	90
WHEATLAND #2	19	0	43	45	0
WOODRUFF NARROWS		NO	REPORT		
GLENDO PROJECT USERS	74	75	63	116	99
KENDRICK PROJECT	69	81	68	101	85
NORTH PLATTE PROJ	25	50	54	46	49

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

JANUARY 2002

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
WYOMING Snow Course and SNOTEL Stations						
ALBANY	9400				---	---
ASTER CREEK	7750	1/02/02	39	11.0	7.2	13.1
BALD MOUNTAIN SNOTEL	9380	1/01/02	---	7.5	7.4	9.7
BASE CAMP SNOTEL	7030	1/01/02	---	5.9	4.8	8.2
BATTLE MTN. SNOTEL	7440	1/01/02	---	4.9	4.3	4.1
BEARLODGE DIVIDE	4680				---	---
BEARTOOTH LK. SNOTEL	9280	1/01/02	---	9.2	7.0	11.5
BEAR TRAP SNOTEL	8200	1/01/02	---	2.5	2.6	2.6
BIG GOOSE	7760				---	---
BIG GOOSE SNOTEL	7760	1/01/02	---	3.3	3.0	---
BIG PARK	8620				---	---
BIG SANDY SNOTEL	9080	1/01/02	29	7.3	6.0	6.9
BLACKWATER SNOTEL	9780	1/01/02	---	8.4	7.4	12.0
BLIND BULL SNOTEL	8900	1/01/02	43	11.4	9.0	13.2
BLIND PARK SNOTEL	6870	1/01/02	---	1.7	4.0	3.5
BLUE RIDGE	9620				---	---
BONE SPGS. SNOTEL	9350	1/01/02	---	6.4	5.3	7.8
BOXELDER	7280				---	---
BROOKLYN LK. SNOTEL	10220	1/01/02	---	5.4	9.4	10.8
BRYAN FLAT	6420				---	---
BUCK CREEK	7960				---	---
BURGESS JCT. SNOTEL	7880	1/01/02	---	2.9	4.0	5.5
BURROUGHS CRK SNOTEL	8750	1/01/02	---	6.4	4.5	6.7
CANYON SNOTEL	8090	1/01/02	---	6.1	4.2	6.1
CARTER MOUNTAIN	7950				---	---
CASPER MTN. SNOTEL	7850	1/01/02	---	4.2	6.4	6.9
CASTLE CREEK	8400				---	---
CCC CAMP	7000				---	---
CHALK CK #1 SNOTEL	9100	1/01/02	37	9.8	9.2	10.1
CHALK CK #2 SNOTEL	8200	1/01/02	30	6.4	5.8	6.7
CLOUD PEAK SNOTEL	9850	1/01/02	---	5.1	5.1	5.7
COLD SPRINGS SNOTEL	9630	1/01/02	---	1.8	1.8	4.6
COTTONWOOD CR SNOTEL	7700	1/01/02	---	8.4	9.1	9.7
DARBY CANYON	8250	12/26/01	28	7.3	10.0	10.5
DEER PARK SNOTEL	9700	1/01/02	---	7.0	7.0	6.7
DITCH CREEK	6870				2.3	---
DIVIDE PEAK SNOTEL	8860	1/01/02	---	6.8	6.8	9.2
DOME LAKE SNOTEL	8880	1/01/02	---	4.6	5.3	6.1
DU NOIR	8760				---	---
EAST RIM DIV SNOTEL	7930	1/01/02	---	4.5	4.3	5.9
ELBO RANCH	7100	1/01/02	23	4.6	2.8	---
ELKHART PARK SNOTEL	9400	1/01/02	---	6.0	5.9	6.3
EVENING STAR SNOTEL	9200	1/01/02	---	10.3	7.4	13.7

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
FOUR MILE MEADOWS	7860				---	---
FOXPARK	9060				---	---
GEYSER CREEK	8500				---	---
GLADE CREEK	7040	1/02/02	32	7.8	7.8	10.3
GRANITE CRK SNOTEL	6770	1/01/02	---	7.2	5.9	7.6
GRANNIER MEADOWS	8860				---	---
GRASSY LAKE SNOTEL	7270	1/01/02	---	11.6	11.0	14.7
GRAVE SPRINGS SNOTEL	8550	1/01/02	---	2.6	3.2	4.0
GREYS BOUNDARY	5720				---	---
GROS VENTRE SNOTEL	8750	1/01/02	---	6.6	5.3	6.9
GROVER PARK DIVIDE	7000				---	---
HAIRPIN TURN	9480				---	---
HANSEN S.M. SNOTEL	8360	1/01/02	---	1.7	2.1	3.3
HAMS FORK SNOTEL	7840	1/01/02	---	5.5	5.1	5.5
HASKINS CREEK	8980				---	---
HOBBS PARK SNOTEL	10100	1/01/02	---	4.4	4.1	7.6
HUCKLEBERRY DIVIDE	7300	1/02/02	31	7.6	6.3	9.3
INDIAN CREEK SNOTEL	9430	1/01/02	---	11.4	10.0	12.5
JACKPINE CREEK	7350	12/26/01	30	7.6	7.6	9.3
KELLEY R.S. SNOTEL	8180	1/01/02	---	7.3	6.0	7.6
KENDALL R.S. SNOTEL	7740	1/01/02	---	4.9	4.3	6.7
KIRWIN SNOTEL	9550	1/01/02	---	4.0	3.2	5.9
LA BONTE	8450				---	---
LAKE CAMP	7780	12/31/01	18	2.8	2.5	4.2
LA PRELE SNOTEL	8380	1/01/02	---	2.3	6.2	5.3
LARSEN CREEK	9020				---	---
LEWIS LAKE SNOTEL	7850	1/01/02	---	12.9	8.8	14.8
LEWIS LAKE DIVIDE	7850	1/02/02	51	14.9	10.4	17.5
LIBBY LODGE	8750				---	---
LITTLE BEAR RUN	6240				3.4	1.7
LITTLE WARM SNOTEL	9370	1/01/02	---	4.4	3.8	5.3
LOOMIS PARK SNOTEL	8240	1/01/02	---	7.8	6.9	8.0
LUPINE CREEK	7380	12/29/01	18	3.1	2.6	4.3
MALLO	6420				5.6	2.9
MARQUETTE SNOTEL	8760	1/01/02	---	2.0	1.3	5.0
MEDICINE LODGE LAKES	9340				---	---
MIDDLE FORK	7420				---	---
MIDDLE POWDER SNOTEL	7760	1/01/02	---	2.6	4.3	5.5
MORAN	6750	1/03/02	24	5.0	4.6	5.7
MOSS LAKE	9800				---	---
MOUNT TOM	5560				6.6	1.9
NEW FORK SNOTEL	8340	1/01/02	---	4.5	5.0	5.4
NORRIS BASIN	7500	12/31/01	18	3.4	2.7	5.1
NORTH BARRETT CREEK	9400				---	---
NORTH FRENCH SNOTEL	10130	1/01/02	---	6.1	12.4	13.4
NORTH RAPID CK SNTL	6130	1/01/02	---	2.4	3.4	---
NORTH TONGUE	8450				---	---
OLD BATTLE SNOTEL	9920	1/01/02	---	10.4	12.5	14.6
OLD FAITHFUL	7400	12/30/01	21	4.9	3.0	6.0
ONION GULCH	8780				---	---
OWL CREEK SNOTEL	8980	1/01/02	---	1.3	1.5	2.7
PARKERS PEAK SNOTEL	9400	1/01/02	---	8.6	8.3	10.6

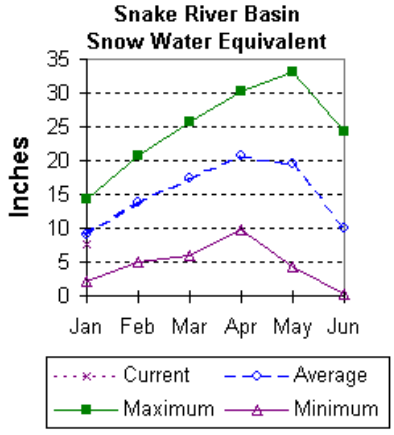
SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
PHILLIPS BENCH SNTL	8200	1/01/02	---	11.6	10.0	12.6
POCKET CREEK	9350				---	---
POISON MEADOWS	8500				---	---
POLE MOUNTAIN	8700				---	---
POWDER RVR.PASS SNTL	9480	1/01/02	---	4.8	3.0	5.3
PURGATORY GULCH	8970				---	---
RANGER CREEK	8120				---	---
RENO HILL SNOTEL	8500	1/01/02	---	3.9	6.9	6.6
REUTER CANYON	6280				---	---
ROWDY CREEK	8300				---	---
RYAN PARK	8400				---	---
SALT RIVER SNOTEL	7600	1/01/02	---	5.3	4.6	5.4
SAND LAKE SNOTEL	10050	1/01/02	---	8.6	13.0	14.9
SANDSTONE SNOTEL	8150	1/01/02	---	3.7	5.0	5.3
SAWMILL DIVIDE	9260				---	---
SHELL CREEK SNOTEL	9580	1/01/02	---	7.3	5.6	7.3
SHERIDAN R.S.	7750				---	---
SNAKE RIVER STATION	6920	1/02/02	28	6.3	6.6	8.9
SNAKE RV STA SNOTEL	6920	1/01/02	---	6.1	5.9	7.9
SNIDER BASIN SNOTEL	8060	1/01/02	---	4.1	4.8	6.9
SNOW KING MTN	7660				---	---
SOLDIER PARK	8780				---	---
SOUR DOUGH	8460				---	---
SOUTH BRUSH SNOTEL	8440	1/01/02	---	4.1	5.4	5.1
SOUTH PASS SNOTEL	9040	1/01/02	---	5.9	5.8	8.2
SPRING CRK. SNOTEL	9000	1/01/02	---	12.9	10.3	12.5
ST LAWRENCE ALT SNTL	8620	1/01/02	---	1.0	1.5	3.8
SUCKER CREEK SNOTEL	8880	1/01/02	---	4.0	3.8	5.2
SYLVAN LAKE SNOTEL	8420	1/01/02	---	8.4	7.2	10.5
SYLVAN ROAD SNOTEL	7120	1/01/02	---	3.7	3.9	6.2
T CROSS RANCH	7900				---	---
TETON PASS W.S.	7740				---	---
THUMB DIVIDE SNOTEL	7980	1/01/02	---	6.3	3.6	7.6
THUMB DIVIDE	7980	1/02/02	25	5.8	3.4	8.1
TIE CREEK SNOTEL	6870	1/01/02	---	.9	2.0	2.5
TIMBER CREEK SNOTEL	7950	1/01/02	---	.5	1.1	3.0
TOGWOTEE PASS SNOTEL	9580	1/01/02	44	10.3	9.1	11.7
TOWNSEND CRK SNOTEL	8700	1/01/02	---	1.9	2.9	4.4
TRIPLE PEAK SNOTEL	8500	1/01/02	---	10.1	9.1	11.9
TURPIN MEADOWS	6900				---	---
TWO OCEAN SNOTEL	9240	1/01/02	126		10.7	13.5
TYRELL RANGER STA.	8300				---	---
UPPER SPEARFISH	6500				---	---
WARREN PEAK SNOTEL	6520				---	---
WEBBER SPRING SNOTEL	9250	1/01/02	---	8.1	9.1	11.5
WHISKEY PARK SNOTEL	8950	1/01/02	---	8.9	9.8	11.1
WILLOW CREEK SNOTEL	8450	1/01/02	---	10.2	10.1	14.3
WINDY PEAK SNOTEL	7900	1/01/02	---	1.4	4.8	3.5
WOLVERINE SNOTEL	7650	1/01/02	---	3.6	---	5.8
WOOD ROCK G.S.	8440				---	---
YOUNTS PEAK SNOTEL	8350	1/01/02	---	5.9	4.5	7.9

(d) Denotes discontinued site.

Snake River Basin (1)

Snow

The Snake River basin snow water equivalent (SWE) is below normal. Snake above Jackson Lake is 82 percent (124% of last year at this time). Pacific Creek is 78 percent of average (116% of last year at this time). Gros Ventre River is 91 percent of average (123% of last year at this time). Hoback River is 90 percent of average (119% of last year at this time), Greys River is 86 percent of average (116% of last year at this time). Salt River is 81 percent of average (100% of last year at this time). Snake River Basin above Palisades is 85 percent of average (119% of last year at this time). See the Basin Summary of Snow Courses at the beginning of this report for a detailed listing of snow course information.

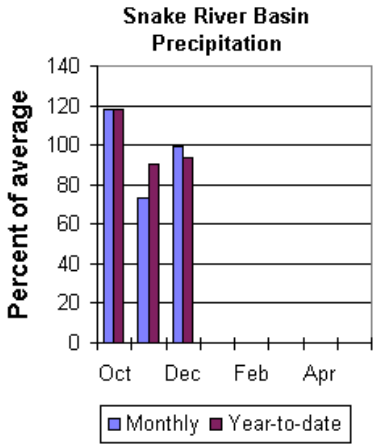


Precipitation.

Precipitation across the basin was near average last month. Monthly precipitation, for the basin, was 99 percent of average (125 percent of last year). Last months percentages range from 84 to 153 percent of average. Water-year-to-date precipitation is 94 percent of normal for the Snake River basin (121 percent of last year at this time) Year-to-date percentages range from 83 to 114 percent of average.

Reservoir.

Current reservoir storage compared to average for the three storage reservoirs in the basin is below average. Grassy Lake storage is about 79 percent of average (9,200 acre feet compared to 12,600 last year). Jackson Lake storage is 29 percent of average (137,400 acre feet compared to 637,300 acre feet last year). Palisades Reservoir storage is about 42 percent of average (439,000 acre feet compared to 1,225,000 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 750,000 acre-feet (83 percent of normal). Yield from the Snake River above Palisades Reservoir is estimated to be 2,305,000 acre-feet (84 percent of normal). The 50 percent chance yield near Heise is expected to be 3,510,000 acre-feet (84 percent of normal). Pacific Creek at Moran is expected to yield about 137,000 acre-feet (77 percent of average). Greys River above Palisades Reservoir is estimated to yield 355,000 acre-feet (90 percent of normal). Salt River near Etna is estimated to have a yield of 360,000 acre-feet (86 percent of normal).

SNAKE RIVER BASIN
Streamflow Forecasts - January 1, 2002

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter ======>> 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
SNAKE near Moran (1,2)	APR-SEP	514	676	750	83	824	986	905
SNAKE above Palisades (2)	APR-SEP	1732	2073	2305	84	2537	2878	2730
PALISADES RESERVOIR INFLOW (1,2)	APR-SEP	2212	2953	3290	85	3627	4368	3870
SNAKE near Heise (2)	APR-SEP	2597	3141	3510	84	3879	4423	4160
PACIFIC CREEK at Moran	APR-SEP	93	119	137	77	155	181	178
GREYS above Palisades	APR-SEP	245	310	355	90	400	465	395
SALT near Etna	APR-SEP	226	306	360	86	414	494	420

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
GRASSY LAKE	15.2	9.2	12.6	11.6
JACKSON LAKE	847.0	137.4	637.6	481.7
PALISADES	1400.0	439.3	575.0	1036.5

SNAKE RIVER BASIN
Watershed Snowpack Analysis - January 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
SNAKE above Jackson Lake	9	123	83
PACIFIC CREEK	3	117	86
GROS VENTRE RIVER	2	123	91
HOBACK RIVER	5	119	90
GREYS RIVER	4	116	86
SALT RIVER	3	100	81
SNAKE above Palisades	21	119	86

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

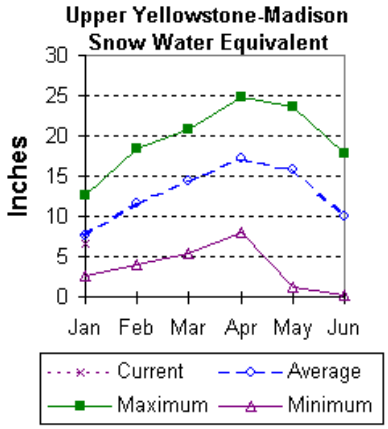
The average is computed for the 1971-2000 base period.

(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 below average for this time of the year, but better than last year. Snow water equivalent (SWE) is about 92 percent of average (159 percent of last year) in the Madison drainage. SWE in the Yellowstone drainage is about 80 percent of average (128 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.

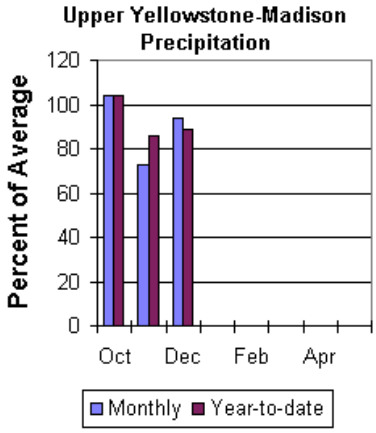


Precipitation

December precipitation in the Madison and Yellowstone drainage was about 94 percent of average (130 percent of previous year) for the 8 reporting stations -- percentage range was from 80 to 103 percent of average. Water-year-to-date precipitation is about 89 percent of average (117 percent of last year's amount). Year to date percentage ranges from 83 to 95 percent

Reservoir

Ennis Lake is storing 30,700 acre-feet (75 percent of capacity) – 97 percent of average. Hebgen Lake is storing about 295,900 acre-feet of water (78 percent of capacity) – 111 percent of average. Hebgen Lake is storing about 100 percent and Ennis Lake is storing about 100 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 650,000 acre feet (81 percent of normal). Yellowstone at Corwin Springs will yield about 1,560,000 acre-feet (79 percent of normal). Yellowstone near Livingston will yield about 1,800,000 acre feet (79 percent of normal). Hebgen lake inflow is estimated to be 350,000 acre feet (70 percent of normal). See the following page for detailed runoff volumes.

UPPER YELLOWSTONE & MADISON RIVER BASINS
Streamflow Forecasts - January 1, 2002

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	470	577	650	81	723	830	805
YELLOWSTONE RIVER at Corwin Springs	APR-SEP	1121	1382	1560	79	1738	1999	1970
YELLOWSTONE RIVER near Livingston	APR-SEP	1326	1608	1800	79	1992	2274	2280
HEBGEN Reservoir Inflow	APR-SEP	250	309	350	70	391	450	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	30.7	30.7	31.5
HEBGEN LAKE	377.5	295.9	297.0	267.6

UPPER YELLOWSTONE & MADISON RIVER BASINS
Watershed Snowpack Analysis - January 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
MADISON RIVER in WY	9	159	92
YELLOWSTONE RIVER in WY	11	126	82

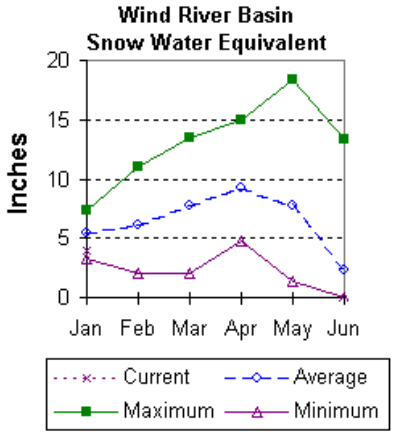
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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 much below average snow water equivalent (SWE) for this time of the year. SWE in the Wind River above Dubois is 89 percent of average (120 percent of last year). The Little Wind SWE is 47 percent of average water content (96 percent of last year), and the Popo Agie drainage SWE is about 71 percent of average (97 percent of last year). The Wind River basin, above Boysen Reservoir, SWE is about 72 percent of average (about 111 percent of last year). See the Basin Summary of Snow Course Data at the front of this report for details.

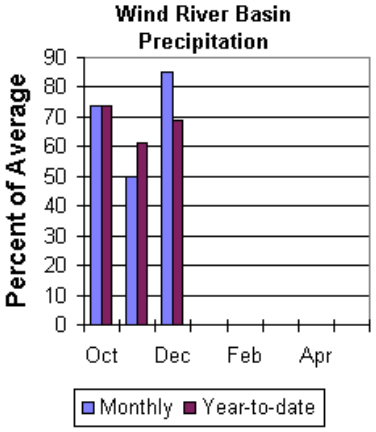


Precipitation

December precipitation in the basin varied from 8 to 100 percent of average. December precipitation for the basin was about 85 percent of average for the 8 reporting stations; that is about 110 percent of last year's amount. Water year-to-date precipitation is 69 percent of normal. The current water-year-to-date average is about 110 percent of last year at this time. Year to date figures range from 37 to 86 percent of average.

Reservoirs

Current storage varies from 13 to 125 percent of average. Bull Lake is currently storing about 28,400 acre feet (19 percent of capacity) -- normally the reservoir is at 57 percent of capacity at this time of the year. Boysen Reservoir is storing about 14 percent of capacity 82,800 acre feet) -- normally the reservoir is at 104 percent of capacity at this time of the year. Pilot Butte is storing 80 percent of capacity (25,300 acre feet) -- normally the reservoir is at 64 percent of capacity at this time of the year.



Streamflow

Water supply is estimated to be 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 320,000 acre feet (50 percent of average). Boysen Reservoir inflow will yield about 440,000 acre feet (54 percent of normal). Bull Lake Creek near Lenore is expected to yield about 100,000 acre feet (55 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 49,000 acre feet (58 percent of average). Little Wind River near Riverton will yield about 180,000 acre feet (57 percent of average).

WIND RIVER BASIN
Streamflow Forecasts - January 1, 2002

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)
WIND RIVER abv Bull Lake Cr (2)	APR-SEP	155	262	335	63	408	515	535
WIND RIVER at Riverton (2)	APR-SEP	33	204	320	50	436	607	640
BOYSEN RESERVOIR Inflow (2)	APR-SEP	88	298	440	54	582	792	809
BULL LAKE CR near Lenore (2)	APR-SEP	41	76	100	55	124	159	182
LT POPO AGIE RIVER nr Lander	APR-SEP	11.7	23	30	57	43	62	53
SF LT WIND nr Fort Washakie	APR-SEP	19.1	37	49	58	61	79	84
LT WIND RIVER nr Riverton	APR-SEP	83	141	180	57	249	351	315

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BULL LAKE	151.8	28.4	62.5	86.3
BOYSEN	596.0	82.8	457.1	620.4
PILOT BUTTE	31.6	25.3	23.6	20.2

WIND RIVER BASIN
Watershed Snowpack Analysis - January 1, 2002

Watershed	Number of Data Sites	This Year as % of ========== Last Yr	Average
WIND RIVER above Dubios	3	120	89
LITTLE WIND	2	96	47
POPO AGIE	4	97	71
WIND above Boysen Resv	7	111	72

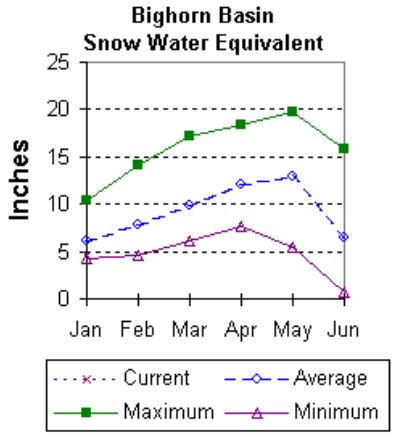
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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 69 percent of average (101 percent of last year). Greybull River SWE is 51 percent of average (105 percent of last year). Shell Creek SWE is 85 percent of average (116 percent of last year). The basin SWE, as a whole, is currently 74 percent of average (111 percent of last year). For more information see Basin Summary of Snow Courses at beginning of report.

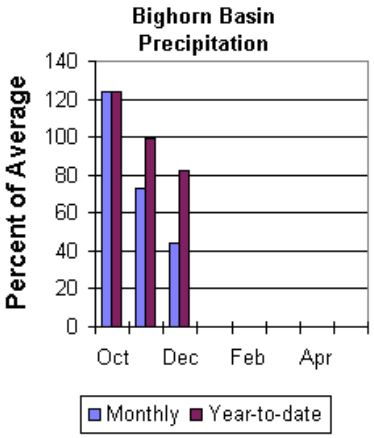


Precipitation

December precipitation was 44 percent of the monthly average (56 percent of last year). Sites ranged from 7 to 139 percent of average for the month. Year-to-date precipitation is 82 percent of normal; that is 114 percent of last year at this time. Year to date percentages, from the 10 reporting stations, range from 58 to 106.

Reservoir

Boysen Reservoir is currently storing 82,800-acre feet (13 percent of average). Bighorn Lake is now at 83 percent of average (753,100-acre feet). Boysen is currently storing 85 percent of last year at this time and Big Horn Lake is storing 62 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 440,000 acre feet (54 percent of average); the Greybull River nr Meeteese should yield 85,000 acre feet (43 percent of average); Shell Creek near Shell should yield 37,000 acre feet (51 percent of average) and the Bighorn River at Kane should yield 560,000 acre feet (51 percent of average).

BIGHORN RIVER BASIN
Streamflow Forecasts - January 1, 2002

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	88	298	440	54	582	792	809
GREYBULL RIVER nr Meeteetse	APR-SEP	53	72	85	43	98	117	200
SHELL CREEK nr Shell	APR-SEP	26	33	37	51	41	48	72
BIGHORN RIVER at Kane (2)	APR-SEP	51	354	560	51	766	1069	1110

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BOYSEN	596.0	82.8	457.1	620.4
BIGHORN LAKE	1356.0	753.1	881.0	911.1

BIGHORN RIVER BASIN
Watershed Snowpack Analysis - January 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
NOWOOD RIVER	2	101	69
GREYBULL RIVER	2	105	51
SHELL CREEK	3	116	85
BIGHORN (Boysen-Bighorn)	7	111	74

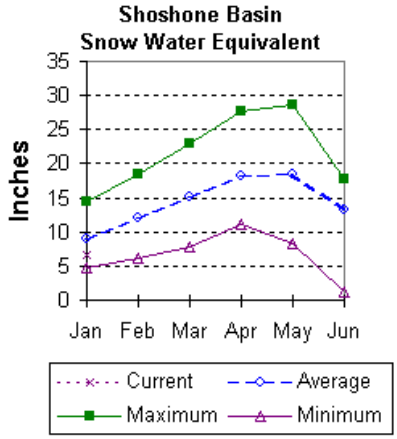
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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.

Shoshone and Clarks Fork River Basin (5)

Snow

Snow Water Equivalent (SWE) is 70 percent of the January average (122 percent of last year) in the Shoshone River basin. The Clarks Fork River basin SWE is 78 percent of average (127 percent of last year). For more information see the Basin Summary of Snow Course Data at the beginning of this report.

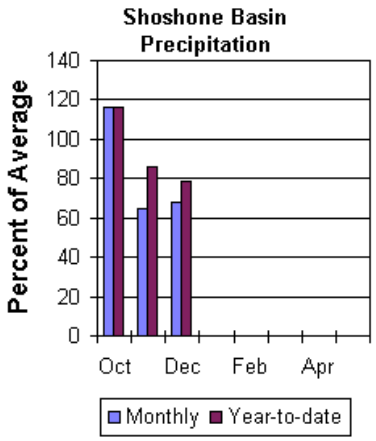


Precipitation

Precipitation for the month of December was 68 percent of normal (82 percent of last year). Monthly percentages range from 0 to 93 percent of average. The basin year-to-date precipitation is now 79 percent of average (107 percent of last year). Year-to-date percentages range from 59 to 86 percent of average.

Reservoir

Current storage in Buffalo Bill Reservoir is 78 percent of average (62 percent of last year's storage) – the reservoir is about 36 percent of capacity. Currently, about 234,400 acre-feet are stored in the reservoir compared to 379,000 acre feet last year. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.



Streamflow

The fifty percent yield (April through September period) for North Fork Shoshone River at Wapiti is expected to be 315,000 acre-feet (61 percent of average). South Fork of the Shoshone River near Valley is estimated to yield of 132,000 acre-feet (50 percent of average), and South Fork above Buffalo Bill Reservoir is expected to be 112,000 acre-feet (50 percent of average). At the Buffalo Bill Reservoir, the fifty percent chance yield for the Shoshone River is expected to be about 495,000 acre-feet (62 percent of average). The fifty-percent chance yield for the Clarks Fork of the Yellowstone near Belfry, Montana is expected to be about 405,000 acre-feet (68 percent of average).

SHOSHONE & CLARKS FORK RIVER BASINS
Streamflow Forecasts - January 1, 2002

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)
NF SHOSHONE RIVER at Wapiti	APR-SEP	243	286	315	61	344	387	520
SF SHOSHONE RIVER nr Valley	APR-SEP	72	108	132	50	156	192	265
SF SHOSHONE RIVER abv Buffalo Bill	APR-SEP	26	77	112	50	147	198	225
BUFFALO BILL DAM Inflow (2)	APR-SEP	280	408	495	62	582	710	805
CLARKS FORK RIVER nr Belfry	APR-SEP	291	359	405	68	451	519	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	234.4	379.0	299.0

SHOSHONE & CLARKS FORK RIVER BASINS
Watershed Snowpack Analysis - January 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
SHOSHONE RIVER	6	122	70
CLARKS FORK in WY	7	127	78

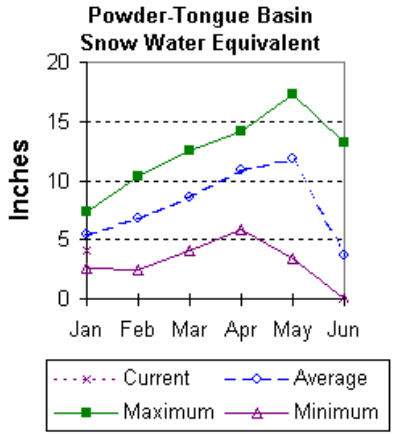
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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.

Powder and Tongue River Basins (6)

Snow

Snow water equivalent (SWE) in the Upper Tongue River drainage is 76 percent of normal (101 percent of last year). The Goose Creek drainage is 75 percent of average (95 percent of last year). Clear Creek drainage is 76 percent of normal SWE (94 percent of last year). Crazy Woman Creek is 91 percent of average (160 percent of last year). The Upper Powder River drainage is 74 percent of average (100 percent of last year). The Powder River basin snow water equivalent (SWE), in Wyoming, is about 75 percent of average (98 percent of last year). For more information see Basin Summary of Snow Courses at beginning of report.

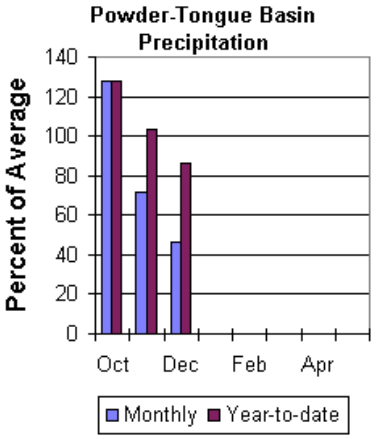


Precipitation

December precipitation was 46 percent of average for the 10 reporting stations (50 percent of last year). Monthly percentages range from 0 to 66 percent of average. Precipitation for the year ranges from 44 to 103 percent of average at the reporting stations. Year-to-date precipitation is about 86 percent of average in the basin; this is 113 percent of last year at this time.

Reservoir

Tongue River Reservoir is currently at 92 percent of average storage for this time of year (20,700 acre feet) – the reservoir is about 26 percent of capacity (total capacity is 79,100 acre feet). Last year at this time the reservoir was storing about 34,900 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 62,000-acre feet (57 percent of normal). Middle Fork of the Powder River near Barnum is estimated to yield 8,400-acre feet (45 percent of average). The North Fork of the Powder near Hazelton should yield about 5,000 acre-feet (48 percent of normal). The estimated yield for Clear Creek near Buffalo is 14,500 acre-feet (37 percent of average). Rock Creek near Buffalo will yield about 12,000 acre-feet (50 percent of normal), and Piney Creek at Kearny should yield about 29,500 acre-feet (57 percent of average).

POWDER & TONGUE RIVER BASINS
Streamflow Forecasts - January 1, 2002

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)
TONGUE RIVER nr Dayton (2)	APR-SEP	31	50	62	57	74	93	109
MIDDLE FORK POWDER nr Barnum	APR-SEP	0.7	5.3	8.4	45	11.5	16.1	18.7
NORTH FORK POWDER nr Hazelton	APR-SEP	2.4	4.0	5.0	48	6.0	7.6	10.4
CLEAR CREEK nr Buffalo	APR-SEP	5.8	11.0	14.5	37	18.0	23	39
ROCK CREEK nr Buffalo	APR-SEP	6.1	9.6	12.0	50	14.4	17.9	24
PINEY CREEK at Kearny	APR-SEP	4.0	19.2	30	57	40	55	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	20.7	34.9	22.5

POWDER & TONGUE RIVER BASINS
Watershed Snowpack Analysis - January 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
UPPER TONGUE RIVER	6	101	76
GOOSE CREEK	1	95	75
CLEAR CREEK	2	94	76
CRAZY WOMAN CREEK	1	160	91
UPPER POWDER RIVER	3	100	74
POWDER RIVER in WY	5	98	75

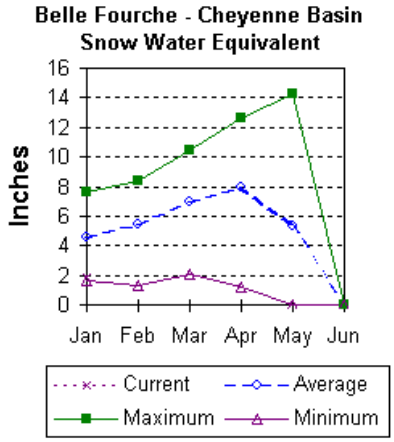
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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.

Belle Fourche and Cheyenne River Basins (7)

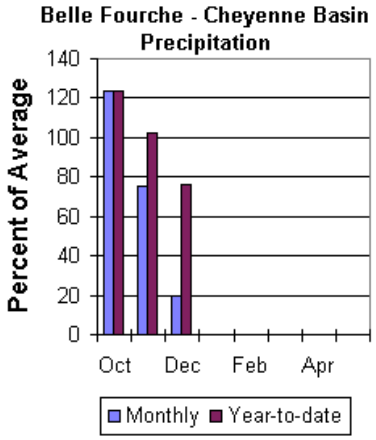
Snow.

The Belle Fourche River Basin snow water equivalent (SWE) is much below average.. SWE is currently 40 percent of average snow pack; 20 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 20 percent of average in the Black Hills. Monthly percentages range from 10 to 154 percent. Year-to-date precipitation is 76 percent of average and 58 percent of last year's amount.



Reservoir.

Usable reservoir storage is generally above average in the basin. Angostura is currently storing 101 percent of average (97,800-acre feet), about 80 percent of capacity. Belle Fourche reservoir is storing 138 percent of average (124,600-acre feet), about 70 percent of capacity. Deerfield reservoir is storing 121 percent of average (14,900-acre feet), about 98 percent of capacity. Keyhole reservoir is storing 152 percent of average (154,600-acre feet), 80 percent of capacity. Pactola reservoir is storing 114 percent of average (52,400-acre feet), 95 percent of capacity. Shadehill reservoir is storing 104 percent of average (52,800-acre feet), 65 percent of capacity.

Streamflow

Water supply is estimated to be below normal this year. The following values reflect the 50 percent chance yields for the April through July runoff period. Deerfield Reservoir inflow is forecast at 3,100 acre feet (63 percent of average). Pactola is forecast at 9,100 acre feet (48 percent of average).

BELLE FOURCHE & CHEYENNE RIVER BASINS
Streamflow Forecasts - January 1, 2002

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	1.15	2.31	3.10	63	4.35	6.19	4.90
	APR-JUL	0.80	1.84	2.55	61	3.71	5.43	4.20
PACTOLA RESERVOIR Inflow	MAR-JUL	1.1	6.8	10.7	51	18.3	30	21
	APR-JUL	0.3	5.5	9.1	48	16.5	27	18.9

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	97.8	85.4	96.4
BELLE FOURCHE	178.4	124.6	132.4	90.6
DEERFIELD	15.2	14.9	15.0	12.3
KEYHOLE	193.8	154.6	158.7	101.7
PACTOLA	55.0	52.4	54.0	45.8
SHADEHILL	81.4	52.8	41.5	50.7

BELLE FOURCHE & CHEYENNE RIVER BASINS
Watershed Snowpack Analysis - January 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
BELLE FOURCHE	3	24	40

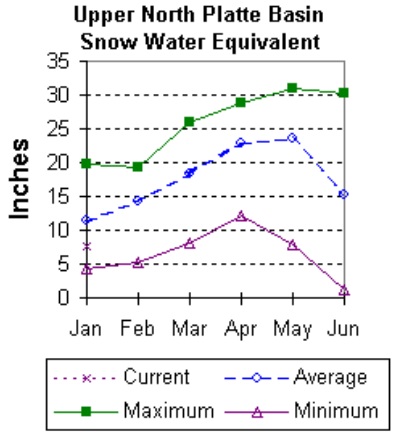
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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 66 percent of average snow water equivalent (SWE) recorded for this time of the year (72 percent of last year). SWE in the drainage area above Northgate is about 67 percent of average and 69 percent of last year at this time. SWE in the Encampment River drainage is about 74 percent of normal and 87 percent of last year. Brush Creek SWE for the year is about 55 percent of normal and 57 percent of last year's SWE. Medicine Bow and Rock Creek drainage SWE is about 54 percent of average and 63 percent of last year at this time. For more information see Basin Summary of Snow Courses at the beginning of this report.

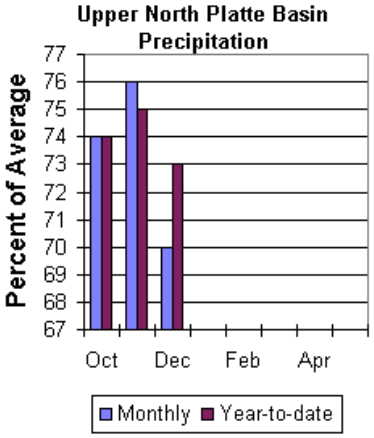


Precipitation

Eleven reporting stations indicate December precipitation was 70 percent of average and about 68 percent of last year's amount. December precipitation varied from 11 to 84 percent of average. Total water-year-to-date precipitation is about 73 percent of average for the basin, which is about 91 percent of last year's amount. Year to date percentage ranges from 30 to 107 percent of average for the 11 reporting stations.

Reservoirs

Seminoe Reservoir is currently storing about 76 percent of normal for this time of the year. Currently, the reservoir is storing 67 percent of last year's amount. Seminoe Reservoir is estimated to be storing 480,400 acre-feet (47 percent of capacity). Last year, at this time, the reservoir had 717,900 acre-feet in storage.



Streamflow

All the following yields are based on the fifty percent chance April through September yield. Yield for the North Platte River near Northgate is expected to be about 165,000 acre-feet (61 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 44,000 acre-feet (77 percent of average). Seminoe Reservoir inflow should be about (495,000 acre-feet (58 percent of normal). See the following table for more detailed information on projected runoff.

UPPER NORTH PLATTE RIVER BASIN
Streamflow Forecasts - January 1, 2002

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)
North Platte River nr Northgate	APR-SEP	76	106	165	61	224	311	270
Encampment River nr Encampment	APR-SEP	62	81	110	67	139	182	165
Rock Creek nr Arlington	APR-SEP	26	36	44	77	53	67	57
Seminoe Reservoir inflow	APR-JUL	220	360	455	57	622	868	800
	APR-SEP	277	407	495	58	647	871	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	480.4	717.9	631.1

UPPER NORTH PLATTE RIVER BASIN
Watershed Snowpack Analysis - January 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
N PLATTE above Northgate	5	69	67
ENCAMPMENT RIVER	3	87	74
BRUSH CREEK	2	57	55
MEDICINE BOW & ROCK CREEK	2	63	54
N PLATTE above Seminoe	13	72	66

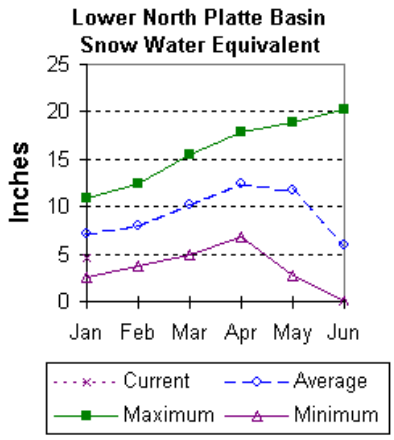
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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.

Lower North Platte River Basin (9)

Snow

SWE for the North Platte River basin in Wyoming averages 64 percent of normal (71 % of last year). The Sweetwater drainage SWE is currently 87 percent (101 percent of last year). Deer and LaPrele Creek SWE is 52 percent of average (47 percent of last year. SWE for the North Platte above the Laramie River drainage is 66 percent of average (73 % of last year). SWE for the Laramie River above the mouth is 57 percent of average (65 % of last year). SWE for the Laramie River above Laramie is 60 percent of average (69 % of last year). SWE for the Little Laramie River is 50 percent of average (57 percent of last year). For more information see Basin Summary of Snow Courses at beginning of report.

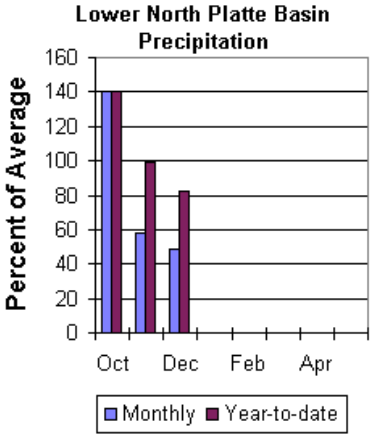


Precipitation

Of the 14 reporting stations, percentages for the month range from 0 to 113. December precipitation for the basin was 49 percent of average (42 percent of last year). The water year-to-date precipitation for the basin is currently 82 percent of average (96 percent of last year). Year to date percentages range from 61 to 167.

Reservoir

The Lower North Platte River basin reservoir storage is well below to well above average. Reservoir storage is as follows: Alcova 156,200 acre feet (101 percent of average); Glendo 192,800 acre feet (68 percent of average); Guernsey 11,000 acre feet (153 percent of average); Pathfinder 487,100 acre feet (77 percent of average); Seminoe 480,400 acre feet (76 percent of average). Wheatland No.2 19,000 acre feet (45 percent of average). Water allocated to project use is near average with North Platte Project users at 46 percent of average, Kendrick Project users at 101 percent of average, and Glendo Project users at 116 percent of average.



Streamflow

Yields from 37 to 66 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 38,000 acre-feet (48 percent of average). Deer Creek at Glenrock is expected to yield about 37 percent of average (15,000 acre-feet). LaPrele Creek above the reservoir is estimated to yield 40 percent of average (9,500 acre-feet). North Platte River below Guernsey Reservoir is expected to yield about 49 percent of normal (490,000 acre-feet), and below Glendo Reservoir is anticipated to yield about 49 percent of average (480,000 acre-feet). Laramie River near Woods should yield about 66 percent of average (89,000 acre-feet). The Little Laramie near Filmore should produce about 42,000 acre-feet (66 percent of average).

LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS
Streamflow Forecasts - January 1, 2002

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)
Sweetwater River nr Alcova	APR-JUL	15.9	27	35	47	52	76	74
	APR-SEP	17.8	30	38	48	55	80	80
Deer Creek at Glenrock	APR-SEP	2.7	8.9	15.0	37	23	37	41
La Prele Creek ab La Prele Reservoir	APR-SEP	0.8	4.3	9.5	40	17.7	37	24
Alcova to Orin Gain	APR-JUL	20	42	56	37	95	152	152
	APR-SEP	23	45	59	37	98	156	161
North Platte River blw Glendo Reserv	APR-JUL	212	368	475	50	582	738	960
	APR-SEP	344	425	480	49	592	758	990
North Platte River blw Guernsey Resv	APR-JUL	321	419	485	50	618	813	970
	APR-SEP	323	422	490	49	628	830	1010
Laramie River nr Woods	APR-SEP	43	70	89	66	117	159	135
Little Laramie River nr Filmore	APR-SEP	26	36	42	66	52	66	64

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	156.2	156.4	154.4
GLENDO	506.4	192.8	236.8	282.9
GUERNSEY	45.6	11.0	10.1	7.2
PATHFINDER	1016.5	487.1	700.5	635.7
SEMINOE	1016.7	480.4	717.9	631.1
WHEATLAND #2	98.9	19.0	---	42.2
NORTH PLATTE PROJ	1062.1	260.7	526.8	568.4
KENDRICK PROJECT	1201.7	830.1	972.0	819.8
GLENDO PROJECT USERS	183.2	135.0	136.5	116.2

LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS
Watershed Snowpack Analysis - January 1, 2002

Watershed	Number of Data Sites	This Year as % of ========== Last Yr	Average
SWEETWATER	2	101	87
DEER & LaPRELE CREEKS	2	47	52
N PLATTE abv Laramie R.	17	73	66
LARAMIE RIVER abv Laramie	3	69	60
LITTLE LARAMIE RIVER	1	57	50
LARAMIE RIVER above mouth	4	65	57
NORTH PLATTE	17	71	64

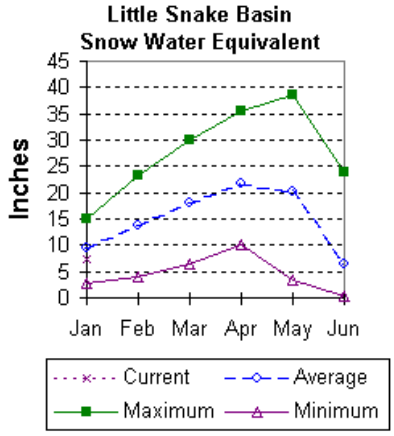
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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.

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 77 percent of average (85 percent of last year at this time). For more information see Basin Summary of Snow Courses at beginning of this report.

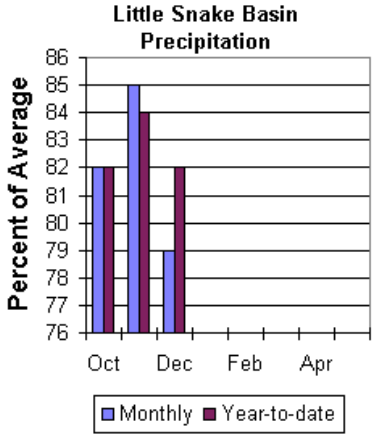


Precipitation

Precipitation across the basin was below average this past month. December precipitation was 79 percent of average (88 percent of last year) for the 5 reporting stations. December precipitation ranged from 55 to 88 percent of average. The Little Snake River basin water-year-to-date precipitation is currently 82 percent of average (94 percent of last year). Year-to-date percentages range from 78 to 89 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 100,000 acre-feet (63 percent of normal). Little Snake River near Dixon is estimated to yield 200,000 acre-feet (61 percent of normal).



LITTLE SNAKE RIVER BASIN
Streamflow Forecasts - January 1, 2002

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	46	76	100	63	128	174	159
LITTLE SNAKE R nr Dixon	APR-JUL	83	153	200	61	247	317	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, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
LITTLE SNAKE RIVER	6	85	77

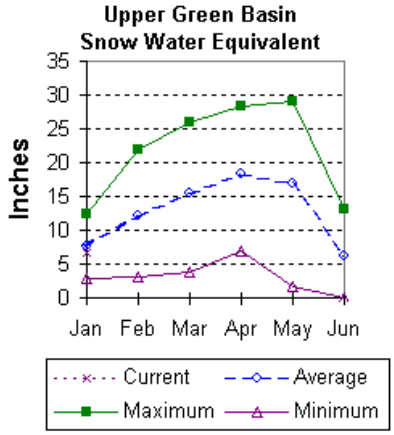
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

Upper Green River Basin (11)

Snow

The Upper Green River Basin snow water equivalent (SWE), above Fontenelle Reservoir, is 88 percent of average (112 percent of last year). The Green River basin SWE above Warren Bridge is 87 percent of normal (115 percent of last year). SWE on the west side of the Upper Green River basin is about 88 percent of normal, 116 percent of this time last year. Newfork River SWE is now 90 percent of normal (96 percent of last year). Big Sandy-Eden Valley SWE is about 106 percent of average (122 percent of last year). For more information see the Basin Summary of Snow Courses at the beginning of this report.

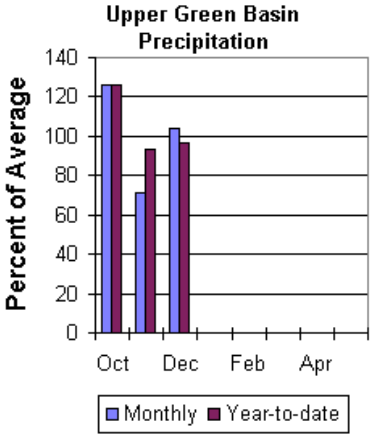


Precipitation

The 11 reporting precipitation sites in the basin were 104 percent of the December average (115 percent of last year at this time). December precipitation varied from 45 to 137 percent of average. Water year-to-date precipitation is about 97 percent of average (117 percent of last year). Year to date percentage of average ranges from 83 to 111 percent for the reporting stations.

Reservoir

Big Sandy Reservoir is currently storing 3,600 acre feet (20 percent of average) -- 71 percent of last year and 9 percent of capacity. Edan Reservoir is currently storing 480 acre feet (13 percent of average) -- 4 percent of capacity. Fontenelle Reservoir is storing 146,400 acre-feet (70 percent of average and 42 percent of the total capacity). Flaming Gorge Reservoir is currently storing 3,023,000 acre feet (98 percent of average) -- 96 percent of last year and 77 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 225,000 acre-feet (85 percent of normal). Pine Creek above Fremont Lake is expected to yield 88,000 acre-feet (85 percent of normal). New Fork River near Big Piney is expected to yield about 315,000 acre-feet (80 percent of normal). Fontenelle Reservoir Inflow is estimated to be 620,000 acre-feet (72 percent of average), and Big Sandy near Farson is expected to be about 49,000 acre-feet (85 percent of normal).

UPPER GREEN RIVER BASIN
Streamflow Forecasts - January 1, 2002

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	142	191	225	85	259	308	265
Pine Creek abv Fremont Lake	APR-JUL	63	78	88	85	98	113	104
New Fork River nr Big Piney	APR-JUL	170	256	315	80	374	460	395
Fontenelle Reservoir Inflow	APR-JUL	410	530	620	72	717	874	860
Big Sandy River nr Farson	APR-JUL	27	40	49	85	58	71	58

* 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
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BIG SANDY	38.3	3.6	5.1	18.3
EDEN	11.8	0.5	---	3.7
FLAMING GORGE	3749.0	2873.4	3006.0	2940.8
FONTENELLE	344.8	146.4	151.9	209.7

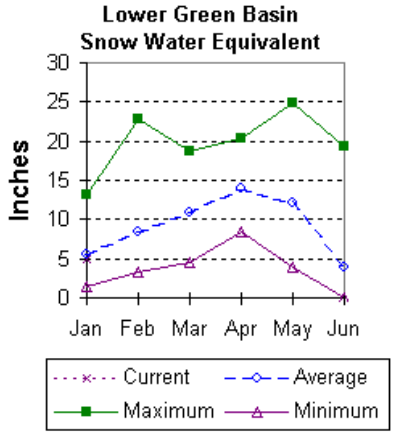
UPPER GREEN RIVER BASIN
Watershed Snowpack Analysis - January 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
GREEN above Warren Bridge	4	115	87
UPPER GREEN (West Side)	5	116	88
NEWFORK RIVER	2	96	90
BIG SANDY/EDEN VALLEY	1	122	106
GREEN above Fontenelle	11	112	88

Lower Green River Basin (12)

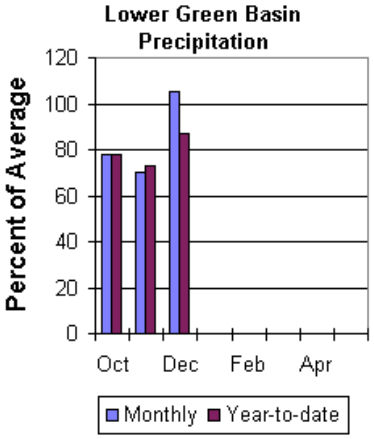
Snow

The Blacks Fork and Henrys Fork drainage's, as of January 1, are below average. SWE in the Hams Fork, as of January 1, is 95 percent of average (115% of last year). Blacks Fork SWE is currently 86 percent of average (86 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 above average for the 3 reporting stations during December. Precipitation ranged from 102 to 139 percent of average for the month. The basin year-to-date precipitation is currently 87 percent of average (116 percent of last year). Year to date percentages range from 84 to 91.



Reservoir

Fontenelle Reservoir is currently storing 146,400 acre feet; this is 70 percent of average (96 percent of last year). Flaming Gorge is currently storing 2,873,400 acre feet,this is 98 percent of average (96 percent of last year). Viva Naughton is currently storing 29,000 acre feet; this is 92 percent of average (90 percent of last year).

Streamflow

Expected yields vary from 69 to 77 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 650,000-acre feet (74 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 21,000 acre-feet (68 percent of average). The estimated yield for Hams Fork near Frontier is 50,000-acre feet (77 percent of average). Viva Naughton Reservoir inflow will be about 65,000-acre feet (73 percent of average). Flaming Gorge Reservoir inflow will be about 820,000-acre feet (69 percent of average).

LOWER GREEN RIVER BASIN
Streamflow Forecasts - January 1, 2002

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	342	525	650	74	775	958	875
Blacks Fork nr Robertson	APR-JUL	47	57	70	74	83	101	95
EF of Smiths Fork nr Robertson	APR-JUL	15.5	18.6	21	68	24	28	31
Hams Fk blw Pole Ck nr Frontier	APR-JUL	29	41	50	77	60	77	65
Hams Fk Inflow to Viva Naughton Res	APR-JUL	22	48	65	73	82	108	89
Flaming Gorge Reservoir Inflow	APR-JUL	394	648	820	69	992	1246	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	146.4	151.9	209.7
FLAMING GORGE	3749.0	2873.4	3006.0	2940.8
VIVA NAUGHTON RES	42.4	29.0	32.2	31.6

LOWER GREEN RIVER BASIN
Watershed Snowpack Analysis - January 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
HAMS FORK RIVER	3	115	95
BLACKS FORK	2	86	86
HENRYS FORK	2	69	79
GREEN above Flaming Gorge	18	108	89

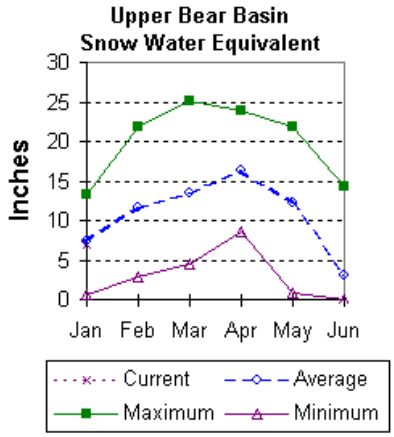
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

(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 93 percent of average (112 percent of last year). SWE for the Bear River in Utah is estimated to be 94 percent of average; that is about 103 percent of last year at this time. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is estimated at 94 percent of average (117 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.

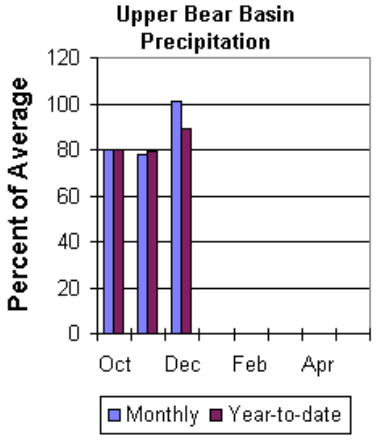


Precipitation

Precipitation for the month of December was 101 percent of average for the 2 reporting stations; this is 137 percent of the previous December. The year-to-date precipitation, for the basin, is 89 percent of average; this is 110 percent of last year's amount.

Reservoir

Woodruff Narrows reservoir had no report this month.



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), and Thomas Fork drainage near the Idaho-Wyoming state line is below average. 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, 2002

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	60	81	100	85	123	167	118
THOMAS FK nr WY-ID State Line (Disc.	APR-SEP	13.9	22	29	81	39	61	36
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		NO REPORT		

UPPER BEAR RIVER BASIN
Watershed Snowpack Analysis - January 1, 2002

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
UPPER BEAR RIVER in Utah	5	103	94
SMITHS & THOMAS FORKS	3	117	94
BEAR RIVER abv ID line	6	112	93
NORTHWEST	57	122	80
NORTHEST	11	85	73
SOUTHEAST	20	71	66
SOUTHWEST	25	101	85

* 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.

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