USDA United States Department of Agriculture

Natural Resources Conservation Service

Wyoming Basin Outlook Report January 1, 2000

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. Stmamflow 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 mote 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.

General

Generally, snow water equivalent (SWE) across the state is below normal -- SWE is 15 to 30 percent below average for most of the State. Precipitation for December was above average in the north central and northeast and below average for the rest of the State. Precipitation for year-to-date is below to much below normal. Most of the reservoir levels are above average. Forecast runoff varies, but is generally from 49 to 74 percent of average. The mean of all the forecast points is 26 percent below average -- for all points in the State. The minimum yield forecast was 28 percent of average in the Sweetwater drainage and the maximum forecast was 87 percent of average at Shell Creek near Shell..

Snowpack

December conditions varied across the State, but SWE is generally below average across the State. The northwestern portion of Wyoming received well below normal snow accumulation. Northeast Wyoming is below normal -- they received several snow storms that missed the rest of the State. The Southeast portion of the State is much below normal and the Southwest portion is also below normal.

Precipitation

December precipitation was mixed with north central and northeast portion of the State above average and the rest below average. The following table displays the major river basins and their departure from normal for December 1999.

Basin	Departure from normal	Basin	Departure from normal
Snake River	-27%	Upper North Platte River	-11%
Yellowstone & Madison	-3%	Lower North Platte	-20%
Wind River	-49%	Little Snake River	-9%
Big Horn	+18%	Upper Green River	-47%
Shoshone & Clarks Fork	-3%	Lower Green River	-47%
Powder & Tongue River	+23%	Upper Bear River	-43%
Belle Fourche & Cheyenne	+24%		

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 1999

BASIN AREA RESERVIOR	CURRENT AS % CAPACITY	LAST YR AS % CAPACITY	AVERAGE AS % CAPACITY	CURRENT AS % AVERAGE	CURRENT AS % LAST YR
ALCOVA	85	85	83	102	100
ANGOSTURA	86	91	79	109	95
BELLE FOURCHE	97	93	51	191	104
BIG SANDY			NO REPORT		
BIGHORN LAKE	71	70	66	108	102
BOYSEN	92	100	103	89	92
BUFFALO BILL	71	69	68	105	102
BULL LAKE	63	65	58	108	98
DEERFIELD	97	94	81	120	103
EDEN			NO REPORT		
FLAMING GORGE			NO REPORT		
FONTENELLE	61	66	60	101	93
GLENDO	55	69	55	100	79
GRASSY LAKE	80	83	69	116	97
GUERNSEY	23	31	12	191	73
HEBGEN LAKE	91	88	65	140	104
JACKSON LAKE	75	70	56	134	107
KEYHOLE	89	91	51	175	97
PACTOLA	99	94	83	119	106
PALISADES	84	86	74	113	97
PATHFINDER	91	86	50	184	107
PILOT BUTTE	73	72	49	148	101
SEMINOE	83	74	53	156	112
SHADEHILL	68	71	62	110	96
TONGUE RIVER			NO REPORT		
VIVA NAUGHTON RES			NO REPORT		
WHEATLAND #2			AVERAGE NOT ESTABLISHED		
WOODRUFF NARROWS			NO REPORT		
GLENDO PROJECT USERS	85	85	63	134	99
KENDRICK PROJECT	83	82	68	121	101
NORTH PLATTE PROJ	85	76	54	158	111

JANUARY 2000

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
SNAKE RIVER BASIN						
ASTER CREEK	7750	12/29/99	29	8.2	14.9	12.8
BASE CAMP PILLOW	7030	1/01/00	---	6.1	8.8	7.9
BASE CAMP	7030	12/30/99	26	7.0	8.8	8.6
BLACK BEAR PILLOW	7950	1/01/00	---	12.3	20.1	15.6
BLIND BULL PILLOW	8900	1/01/00	---	8.0	11.4	12.5
BRYAN FLAT	6420				---	---
CCC CAMP	7000				---	5.1
COTTONWOOD CR PILLOW	7700	1/01/00	---	6.2	8.9	8.8
DARBY CANYON	8250				9.7	10.0
EAST RIM DIV PILLOW	7930	1/01/00	---	2.8	5.3	5.7
ELBO RANCH	7100	12/30/99	15	3.1	4.1	---
FOUR MILE MEADOWS	7860				---	---
GLADE CREEK	7040	12/30/99	25	6.7	10.1	9.7
GRASSY LAKE PILLOW	7270	1/01/00	---	9.9	15.8	14.3
GREYS BOUNDARY	5720				---	4.4
GROS VENTRE PILLOW	8750	1/01/00	---	2.4	6.3	6.9
GROVER PARK DIVIDE	7000				---	4.8
HUCKLEBERRY DIVIDE	7300	12/29/99	26	6.6	8.4	9.3
JACKPINE CREEK	7350				5.1	8.9
LEWIS LAKE PILLOW	7850	1/01/00	---	8.6	14.6	13.8
LEWIS LAKE DIVIDE	7850	12/29/99	41	12.5	19.1	17.5
MORAN	6750	12/30/99	17	4.0	5.3	5.4
PHILLIPS BENCH PILL.	8200	1/01/00	---	6.7	12.0	11.5
POISON MEADOWS	8500				---	9.7
SALT RIVER PILLOW	7600	1/01/00	---	3.3	5.0	5.1
SNAKE RIVER STATION	6920	12/29/99	23	5.0	8.1	8.8
SNOW KING MTN	7660				---	6.6
SPRING CRK. PILLOW	9000	1/01/00	---	7.0	10.7	11.6
TETON PASS W.S.	7740				---	---
THUMB DIVIDE	7980	12/29/99	18	4.2	9.0	8.4
TOGWOTEE PASS PILLOW	9580	1/01/00	26	6.1	13.0	11.1
TURPIN MEADOWS	6900				---	---
TWO OCEAN PILLOW	9240	1/01/00	---	7.8	16.3	12.6
WILLOW CREEK PILLOW	8450	1/01/00	---	7.7	12.1	12.8
UPPER YELLOWSTONE & MADISON RIVER BASINS						
BLACK BEAR PILLOW	7950	1/01/00	---	12.3	20.1	15.6
CANYON PILLOW	8090	1/01/00	---	5.0	7.6	5.3
FISHER CREEK PILLOW	9100	1/01/00	---	14.0	18.0	15.6
FISHER CREEK	9100				---	---
LAKE CAMP	7780	12/29/99	16	3.3	4.9	3.8
LUPINE CREEK	7380	12/29/99	16	4.3	5.2	4.3

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
MADISON PLT PILLOW	7750	1/01/00	---	6.6	15.4	10.1
MADISON PLATEAU	7750				---	---
NORRIS BASIN	7500	12/21/99	21	5.4	5.0	5.0
N.E. ENTRANCE PILLOW	7350	1/01/00	---	5.1	5.0	4.0
NORTHEAST ENTRANCE	7350	01/05/00	27	5.2	4.6	3.7
OLD FAITHFUL	7400	12/30/99	18	3.5	8.1	6.4
PARKERS PEAK PILLOW	9400	1/01/00	---	7.1	11.0	10.6
SYLVAN LAKE PILLOW	8420	1/01/00	---	7.4	11.7	10.8
THUMB DIVIDE	7980	12/29/99	18	4.2	9.0	8.4
TWENTY-ONE MILE	7150	12/30/99	24	5.5	9.0	7.3
TWO OCEAN PILLOW	9240	1/01/00	---	7.8	16.3	12.6
WEST YELL'ST PILLOW	6700	1/01/00	---	3.2	6.2	5.1
WEST YELLOWSTONE	6700	12/29/99	16	3.0	5.8	4.8
WIND RIVER BASIN						
BLUE RIDGE	9620				---	---
BURROUGHS CRK PILLOW	8750	1/01/00	---	4.0	7.9	7.1
BURROUGHS CREEK	8750				---	---
CASTLE CREEK	8400				---	---
COLD SPRINGS PILLOW	9630	1/01/00	---	1.5	5.0	4.4
DU NOIR	8760				---	---
GEYSER CREEK	8500				---	---
GRANNIER MEADOWS	8860				---	---
HOBBS PARK PILLOW	10100	1/01/00	---	3.0	8.2	7.7
LITTLE WARM PILLOW	9370	1/01/00	---	2.7	6.2	5.1
MIDDLE FORK	7420				---	---
SOUTH PASS PILLOW	9040	1/01/00	---	3.2	7.0	8.3
ST LAWRENCE ALT PILL	8620	1/01/00	---	.8	3.8	3.3
T CROSS RANCH	7900				---	---
TOGWOTEE PASS PILLOW	9580	1/01/00	26	6.1	13.0	11.1
TOWNSEND CRK PILLOW	8700	1/01/00	---	1.5	4.3	4.5
YOUNTS PEAK PILLOW	8350	1/01/00	---	5.0	10.1	8.9
BIG HORN RIVER BASIN						
BALD MOUNTAIN PILLOW	9380	1/01/00	---	9.6	8.2	10.2
BONE SPGS. PILLOW	9350	1/01/00	---	7.0	6.7	7.8
KIRWIN PILLOW	9550	1/01/00	---	2.5	6.5	5.2
MEDICINE LODGE LAKES	9340				---	---
MIDDLE POWDER PILLOW	7760	1/01/00	---	4.6	3.3	5.7
MIDDLE POWDER	7760				---	---
ONION GULCH	8780				---	---
OWL CREEK PILLOW	8980	1/01/00	---	.7	3.4	1.9
POWDER RVR.PASS PILL	9480	1/01/00	---	4.3	4.8	5.1
RANGER CREEK	8120				---	---
SHELL CREEK PILLOW	9580	1/01/00	---	7.1	7.5	7.5

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
TIMBER CREEK PILLOW	7950	1/01/00	---	.4	3.2	2.4
TYRELL RANGER STA.	8300				---	---
SHOSHONE & CLARKS FORK RIVER BASINS						
BEARTOOTH LK. PILLOW	9280	1/01/00	---	9.6	11.7	11.5
BLACKWATER PILLOW	9780	1/01/00	---	5.8	14.9	9.9
CARTER MOUNTAIN	7950				---	---
FISHER CREEK PILLOW	9100	1/01/00	---	14.0	18.0	15.6
FISHER CREEK	9100				---	---
EVENING STAR PILLOW	9200	1/01/00	---	9.7	16.0	12.9
MARQUETTE PILLOW	8760	1/01/00	---	1.9	5.0	3.8
PARKERS PEAK PILLOW	9400	1/01/00	---	7.1	11.0	10.6
N.E. ENTRANCE PILLOW	7350	1/01/00	---	5.1	5.0	4.0
NORTHEAST ENTRANCE	7350	01/05/00	27	5.2	4.6	3.7
PARKERS PEAK PILLOW	9400	1/01/00	---	7.1	11.0	10.6
SYLVAN ROAD PILLOW	7120	1/01/00	---	6.0	7.7	5.8
WHITE MILL PILLOW	8700	1/01/00	---	10.6	11.3	11.4
WHITE MILL	8700				---	---
WOLVERINE PILLOW	7650	1/01/00	---	5.9	8.0	5.2
YOUNTS PEAK PILLOW	8350	1/01/00	---	5.0	10.1	8.9
POWDER & TONGUE RIVER BASINS						
BEAR TRAP PILLOW	8200	1/01/00	---	1.8	3.0	3.7
BIG GOOSE	7760				---	---
BONE SPGS. PILLOW	9350	1/01/00	---	7.0	6.7	7.8
BURGESS JCT. PILLOW	7880	1/01/00	---	4.4	3.6	5.5
CLOUD PEAK PILLOW	9850	1/01/00	---	7.0	6.8	5.6
DOME LAKE PILLOW	8880	1/01/00	---	4.2	5.5	6.3
HANSEN S.M. PILLOW	8360	1/01/00	---	2.2	2.9	3.3
MIDDLE POWDER PILLOW	7760	1/01/00	---	4.6	3.3	5.7
MIDDLE POWDER	7760				---	---
NORTH TONGUE	8450				---	---
ONION GULCH	8780				---	---
POWDER RVR.PASS PILL	9480	1/01/00	---	4.3	4.8	5.1
SAWMILL DIVIDE	9260				---	---
SOLDIER PARK	8780				---	---
SOUR DOUGH	8460				---	---
SUCKER CREEK PILLOW	8880	1/01/00	---	4.6	4.5	5.2
SUCKER CREEK	8880				---	---
WOOD ROCK G.S.	8440				---	---
BELLE FOURCHE & CHEYENNE RIVER BASINS						
BEARLODGE DIVIDE	4680				---	---

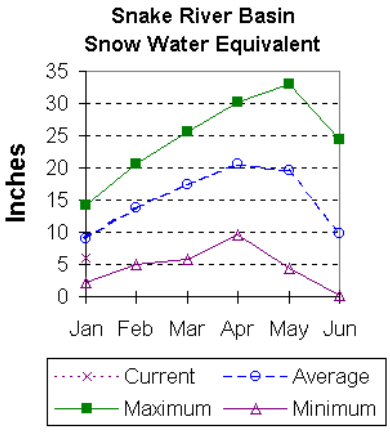
SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
BLIND PARK PILLOW	6870	1/01/00	---	3.2	2.1	5.3
DITCH CREEK	6870				1.0	---
NORTH RAPID CK PILL.	6130	1/01/00	---	2.9	2.1	---
MALLO	6420				1.8	3.3
MOUNT TOM	5560				.5	2.2
REUTER CANYON	6280				---	---
UPPER SPEARFISH	6500				---	---
WARREN PEAK PILLOW	6520	1/01/00	---	4.0	2.3	5.3
LITTLE BEAR RUN	6240				.4	---
UPPER NORTH PLATTE BASIN						
DIVIDE PEAK PILLOW	8860	1/01/00	---	6.6	7.3	9.5
JOE WRIGHT SNOTEL	10000	1/01/00	---	7.1	7.7	10.4
MOSS LAKE	9800				---	---
NORTH BARRETT CREEK	9400				---	---
NORTH FRENCH PILLOW	10130	1/01/00	---	10.3	11.6	11.4
OLD BATTLE PILLOW	9920	1/01/00	---	7.2	10.9	14.8
PURGATORY GULCH	8970				---	---
ROACH SNOTEL	9400	1/01/00	---	5.0	6.1	7.7
RYAN PARK	8400				---	---
SAND LAKE PILLOW	10050	1/01/00	---	8.7	12.6	15.1
SOUTH BRUSH PILLOW	8440	1/01/00	---	5.3	3.8	4.8
WEBBER SPRING PILLOW	9250	1/01/00	---	6.2	7.0	12.2
WILLOW CK PS SNOTEL	9500	1/01/00	---	3.7	4.8	5.7
LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS						
ALBANY	9400				---	---
BOXELDER	7280				---	---
BROOKLYN LK. PILLOW	10220	1/01/00	---	5.7	7.0	12.0
BUCK CREEK	7960				---	---
CASPER MTN. PILLOW	7850	1/01/00	---	6.3	3.7	7.5
DEADMAN HILL SNOTEL	10200	1/01/00	---	3.2	8.6	7.9
DEADMAN HILL	10200				---	---
FOXPARK	9060				---	---
GRANNIER MEADOWS	8860				---	---
HAIRPIN TURN	9480				---	---
JOE WRIGHT SNOTEL	10000	1/01/00	---	7.1	7.7	10.4
LA BONTE	8450				---	---
LA PRELE PILLOW	8380	1/01/00	---	3.4	1.1	4.7
LARSEN CREEK	9020				---	---
LIBBY LODGE	8750				---	---
POLE MOUNTAIN	8700				---	---
RENO HILL PILLOW	8500	1/01/00	---	5.2	5.2	6.2
ROACH SNOTEL	9400	1/01/00	---	5.0	6.1	7.7
SOUTH PASS PILLOW	9040	1/01/00	---	3.2	7.0	8.3
WINDY PEAK PILLOW	7900	1/01/00	---	1.9	1.6	3.3
LITTLE SNAKE RIVER BASIN						
BATTLE MTN. PILLOW	7440	1/01/00	---	3.5	3.7	5.0
BUTTER HILL	7880				---	---

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
DIVIDE PEAK PILLOW	8860	1/01/00	---	6.6	7.3	9.5
ELK RIVER SNOTEL	8600	1/01/00	---	5.4	3.6	8.1
HASKINS CREEK	8980				---	---
OLD BATTLE PILLOW	9920	1/01/00	---	7.2	10.9	14.8
SANDSTONE PILLOW	8150	1/01/00	---	5.0	4.2	6.2
WHISKEY PARK PILLOW	8950	1/01/00	---	8.1	7.2	12.8
UPPER GREEN RIVER BASIN						
BIG PARK	8620				---	---
BIG SANDY PILLOW	9080	1/01/00	---	2.5	7.0	6.0
BLIND BULL PILLOW	8900	1/01/00	---	8.0	11.4	12.5
EAST RIM DIV PILLOW	7930	1/01/00	---	2.8	5.3	5.7
ELKHART PARK PILLOW	9400	1/01/00	---	3.2	5.6	5.8
GROS VENTRE PILLOW	8750	1/01/00	---	2.4	6.3	6.9
INDIAN CREEK PILLOW	9430	1/01/00	---	5.9	10.0	11.6
KELLEY R.S. PILLOW	8180	1/01/00	---	3.0	5.8	6.7
KENDALL R.S. PILLOW	7740	1/01/00	---	3.9	6.0	5.9
LOOMIS PARK PILLOW	8240	1/01/00	---	5.0	6.9	7.0
NEW FORK PILLOW	8340	1/01/00	---	3.0	4.9	4.6
POCKET CREEK	9350				---	---
POISON MEADOWS	8500				---	9.7
ROWDY CREEK	8300				---	---
SNIDER BASIN PILLOW	8060	1/01/00	---	3.2	5.7	6.0
TRIPLE PEAK PILLOW	8500	1/01/00	---	7.3	10.9	10.9
LOWER GREEN RIVER BASIN						
BIG PARK	8620				---	---
BLACK'S FORK JUNCTN	8930				---	---
HAMS FORK PILLOW	7840	1/01/00	---	2.6	4.0	4.3
HENRY'S FORK	10000				---	---
HEWINTA SNOTEL	9500	1/01/00	---	2.4	3.1	3.9
HICKERSON PARK SNOTE	9100	1/01/00	---	2.1	2.3	2.6
HOLE-IN-ROCK SNOTEL	9150	1/01/00	---	2.1	2.9	2.3
INDIAN CREEK PILLOW	9430	1/01/00	---	5.9	10.0	11.6
KELLEY R.S. PILLOW	8180	1/01/00	---	3.0	5.8	6.7
SPRING CRK. PILLOW	9000	1/01/00	---	7.0	10.7	11.6
STEEL CREEK PARK SNO	10100	1/01/00	---	4.8	5.0	7.2
UPPER BEAR RIVER BASIN						
BIG PARK	8620				---	---
BURT'S-MILLER RANCH	7900				---	---
HAYDEN FORK SNOTEL	9100	1/01/00	---	3.9	4.8	6.8
INDIAN CREEK PILLOW	9430	1/01/00	---	5.9	10.0	11.6
KELLEY R.S. PILLOW	8180	1/01/00	---	3.0	5.8	6.7
SALT RIVER PILLOW	7600	1/01/00	---	3.3	5.0	5.1
STILLWATER CAMP	8550				---	---
TRIAL LAKE SNOTEL	9960	1/01/00	---	5.0	5.0	10.8
TRIAL LAKE	9960				---	---

Snake River Basin (1)

Snow

Percentage of average snow water equivalent (SWE) for each drainage in the basin is: Snake above Jackson Lake -- 65 percent (60% of last year at this time), Pacific Creek -- 72 percent (64% of last year at this time), Gros Ventre River -- 47 percent (50% of last year at this time), Hoback River -- 57 percent (61% of last year at this time), Greys River -- 62 percent (67% of last year at this time), Salt River -- 64 percent (66% of last year at this time). Snake River Basin above Palisades is 64 percent of average (61% 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.

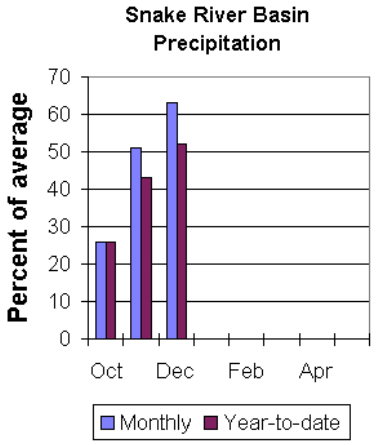


Precipitation.

Precipitation across the basin was above average for last month. Monthly precipitation, for the basin, was 63 percent of average (74 percent of last year). December percentages range from 36 to 122 percent of average. Water-year-to-date precipitation is 52 percent of normal for the Snake River basin (55 percent of last year at this time) Year-to-date percentages range from 24 to 62 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 (12,200 acre feet compared to 12,600 last year), Jackson lake — 134 percent of average (632,300 acre feet compared to 590,000 acre feet last year), and Palisades Reservoir —113 percent of average (1,173,000 acre feet compared to 1,207,300 acre feet last year).



Streamflow.

The most probable, 50 percent chance, April through September runoff yield forecast is below average for the basin. The Snake near Moran is expected to yield 702,000 acre-feet (81 percent of normal). Yield from the Snake River above Palisades Reservoir is estimated to be 2,166,000 acre-feet (81 percent of normal). The 50 percent chance yield near Heise is expected to be 3,170,000 acre-feet (78 percent of normal). Pacific Creek at Moran is expected to yield about 131,000 acre-feet (79 percent of average). Greys River above Palisades Reservoir is estimated to yield 280,000 acre-feet (72 percent of normal). Salt River near Etna is estimated to have a yield of 285,000 acre-feet (71 percent of normal).

SNAKE RIVER BASIN
Streamflow Forecasts - January 1, 2000

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	466	628	702	81	776	938	869
SNAKE above Palisades (2)	APR-SEP	1593	1934	2166	81	2398	2739	2671
SNAKE near Heise (2)	APR-SEP	2257	2801	3170	78	3539	4083	4049
PACIFIC CREEK at Moran	APR-SEP	87	113	131	79	149	175	166
GREYS above Palisades	APR-SEP	170	235	280	72	325	390	388
SALT near Etna	APR-SEP	151	231	285	71	339	419	399

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
GRASSY LAKE	15.2	12.2	12.6	10.5
JACKSON LAKE	847.0	632.3	590.0	470.2
PALISADES	1400.0	1173.0	1207.3	1036.0

SNAKE RIVER BASIN
Watershed Snowpack Analysis - January 1, 2000

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
SNAKE above Jackson Lake	9	60	66
PACIFIC CREEK	3	59	69
GROS VENTRE RIVER	2	50	47
HOBACK RIVER	5	61	57
GREYS RIVER	3	66	62
SALT RIVER	3	66	64
SNAKE above Palisades	21	61	63

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

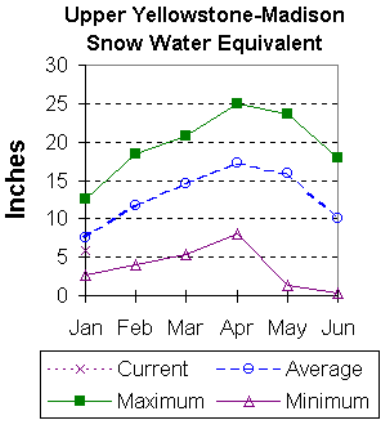
The average is computed for the 1961-1990 base period.

(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.
(3) - Forecasts produced in cooperation with Alberta Forecasting Staff Canada

Upper Yellowstone and Madison River Basins (2)

Snow

Snowfall in the basin this year has been well below average. For this time of the year, snow water equivalent (SWE) is about 71 percent of average (56 percent of last year) in the Madison drainage. SWE in the Yellowstone drainage is about 72 percent of average (61 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.

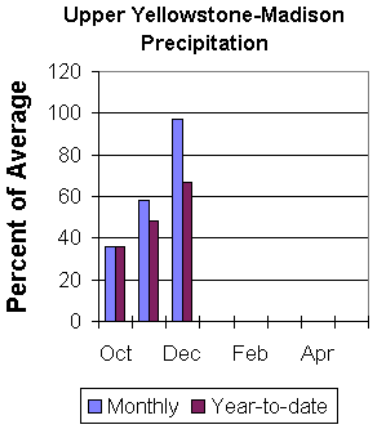


Precipitation

December precipitation in the Madison and Yellowstone drainage was about 97 percent of average (96 percent of previous year) for the 7 reporting stations -- percentage range was from 53 percent of average at Two Ocean Plateau to 161 percent of average at Tower falls. Water-year-to-date precipitation is about 67 percent of average (59 percent of last year's amount). Year to date percentage ranges from 46 to 88 for the 7 reporting stations.

Reservoir

Ennis Lake is storing 28,900 acre-feet (86 percent of average and 70 percent of capacity). Hebgen Lake is storing about 344,800 acre-feet of water (140 percent of average and 91 percent of capacity). Hebgen Lake is storing about 82 percent and Ennis Lake is storing about 88 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 52,000 acre feet (66 percent of normal). Yellowstone at Corwin Springs will yield about 1,315,000 acre-feet (68 percent of normal). Yellowstone near Livingston will yield about 1,515,000 acre feet (68 percent of normal). Hebgen lake inflow is estimated to be 415,000 acre feet (85 percent of normal). See the following page for detailed runoff volumes.

UPPER YELLOWSTONE & MADISON RIVER BASINS
Streamflow Forecasts - January 1, 2000

Forecast Point	Forecast Period	<<======= Drier ====== Future Conditions ======= Wetter =====>>						30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	50% (Most Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	
YELLOWSTONE at Lake Outlet	APR-SEP	340	447	520	66	593	700	792
YELLOWSTONE RIVER at Corwin Spgs.	APR-SEP	948	1166	1315	68	1464	1682	1937
YELLOWSTONE RIVER near Livingston	APR-SEP	1041	1323	1515	68	1707	1989	2241
HEBGEN Reservoir Inflow	APR-SEP	315	374	415	85	456	515	486

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
ENNIS LAKE	41.0	28.9	33.6	33.7
HEBGEN LAKE	377.5	344.8	331.5	246.8

UPPER YELLOWSTONE & MADISON RIVER BASINS
Watershed Snowpack Analysis - January 1, 2000

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
MADISON RIVER in WY	9	56	73
YELLOWSTONE RIVER in WY	11	62	75

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

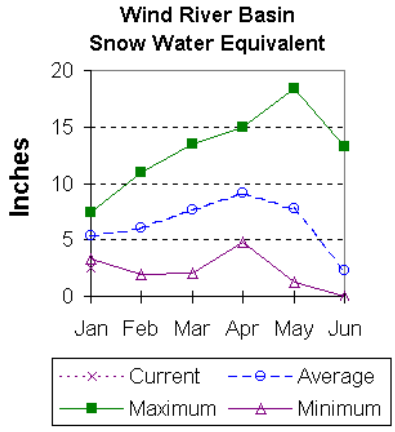
The average is computed for the 1961-1990 base period.

(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.
(3) - Forecasts produced in cooperation with Alberta Forecasting Staff Canada

Wind River Basin (3)

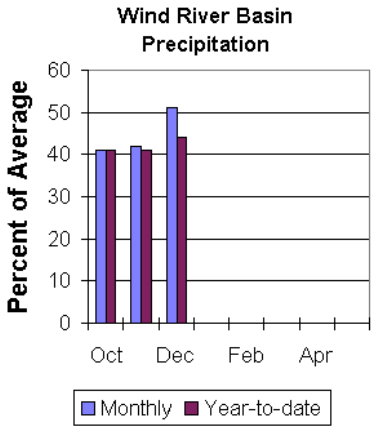
Snow

The Wind River basin has well below average snow water equivalent (SWE) for this time of the year. The Wind River above Dubois is 55 percent of average (48 percent of last year). The Little Wind is 35 percent of average water content (32 percent of last year), and the Popo Agie drainage is about 38 percent of average (39 percent of last year). The Wind River basin, above Boysen Reservoir, SWE is about 47 percent of average (about 42 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 4 to 75 percent of average. December precipitation for the basin was about 51 percent of average for the 10 reporting stations; that is about 57 percent of last year's amount. Water year-to-date precipitation is 44 percent of normal. The current water-year-to-date average is about 40 percent of last year at this time. Year to date figures range from 13 to 54 percent of average for the 10 reporting stations.



Reservoirs

Current storage varies from 63 to 92 percent of average. Bull Lake is currently storing about 95,700 acre feet (63 percent of capacity) -- normally the reservoir is at 58 percent of capacity at this time of the year. Boysen Reservoir is storing about 92 percent of capacity (547,000 acre feet) -- normally the reservoir is at 103 percent of capacity at this time of the year. Pilot Butte is storing 73 percent of capacity (23,000 acre feet) -- normally the reservoir is at 49 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 385,000 acre feet (72 percent of average). Wind River at Riverton will yield about 395,000 acre feet (61 percent of average). Boysen Reservoir inflow will yield about 525,000 acre feet (65 percent of normal). Bull Lake Creek near Lenore is expected to yield about 125,000 acre feet (68 percent of average). Little Popo Agie River near Lander is expected to yield about 31,000 acre feet (60 percent of average). South Fork of Little Wind near Fort Washakie will yield about 54,000 acre feet (67 percent of average). Little Wind River near Riverton will yield about 155,000 acre feet (48 percent of average).

WIND RIVER BASIN
Streamflow Forecasts - January 1, 2000

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	226	321	385	72	449	544	538
WIND RIVER at Riverton (2)	APR-SEP	108	279	395	61	511	682	648
BOYSEN RESERVOIR Inflow (2)	APR-SEP	173	383	525	65	667	877	809
BULL LAKE CR near Lenore (2)	APR-SEP	70	103	125	68	147	180	183
LT POPO AGIE RIVER nr Lander	APR-SEP	4.2	18.0	31	60	44	63	52
SF LT WIND nr Fort Washakie	APR-SEP	24	42	54	67	66	84	81
LT WIND RIVER nr Riverton	APR-SEP	16.0	86	155	48	224	326	324

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BULL LAKE	151.8	95.7	98.1	88.8
BOYSEN	596.0	547.0	593.1	613.5
PILOT BUTTE	31.6	23.0	22.7	15.5

WIND RIVER BASIN
Watershed Snowpack Analysis - January 1, 2000

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
WIND RIVER above Dubios	3	47	55
LITTLE WIND	2	32	35
POPO AGIE	3	39	38
WIND above Boysen Resv	7	43	46

* 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.

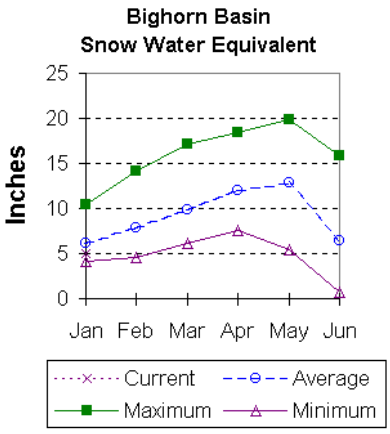
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.
(3) - Forecasts produced in cooperation with Alberta Forecasting Staff Canada

BIGHORN RIVER BASIN as of January 1, 2000

Bighorn River Basin (4)

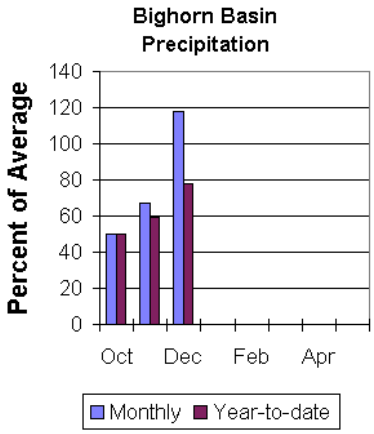
Snow

Snowpack in this basin is below average for this time of year. The Nowood drainage is 82 percent of average SWE (110 percent of last year). The Greybull River drainage SWE is 38 percent of average (30 percent of last year). Shell Creek SWE is 93 percent of average (106 percent of last year). The basin SWE, as a whole, is currently 81 percent of average (88 percent of last year). For more information see Basin Summary of Snow Courses at beginning of report.



Precipitation

December precipitation was 118 percent of the monthly average (120 percent of last year). Sites ranged from 17 to 209 percent of average for the month. Year-to-date precipitation is 78 percent of normal; that is 62 percent of last year at this time. Year to date percentages, from the 14 reporting stations, range from 33 to 102.



Reservoir

Boysen Reservoir is currently storing 547,000-acre feet (89 percent of average). Bighorn Lake is now at 108 percent of average (960,300-acre feet). Boysen is currently storing 92 percent of last year at this time and Big Horn Lake is storing 102 percent of last year's volume.

Streamflow

The 50 percent chance April through September runoff is anticipated to be well below normal. The Wind River at Boysen is forecast to yield 525,000 acre feet (65 percent of average); the Nowood River near Ten Sleep should yield near 22,000 acre feet (38 percent of normal); the Greybull River at Meeteese should yield 100,000 acre feet (50 percent of average); Shell Creek near Shell should yield 65,000 acre feet (87 percent of average) and the Bighorn River at Kane should yield 726,000 acre feet (65 percent of average).

BIGHORN RIVER BASIN
Streamflow Forecasts - January 1, 2000

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	173	383	525	65	667	877	809
NOWOOD RIVER nr Tensleep (D)	APR-SEP	2.3	9.3	22	38	35	53	58
GREYBULL RIVER nr Meeteetse	APR-SEP	68	87	100	50	113	132	201
SHELL CREEK nr Shell	APR-SEP	54	61	65	87	69	76	75
BIGHORN RIVER at Kane (2)	APR-SEP	281	520	726	65	932	1169	1124

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BOYSEN	596.0	547.0	593.1	613.5
BIGHORN LAKE	1356.0	960.3	944.1	891.8

BIGHORN RIVER BASIN
Watershed Snowpack Analysis - January 1, 2000

Watershed	Number of Data Sites	This Year as % of	
		Last Yr	Average
NOWOOD RIVER	2	110	82
GREYBULL RIVER	2	30	38
SHELL CREEK	3	106	93
BIGHORN (Boysen-Bighorn)	7	88	81

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

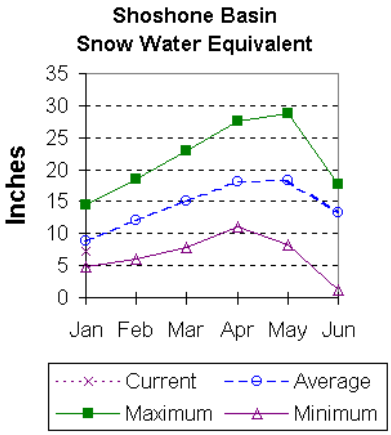
The average is computed for the 1961-1990 base period.

(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.
(3) - Forecasts produced in cooperation with Alberta Forecasting Staff Canada

Shoshone and Clarks Fork River Basin (5)

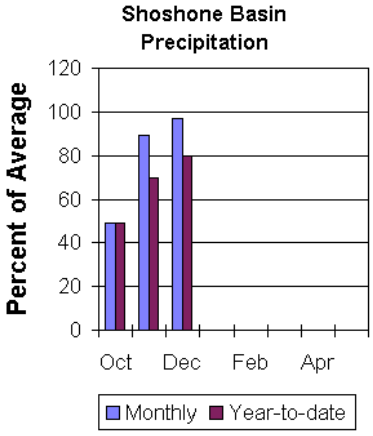
Snow

Snow Water Equivalent (SWE) is 69 percent of the January 1 average (53 percent of last year) in the Shoshone River basin. The Clarks Fork River basin SWE is 87 percent of the January 1 average (77 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 97 percent of normal (74 percent of last year). Monthly percentages range from 9 to 161 percent of average. The basin year-to-date precipitation is now 80 percent of average (66 percent of last year). Year-to-date percentages range from 35 to 100 percent of average.



Reservoir

Current storage in Buffalo Bill Reservoir is 105 percent of average (102 percent of last year's storage). Currently, about 457,500 acre-feet are stored in the reservoir compared to 447,900 acre feet last year. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.

Streamflow

The fifty percent yield (April through September period) for North Fork Shoshone River at Wapiti is expected to be 440,000 acre-feet (85 percent of average). South Fork of the Shoshone River near Valley is estimated to yield of 170,000 acre-feet (63 percent of average), and South Fork above Buffalo Bill Reservoir is expected to be 170,000 acre-feet (74 percent of average). At the Buffalo Bill Reservoir, the fifty percent chance yield for the Shoshone River is expected to be about 650,000 acre-feet (81 percent of average). The fifty-percent chance yield for the Clarks Fork of the Yellowstone near Belfry, Montana is expected to be about 515,000 acre-feet (87 percent of average).

SHOSHONE & CLARKS FORK RIVER BASINS
Streamflow Forecasts - January 1, 2000

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)	
NF SHOSHONE RIVER at Wapiti	APR-SEP	368	411	440	85	469	512	520
SF SHOSHONE RIVER nr Valley	APR-SEP	110	146	170	63	194	230	269
SF SHOSHONE RIVER abv Buffalo Bill	APR-SEP	84	135	170	74	205	256	229
BUFFALO BILL DAM Inflow (2)	APR-SEP	435	563	650	81	737	865	804
CLARKS FORK RIVER nr Belfry	APR-SEP	401	469	515	87	561	629	590

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	457.5	447.9	436.7

SHOSHONE & CLARKS FORK RIVER BASINS
Watershed Snowpack Analysis - January 1, 2000

Watershed	Number of Data Sites	This Year as % of	
		Last Yr	Average
SHOSHONE RIVER	5	53	69
CLARKS FORK in WY	7	77	87

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

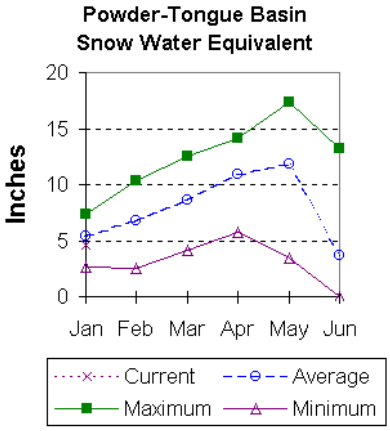
The average is computed for the 1961-1990 base period.

(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.
(3) - Forecasts produced in cooperation with Alberta Forecasting Staff Canada

Powder and Tongue River Basins (6)

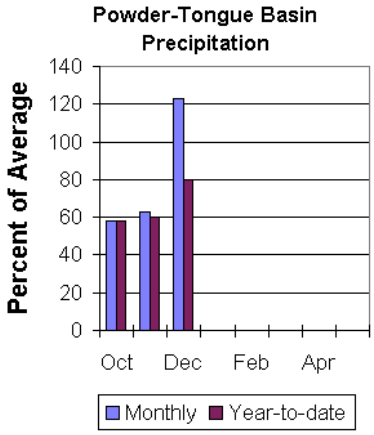
Snow

The Upper Tongue River drainage is 85 percent of normal (98 percent of last year). Goose Creek drainage is 67 percent of average (76 percent of last year). Clear Creek drainage is 103 percent of normal (95 percent of last year). Crazy Woman Drainage is 84 percent of normal (90 percent of last year). The Upper Powder River is 74 percent of normal (96 percent of last year). The Powder River basin snow water equivalent (SWE), in Wyoming, is about 85 percent of average (96 percent of last year). For more information see Basin Summary of Snow Courses at beginning of report.



Precipitation

December precipitation was 120 percent of average for the 11 reporting stations (123 percent of last year). Monthly percentages range from 19 to 580 percent of average. Precipitation for the year ranges from 35 to 100 percent of average. Year-to-date precipitation is about 80 percent of average in the basin; this is 66 percent of last year at this time.



Reservoir

Tongue River Reservoir did not report this month. The total reservoir capacity is about 68,000 acre feet. 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 98,000 acre-feet (85 percent of normal). Water users on the Middle Fork near Barnum should have a yield near 11,800 acre-feet (60 percent of normal). The North Fork of the Powder near Hazelton should yield about 7,000 acre-feet (69 percent of normal). The estimated yield for Clear Creek near Buffalo is 31,000 acre-feet (80 percent of average). Rock Creek near Buffalo will yield about 17,500 acre-feet (73 percent of normal), and Piney Creek at Kearny should yield about 39,000 acre-feet (77 percent of average).

POWDER & TONGUE RIVER BASINS
Streamflow Forecasts - January 1, 2000

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	67	86	98	85	110	129	115
MIDDLE FORK POWDER nr Barnum	APR-SEP	4.1	8.7	11.8	60	14.9	19.5	19.7
NORTH FORK POWDER nr Hazelton	APR-SEP	4.4	6.0	7.0	69	8.0	9.6	10.1
CLEAR CREEK nr Buffalo	APR-SEP	22	28	31	80	35	40	39
ROCK CREEK nr Buffalo	APR-SEP	11.6	15.1	17.5	73	19.9	23	24
PINEY CREEK at Kearny	APR-SEP	13.5	29	39	77	49	65	51

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
TONGUE RIVER	68.0	35.9	5.8	26.0

POWDER & TONGUE RIVER BASINS
Watershed Snowpack Analysis - January 1, 2000

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
UPPER TONGUE RIVER	5	98	85
GOOSE CREEK	1	76	67
CLEAR CREEK	2	95	103
CRAZY WOMAN CREEK	1	90	84
UPPER POWDER RIVER	3	96	74
POWDER RIVER in WY	5	96	85

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

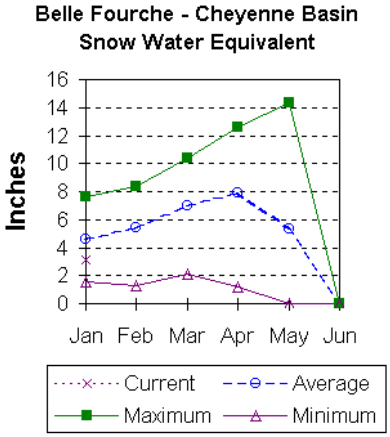
The average is computed for the 1961-1990 base period.

(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.
(3) - Forecasts produced in cooperation with Alberta Forecasting Staff Canada

Belle Fourche and Cheyenne River Basins (7)

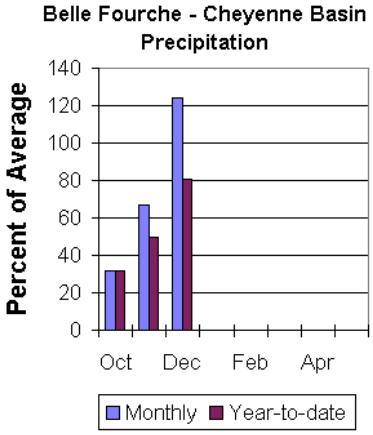
Snow.

The Belle Fourche River basin has 68 percent of normal SWE. The basin SWE is 155 percent of what it was last year. 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 124 percent of average in the Black Hills (166 percent of last December). Monthly percentages range from 15 to 142 percent. Year-to-date precipitation is 81 percent of average and 38 percent of last year's amount. Year to date percentages range from 71 to 95. This is from the 3 reporting stations.



Reservoir.

Reservoir storage is above average in the basin. Angostura is currently storing 109 percent of average (105,500-acre feet). Belle Fourche reservoir is storing 191 percent of average (173,100-acre feet). Deerfield reservoir is storing 120 percent of average (14,800-acre feet). Keyhole reservoir is storing 175 percent of average (171,900-acre feet). Pactola reservoir is storing 119 percent of average (54,600-acre feet), and Shadehill reservoir is storing 110 percent of average (55,700-acre feet).

Streamflow

There was insufficient precipitation data for a forecast in this basin.

BELLE FOURCHE & CHEYENNE RIVER BASINS
Streamflow Forecasts - January 1, 2000

Forecast Point	Forecast Period	<<======= Drier ====== Future Conditions ======= Wetter =====>>					30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	50% (Most Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	
BELLE FOURCHE & CHEYENNE RIVER BASINS								

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	105.5	111.1	96.4
BELLE FOURCHE	178.4	173.1	166.7	90.6
DEERFIELD	15.2	14.8	14.3	12.3
KEYHOLE	193.8	171.9	176.8	98.2
PACTOLA	55.0	54.6	51.5	45.8
SHADEHILL	81.4	55.7	57.8	50.7

BELLE FOURCHE & CHEYENNE RIVER BASINS
Watershed Snowpack Analysis - January 1, 2000

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
BELLE FOURCHE	4	163	68

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

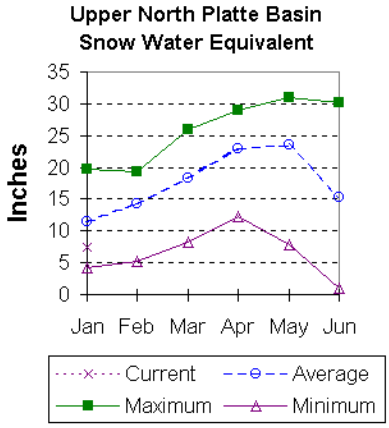
The average is computed for the 1961-1990 base period.

(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.
(3) - Forecasts produced in cooperation with Alberta Forecasting Staff Canada

Upper North Platte River Basin (8)

Snow

The snow courses above Seminoe Reservoir have about 65 percent of average snow water equivalent (SWE) recorded for this time of the year (91 percent of last year). SWE in the drainage area above Northgate is about 101 percent of average and 68 percent of last year at this time. SWE in the Encampment River drainage is about 54 percent of normal and 86 percent of last year. Brush Creek SWE for the year is about 96 percent of normal and 101 percent of last year's SWE. Medicine Bow and Rock Creek drainage SWE is about 53 percent of average and 73 percent of last year at this time. For more information see Basin Summary of Snow Courses at the beginning of this report.

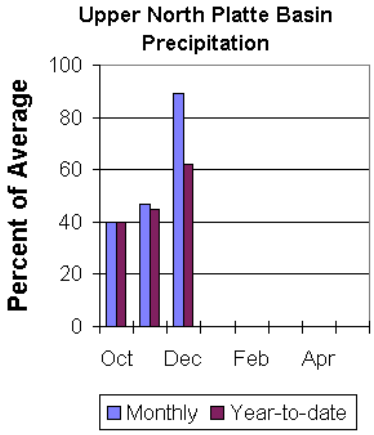


Precipitation

Eight reporting stations indicate December precipitation was 89 percent of average and about 146 percent of last year's amount. December precipitation varied from 26 at Rawlins to 127 percent of average at North French Creek SNOTEL. Total water-year-to-date precipitation is about 62 percent of average for the basin, which is about 55 percent of last year's amount. Year to date percentage ranges from 47 to 84 for the 8 reporting stations.

Reservoirs

Seminoe Reservoir is currently storing about 156 percent of normal for this time of the year. Currently, the reservoir is storing 112 percent of last year's amount. Currently, Seminoe Reservoir storage is estimated to be storing 845,600 acre-feet (83 percent of capacity). Last year, at this time, the reservoir had 756,700 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 156,000 acre-feet (58 percent of average). Encampment River near Encampment is estimated to yield 63,000 acre-feet (40 percent of normal). North Platte River near Sinclair will yield about 358,000 acre-feet (50 percent of normal). Rock Creek near Arlington is estimated to yield 44,000 acre-feet (79 percent of average). Medicine Bow River above Seminoe Reservoir is expected to yield about 57,000 acre-feet (45 percent of normal). Seminoe Reservoir inflow should be about (423,000 acre-feet (50 percent of normal). See the following table for more detailed information on projected runoff.

UPPER NORTH PLATTE RIVER BASIN
Streamflow Forecasts - January 1, 2000

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	10.0	97	156	58	215	302	271
Encampment River nr Encampment	APR-SEP	23	34	63	40	92	135	156
North Platte River nr Sinclair	APR-SEP	137	205	358	50	511	735	719
Rock Creek nr Arlington	APR-SEP	26	36	44	79	53	67	56
Medicine Bow River ab Seminoe Reserv	APR-SEP	12.0	35	57	45	85	136	127
Seminoe Reservoir inflow	APR-JUL	150	215	382	49	549	795	788
	APR-SEP	162	243	423	50	603	868	851

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	845.6	756.7	542.0

UPPER NORTH PLATTE RIVER BASIN
Watershed Snowpack Analysis - January 1, 2000

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
N PLATTE above Northgate	5	101	68
ENCAMPMENT RIVER	3	86	54
BRUSH CREEK	2	101	96
MEDICINE BOW & ROCK CREEK	2	73	53
N PLATTE above Seminoe	13	91	65

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

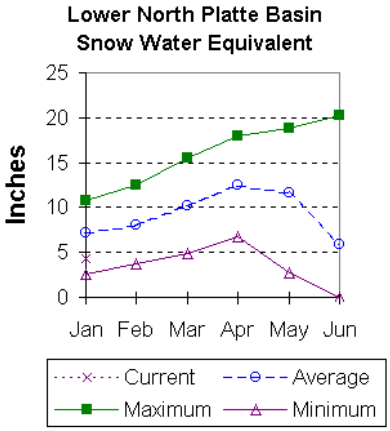
The average is computed for the 1961-1990 base period.

(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.
(3) - Forecasts produced in cooperation with Alberta Forecasting Staff Canada

Lower North Platte River Basin (9)

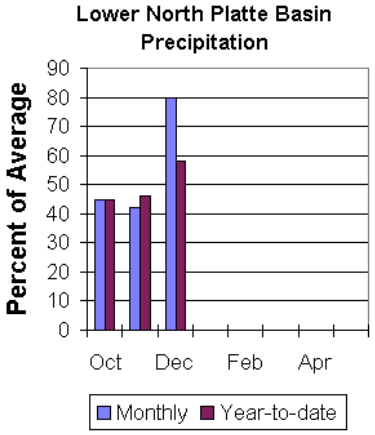
Snow

SWE for the North Platte River basin in Wyoming averages 63 percent of normal (87 % of last year). The Sweetwater drainage is currently 39 percent of average (46 % of last year). Deer and LaPrele Creeks are currently 79 percent of normal (137 percent of last year). SWE for the North Platte above the Laramie River drainage is 64 percent of average (91 % of last year). SWE for the Laramie River above the mouth is 55 percent of average (71 % of last year). SWE for the Laramie River above Laramie is 59 percent of average (68 % of last year). And SWE in the Little Laramie River is 47 percent of normal (81 % of last year). For more information see Basin Summary of Snow Courses at beginning of report.



Precipitation

Of the 12 reporting stations, percentages for the month range from 4 to 144. December precipitation for the basin was 80 percent of average (108 percent of last year). The water year-to-date precipitation for the basin is currently 58 percent of average (44 percent of last year). Year to date percentages range from 13 to 85.



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 (102 percent of average); Glendo 276,400 acre feet (100 percent of average); Guernsey 10,500 acre feet (191 percent of average); Pathfinder 928,900 acre feet (184 percent of average); Seminoe 845,600 acre feet (156 percent of average); and Wheatland No.2 65,000 acre feet (average not established). Water allocated to project use is also above average with North Platte Project users at 158 percent of average, Kendrick Project users at 121 percent of average, and Glendo Project users at 134 percent of average.

Streamflow

Yields from 28 to 72 percent are expected in the basin during the forecast period. The following yields are based on the fifty percent chance probability runoff for the April through September forecast period. The Sweetwater near Alcova is forecast to yield about 21,000 acre-feet (28 percent of average). Deer Creek at Glenrock is expected to yield about 45 percent of average (17,500 acre-feet). LaPrele Creek above the reservoir is estimated to yield 44 percent of average (10,900 acre-feet). North Platte River below Guernsey Reservoir is expected to yield about 46 percent of normal (445,000 acre-feet), and below Glendo Reservoir is anticipated to yield about 47 percent of average (465,000 acre-feet). Laramie River near Woods should yield about 59 percent of average (80,000 acre-feet). The Little Laramie near Filmore should produce about 46,000 acre-feet (72 percent of average).

LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS
Streamflow Forecasts - January 1, 2000

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)	
Sweetwater River nr Alcova	APR-JUL	6.9	11.7	18.0	26	35	59	69
	APR-SEP	7.4	12.6	21	28	38	63	74
Deer Creek at Glenrock	APR-SEP	3.9	10.8	17.5	45	26	41	39
La Prele Creek ab La Prele Reservoir	APR-SEP	1.0	5.2	10.9	44	19.8	40	25
North Platte River blw Glendo	APR-SEP	173		445	46		847	963
North Platte River blw Guernsey	APR-SEP	178		465	47		880	989
Laramie River nr Woods	APR-SEP	10.0	52	80	59	108	150	135
Little Laramie River nr Filmore	APR-SEP	22	36	46	72	56	70	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	156.8	156.5	153.1
GLENDO	506.4	276.4	347.8	276.4
GUERNSEY	45.6	10.5	14.3	5.5
PATHFINDER	1016.5	928.9	869.8	505.0
SEMINOE	1016.7	845.6	756.7	542.0
WHEATLAND #2	98.9	65.0	65.0	---
NORTH PLATTE PROJ	1062.1	899.1	807.8	568.4
KENDRICK PROJECT	1201.7	993.6	982.9	819.8
GLENDO PROJECT USERS	183.2	155.6	156.5	116.2

LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS
Watershed Snowpack Analysis - January 1, 2000

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
SWEETWATER	1	46	39
DEER & LaPRELE CREEKS	2	137	79
N PLATTE abv Laramie R.	16	91	64
LARAMIE RIVER abv Laramie	3	68	59
LITTLE LARAMIE RIVER	1	81	47
LARAMIE RIVER above mouth	4	71	55
NORTH PLATTE	17	87	63

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

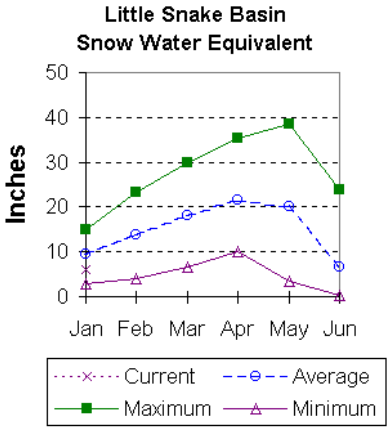
The average is computed for the 1961-1990 base period.

(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.
(3) - Forecasts produced in cooperation with Alberta Forecasting Staff Canada

Little Snake River Basin (10)

Snow

Snowfall has been well below average across the basin this year. Currently, snow water equivalent (SWE) in the Little Snake River drainage is 63 percent of average (97 percent of last year at this time). For more information see Basin Summary of Snow Courses at beginning of this report.

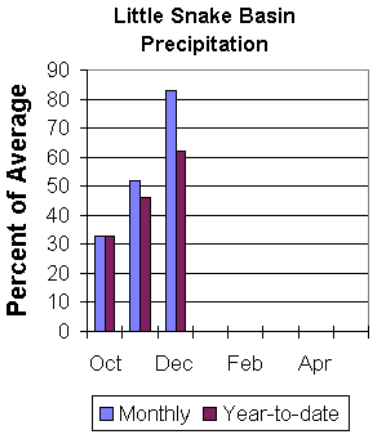


Precipitation

Precipitation across the basin was below average this past month. December precipitation was 83 percent of average (128 percent of last year) for the 5 reporting stations. The Little Snake River basin water-year-to-date precipitation is currently 62 percent of average (54 percent of last year). Year-to-date percentages range from 51 to 74 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 95,000 acre-feet (61 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, 2000

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	43	71	95	61	122	168	155
LITTLE SNAKE R nr Dixon	APR-JUL	83	153	200	61	247	317	329

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, 2000

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
LITTLE SNAKE RIVER	6	97	63

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

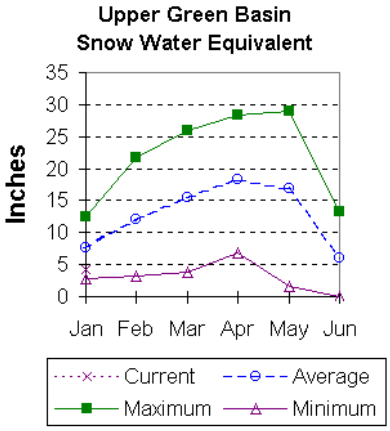
The average is computed for the 1961-1990 base period.

(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.
(3) - Forecasts produced in cooperation with Alberta Forecasting Staff Canada

Upper Green River Basin (11)

Snow

The Upper Green River Basin snow water equivalent (SWE), above Fontenelle Reservoir, is 58 percent of average (61 percent of last year). The Green River basin SWE above Warren Bridge is 55 percent of normal (56 percent of last year). SWE on the west side of the Upper Green River basin is about 60 percent of normal, 64 percent of this time last year. Newfork River SWE is now 60 percent of normal (59 percent of last year). Big Sandy-Eden Valley SWE is about 42 percent of average (36 percent of last year). For more information see the Basin Summary of Snow Courses at the beginning of this report.

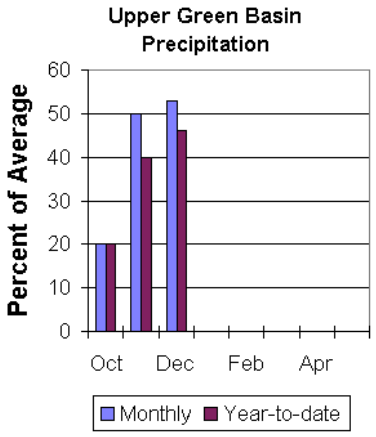


Precipitation

The 13 reporting precipitation sites in the basin were 53 percent of the December average (63 percent of last year at this time). December precipitation varied from 26 to 100 percent of average. Water year-to-date precipitation is about 46 percent of average (50 percent of last year). Year to date percentage of average ranges from 24 to 54 for the 13 reporting stations.

Reservoir

Data for Big Sandy Reservoir, Eden Reservoir, And Flaming Gorge Reservoir were not reported this month. Fontenelle Reservoir is storing 210,400 acre-feet (101 percent of average and 61 percent of the total 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 190,000 acre-feet (71 percent of normal). Pine Creek above Fremont Lake is expected to yield 78,000 acre-feet (75 percent of normal). New Fork River near Big Piney is expected to yield about 235,000 acre-feet (61 percent of normal). Fontenelle Reservoir Inflow is estimated to be 525,000 acre-feet (62 percent of average), and Big Sandy near Farson is expected to be about 32,000 acre-feet (56 percent of normal).

UPPER GREEN RIVER BASIN
Streamflow Forecasts - January 1, 2000

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	125	156	190	71	224	279	266
Pine Creek abv Fremont Lake	APR-JUL	47	68	78	75	88	109	104
New Fork River nr Big Piney	APR-JUL	112	176	235	61	294	431	385
Fontenelle Reservoir Inflow	APR-JUL	204	442	525	62	615	976	849
Big Sandy River nr Farson	APR-JUL	20	23	32	56	41	58	57

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BIG SANDY		NO REPORT		
EDEN		NO REPORT		
FLAMING GORGE	3749.0	3269.0	3401.0	---
FONTENELLE	344.8	210.4	226.9	208.3

UPPER GREEN RIVER BASIN
Watershed Snowpack Analysis - January 1, 2000

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
GREEN above Warren Bridge	4	58	55
UPPER GREEN (West Side)	5	64	60
NEWFORK RIVER	2	59	60
BIG SANDY/EDEN VALLEY	1	36	42
GREEN above Fontenelle	11	62	58

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

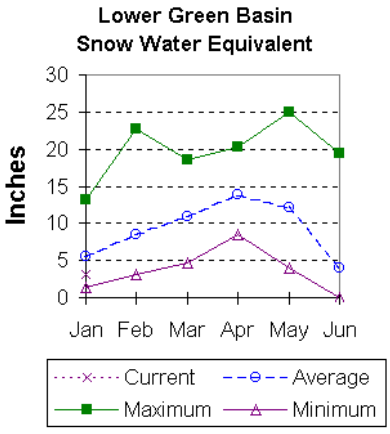
The average is computed for the 1961-1990 base period.

(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.
(3) - Forecasts produced in cooperation with Alberta Forecasting Staff Canada

Lower Green River Basin (12)

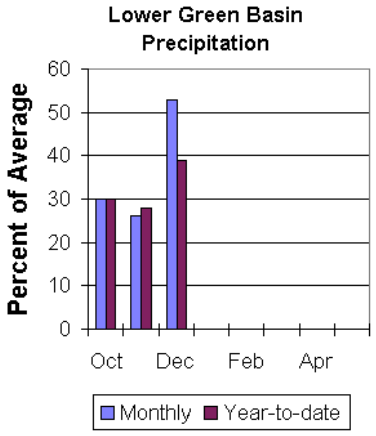
Snow

The Blacks Fork drainage snow water equivalent (SWE) is 65 percent of average (89 % of last year). SWE in the Hams Fork, as of January 1, is 51 percent of average (58% of last year). The Henry's Fork SWE for the basin 86 percent of average (81 % of last year). The basin, as a whole, is 59 percent of average (62 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 42 to 111 percent of average for the month. The entire basin received 53 percent of average for the month (72 percent of last year). The basin year-to-date precipitation is currently 39 percent of average (52 percent of last year). Year to date percentages range from 30 to 44.



Reservoir

Fontenelle Reservoir is currently storing 210,400 acre feet; this is 101 percent of average (93 % of last year). Flaming Gorge did not report this month. Viva Naughton did not report this month.

Streamflow

Expected yields vary from 48 to 67 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). East Fork of Smiths Fork near Robertson is estimated to yield 19,400 acre-feet (65 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).

LOWER GREEN RIVER BASIN
Streamflow Forecasts - January 1, 2000

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	243	405	530	59	655	1007	899
Blacks Fork nr Robertson	APR-JUL	33	51	64	67	77	95	95
EF of Smiths Fork nr Robertson	APR-JUL	14.4	17.2	19.4	65	22	26	30
Hams Fk blw Pole Ck nr Frontier	APR-JUL	18.0	27	35	53	44	58	66
Hams Fk Inflow to Viva Naughton Res	APR-JUL	16.9	26	43	48	60	86	89
Flaming Gorge Reservoir Inflow	APR-JUL	251	553	725	61	897	1423	1196

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
FONTENELLE	344.8	210.4	226.9	208.3
FLAMING GORGE	3749.0	3269.0	3401.0	---
VIVA NAUGHTON RES		NO REPORT		

LOWER GREEN RIVER BASIN
Watershed Snowpack Analysis - January 1, 2000

Watershed	Number of Data Sites	This Year as % of	
		Last Yr	Average
HAMS FORK RIVER	3	58	51
BLACKS FORK	2	89	65
HENRYS FORK	2	81	86
GREEN above Flaming Gorge	18	63	59

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

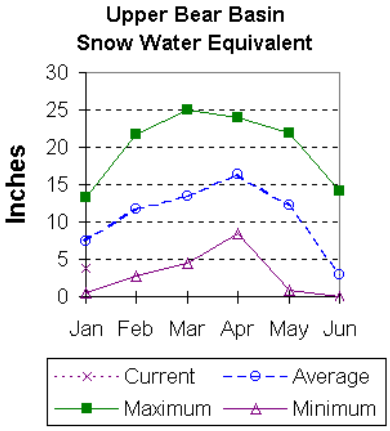
The average is computed for the 1961-1990 base period.

(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.
(3) - Forecasts produced in cooperation with Alberta Forecasting Staff Canada

Upper Bear River Basin (13)

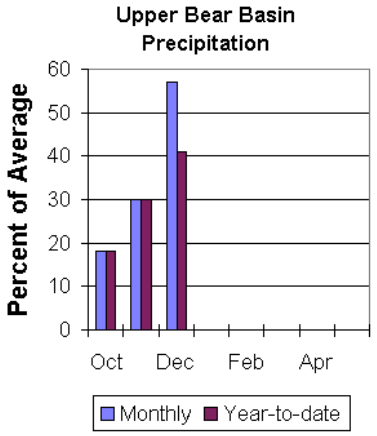
Snow

Snow water equivalent (SWE), at snow courses in the Bear River above the Idaho state line, is 46 percent of average (63 percent of last year). SWE for the Bear River in Utah is estimated to be 50 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 52 percent of average (59 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 57 percent of average for the 2 reporting stations; this is 64 percent of the previous December. The monthly percentages range from 61 to 68 percent of average. The year-to-date precipitation, for the basin, is 41 percent of average; this is 49 percent of last year's amount. Year-to-date percentages range from 38 to 45 percent of average.



Reservoir

No data for Woodruff Narrows reservoir was received this month.

Streamflow

The following 50 percent chance stream flow yields are for the April through September period. Smiths Fork near Border is about 79,000 acre-feet (67 percent of normal), and Thomas Fork drainage near the Idaho-Wyoming state line is estimated to yield 20,000 acre-feet or 56 percent of normal. Bear River near the Utah-Wyoming State Line is expected to yield about 81,000 acre feet; that is 64 percent of average, while Bear River near Woodruff is expected to yield about 92,000 acre-feet, about 60 percent of normal.

UPPER BEAR RIVER BASIN
Streamflow Forecasts - January 1, 2000

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	47	64	79	67	97	132	118
THOMAS FK nr WY-ID State Line (Disc.	APR-SEP	9.6	14.8	20	56	27	42	36
Bear R nr UT-WY State Line	APR-SEP	56	70	81	64	94	117	126
BEAR R nr Woodruff, UT	APR-SEP	45	69	92	60	123	187	154

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
WOODRUFF NARROWS	57.3	37.5	43.0	---

UPPER BEAR RIVER BASIN
Watershed Snowpack Analysis - January 1, 2000

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
UPPER BEAR RIVER in Utah	3	81	50
SMITHS & THOMAS FORKS	3	59	52
BEAR RIVER abv ID line	6	63	46

* 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.
(3) - Forecasts produced in cooperation with Alberta Forecasting Staff Canada

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