

**USDA** United States  
Department of  
Agriculture

**Natural  
Resources  
Conservation  
Service**

# Wyoming Basin Outlook Report June 1, 2000



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

---

*For more water supply and resource management information, contact:*

**Dave Taylor**  
**Water Supply Specialist**  
**100 East "B" Street**  
**Casper, WY 82601**  
**(307) 261-6481**

---

## *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.

---

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.

---

# Wyoming Water Supply Outlook Report

## General

Generally, because of the warm conditions, snow water equivalent (SWE) across the state is much below normal for this time of the year. SWE averages for the State are about 35 percent of normal for this time of the year. Northwest portion of the State is 42 percent normal (58 percent below normal). Northeast Wyoming is 48 percent of normal (52 percent below normal), and the southeast part of the State is 32 percent of average (68 percent below average). Southwestern Wyoming is 18 percent of average (72 percent below average).

Precipitation for May was average to above average for the State, with the exception of the Belle Fourche and Little Snake River drainages, -- the year-to-date precipitation is near average to below average. Most of the reservoir levels are average to well above average. Forecast runoff varies from 34 to 99 percent of average. The mean of all the forecast points in the State is about 65 percent of average (35 percent below average). The minimum yield forecast was 34 percent of average in the Middle PoPo Agie River near Lander and the maximum forecast was 99 percent of average at Deer Creek at Glenrock.

## Snowpack

The early warm weather has resulted in more snow melting than is normal for this time of the year. SWE is generally well below average for the entire State. SWE in the northwestern portion of the State is now at 42 percent of average (27 percent of last year). Northeast Wyoming SWE is currently about 48 percent of average (33 percent of last year). The Southeast portion saw a decrease to 32 percent of average SWE (27 percent of last year). And the southwest dropped to about 18 percent of average (11 percent of last year).

## Precipitation

May precipitation was slightly above normal across most of the State. The Belle Fourche and Little Snake River drainage's were below normal, and the Big horn and Upper Green River drainage's were near normal. 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	+18%	Upper North Platte River	+23%
Yellowstone & Madison	+54%	Lower North Platte	+27%
Wind River	+06%	Little Snake River	-09%
Big Horn	0%	Upper Green River	0%
Shoshone & Clarks Fork	+24%	Lower Green River	+02%
Powder & Tongue River	+26%	Upper Bear River	+12%
Belle Fourche & Cheyenne	-05%		

## Streams

Stream flow yield is expected to be well below average across the State. Yield for the State is forecast to be about 65 percent of average. The northwest part of the State is expected to yield about 66 percent of normal -- yield estimates vary from 34 to 86 percent of normal through the northwest region of the State. Yield from the northeast portion of Wyoming will be below average (about 65 percent of average) -- yield estimates vary from 52 to 82 percent of average for the various forecast points. In most cases, the southeast portion of the state will be about 66 percent of normal -- yield estimates range from 38 to 99 percent of normal. The southwest portion of

Wyoming varies from 47 to 77 percent of average -- mean estimated yield for the forecast points in southwest Wyoming is about 62 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  
  
F O R   T H E   E N D   O F      M A Y      2 0 0 0

BASIN AREA RESERVIOR	CURRENT AS % CAPACITY	LAST YR AS % CAPACITY	AVERAGE AS % CAPACITY	CURRENT AS % AVERAGE	CURRENT AS % LAST YR
ALCOVA	98	97	98	100	101
ANGOSTURA	98	99	96	102	99
BELLE FOURCHE	107	105	85	125	102
BIG SANDY			NO REPORT		
BIGHORN LAKE	70	67	63	111	104
BOYSEN	91	82	92	99	111
BUFFALO BILL	78	61	58	134	129
BULL LAKE	74	62	61	122	120
DEERFIELD	99	100	89	111	99
EDEN			NO REPORT		
FLAMING GORGE			NO REPORT		
FONTENELLE	54	60	57	96	91
GLENDO	100	109	99	101	92
GRASSY LAKE	94	89	89	105	105
GUERNSEY	79	74	76	104	106
HEBGEN LAKE	94	79	82	115	119
JACKSON LAKE	100	76	64	156	131
KEYHOLE	91	93	59	155	98
PACTOLA	99	100	88	113	100
PALISADES	95	52	75	125	183
PATHFINDER	98	98	63	156	100
PILOT BUTTE	78	53	81	96	148
SEMINOE	90	83	54	166	108
SHADEHILL	69	96	84	82	72
TONGUE RIVER	117	96	71	165	122
VIVA NAUGHTON RES	107	81	80	133	132
WHEATLAND #2	82	91	55	148	90
WOODRUFF NARROWS			NO REPORT		
<hr/>					
GLENDO PROJECT USERS	94	94	82	115	100
KENDRICK PROJECT	87	87	70	124	100
NORTH PLATTE PROJ	100	100	86	117	100

# 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

JUNE   2000

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
-----						
WYOMING Snow Course and SNOTEL Stations						
ALBANY	9400				---	---
ASTER CREEK	7750				---	---
BALD MOUNTAIN SNOTEL	9380	6/01/00	---	13.7	21.5	18.5
BASE CAMP SNOTEL	7030	6/01/00	---	.0	.0	.0
BATTLE MTN. SNOTEL	7440	6/01/00	---	.0	.0	.0
BEARLODGE DIVIDE	4680				---	2.2
BEARTOOTH LK. SNOTEL	9280	6/01/00	---	16.4	22.9	19.4
BEAR TRAP SNOTEL	8200	6/01/00	---	.0	.0	.0
BIG GOOSE	7760				---	---
BIG GOOSE SNOTEL	7760	6/01/00	---	.0	.0	---
BIG PARK	8620				---	---
BIG SANDY SNOTEL	9080	6/01/00	---	.0	1.4	.0
BLACKWATER SNOTEL	9780	6/01/00	---	13.2	31.1	18.8
BLIND BULL SNOTEL	8900	6/01/00	---	4.9	27.9	16.4
BLIND PARK PILLOW	6870	6/01/00	---	.1	.0	.0
BLUE RIDGE	9620				---	---
BONE SPGS. SNOTEL	9350	6/01/00	---	4.4	16.0	8.1
BOXELDER	7280				---	---
BROOKLYN LK. SNOTEL	10220	6/01/00	---	.0	17.5	12.8
BRYAN FLAT	6420	0 / /00	---		---	---
BUCK CREEK	7960				---	---
BURGESS JCT. SNOTEL	7880	6/01/00	---	.0	2.8	2.3
BURROUGHS CRK SNOTEL	8750	6/01/00	---	.1	10.1	2.0
CANYON SNOTEL	8090	6/01/00	---	.0	1.4	1.4
CARTER MOUNTAIN	7950				---	---
CASPER MTN. SNOTEL	7850	6/01/00	---	.0	.0	3.5
CASTLE CREEK	8400				---	---
CCC CAMP	7000				---	---
CHALK CK #1 SNOTEL	9100	6/01/00	---	.0	17.9	10.1
CHALK CK #2 SNOTEL	8200	6/01/00	---	.0	.0	.9
CLOUD PEAK SNOTEL	9850	6/01/00	---	4.8	15.2	8.3
COLD SPRINGS SNOTEL	9630	6/01/00	---	.0	8.8	.3
COTTONWOOD CR SNOTEL	7700	6/01/00	---	.0	8.8	.0
DARBY CANYON	8250				---	12.7
DEER PARK SNOTEL	9700	6/01/00	---	.4	19.7	---
DITCH CREEK	6870				---	---
DIVIDE PEAK SNOTEL	8860	6/01/00	---	.0	.5	2.9
DOMELAKE SNOTEL	8880	6/01/00	---	.0	4.6	3.9
DU NOIR	8760				---	2.2
EAST RIM DIV SNOTEL	7930	6/01/00	---	.0	4.7	7.0
ELBO RANCH	7100				---	---
ELKHART PARK SNOTEL	9400	6/01/00	---	.0	4.9	4.4
EVENING STAR SNOTEL	9200	6/01/00	---	12.7	30.9	25.5

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
FOUR MILE MEADOWS	7860				---	---
FOXPARK	9060				---	---
GEYSER CREEK	8500				---	2.2
GLADE CREEK	7040				---	---
GRANITE CRK SNOTEL	6770	6/01/00	---	.0	1.4	1.7
GRANNIER MEADOWS	8860				---	---
GRASSY LAKE SNOTEL	7270	6/01/00	---	.0	23.5	12.0
GRAVE SPRINGS SNOTEL	8550	6/01/00	---	.0	.0	2.0
GREYS BOUNDARY	5720				---	---
GROS VENTRE SNOTEL	8750	6/01/00	---	.0	7.2	.0
GROVER PARK DIVIDE	7000				---	---
HAIRPIN TURN	9480				---	---
HANSEN S.M. SNOTEL	8360	6/01/00	---	.0	.0	.8
HAMS FORK SNOTEL	7840	6/01/00	---	.0	.0	.0
HASKINS CREEK	8980				---	3.2
HOBBS PARK SNOTEL	10100	6/01/00	---	.2	21.7	9.3
HUCKLEBERRY DIVIDE	7300				---	---
INDIAN CREEK SNOTEL	9430	6/01/00	---	1.5	26.7	17.4
JACKPINE CREEK	7350				---	---
KELLEY R.S. SNOTEL	8180	6/01/00	---	.0	.7	.0
KENDALL R.S. SNOTEL	7740	6/01/00	---	.0	.0	.0
KIRWIN SNOTEL	9550	6/01/00	---	.0	12.0	5.1
LA BONTE	8450				---	---
LAKE CAMP	7780				---	---
LA PRELE SNOTEL	8380	6/01/00	---	.0	.0	1.0
LARSEN CREEK	9020				---	---
LEWIS LAKE SNOTEL	7850	6/01/00	---	.0	27.1	19.0
LEWIS LAKE DIVIDE	7850				41.4	---
LIBBY LODGE	8750				---	---
LITTLE BEAR RUN	6240				---	---
LITTLE WARM SNOTEL	9370	6/01/00	---	.0	8.6	.7
LOOMIS PARK SNOTEL	8240	6/01/00	---	.0	3.5	.0
LUPINE CREEK	7380				---	---
MALLO	6420				---	---
MARQUETTE SNOTEL	8760	6/01/00	---	.0	13.2	4.1
MEDICINE LODGE LAKES	9340				---	---
MIDDLE FORK	7420				---	---
MIDDLE POWDER SNOTEL	7760	6/01/00	---	.0	3.8	2.5
MORAN	6750				---	---
MOSS LAKE	9800				---	---
NEW FORK SNOTEL	8340	6/01/00	---	.0	.0	.0
NORRIS BASIN	7500				---	---
NORTH BARRETT CREEK	9400				---	---
NORTH FRENCH SNOTEL	10130	6/01/00	---	9.2	33.3	20.2
NORTH RAPID CK PILL.	6130	6/01/00	---	.0	.0	---
NORTH TONGUE	8450				---	---
OLD BATTLE SNOTEL	9920	6/01/00	---	12.8	32.4	24.0
OLD FAITHFUL	7400				---	---
ONION GULCH	8780				---	---
OWL CREEK SNOTEL	8980	6/01/00	---	.0	.4	.1
PARKERS PEAK SNOTEL	9400	6/01/00	---	7.5	17.6	18.6
PHILLIPS BENCH SNOT.	8200	6/01/00	---	.2	20.8	17.6

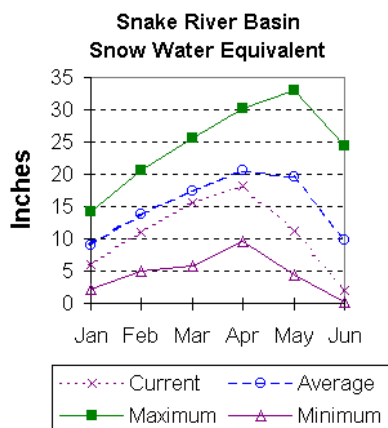
SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
POCKET CREEK	9350				---	---
POISON MEADOWS	8500				---	---
POLE MOUNTAIN	8700				---	---
POWDER RVR.PASS SNOT	9480	6/01/00	---	.0	3.5	1.3
PURGATORY GULCH	8970				---	---
RANGER CREEK	8120				---	---
RENO HILL SNOTEL	8500	6/01/00	---	.0	.0	2.9
REUTER CANYON	6280				---	2.2
ROWDY CREEK	8300				---	---
RYAN PARK	8400				---	---
SALT RIVER SNOTEL	7600	6/01/00	---	.0	.0	.0
SAND LAKE SNOTEL	10050	6/01/00	---	11.3	41.0	24.6
SANDSTONE SNOTEL	8150	6/01/00	---	.0	.0	.0
SAWMILL DIVIDE	9260				---	---
SHELL CREEK SNOTEL	9580	6/01/00	---	5.1	12.2	11.2
SHERIDAN R.S.	7750				---	2.2
SNAKE RIVER STATION	6920				---	---
SNAKE RV STA SNOTEL	6920	6/01/00	---	.0	.0	.0
SNIDER BASIN SNOTEL	8060	6/01/00	---	.0	.5	.0
SNOW KING MTN	7660				---	---
SOLDIER PARK	8780				---	---
SOUR DOUGH	8460				---	---
SOUTH BRUSH SNOTEL	8440	6/01/00	---	.0	6.9	1.0
SOUTH PASS SNOTEL	9040	6/01/00	---	.0	14.6	10.0
SPRING CRK. SNOTEL	9000	6/01/00	---	1.9	24.8	19.0
ST LAWRENCE ALT SNOT	8620	6/01/00	---	.0	.0	.1
SUCKER CREEK SNOTEL	8880	6/01/00	---	.0	6.3	4.0
SYLVAN LAKE SNOTEL	8420	6/01/00	---	1.8	21.5	14.1
SYLVAN ROAD SNOTEL	7120	6/01/00	---	.0	.0	1.0
T CROSS RANCH	7900				---	---
TETON PASS W.S.	7740				---	---
THUMB DIVIDE SNOTEL	7980	6/01/00	---	.0	3.8	.0
THUMB DIVIDE	7980				---	---
TIE CREEK SNOTEL	6870	6/01/00	---	.1	.0	---
TIMBER CREEK SNOTEL	7950	6/01/00	---	.0	2.1	.2
TOGWOTEE PASS SNOTEL	9580	6/01/00	21	10.6	23.5	23.6
TOWNSEND CRK SNOTEL	8700	6/01/00	---	.0	4.7	1.8
TRIPLE PEAK SNOTEL	8500	6/01/00	---	.0	14.6	14.7
TURPIN MEADOWS	6900				---	---
TWO OCEAN SNOTEL	9240	6/01/00	---	13.4	34.6	22.5
TYRELL RANGER STA.	8300				---	---
UPPER SPEARFISH	6500				---	---
WARREN PEAK SNOTEL	6520	6/01/00	---	.0	.0	.1
WEBBER SPRING SNOTEL	9250	6/01/00	---	.0	.0	10.3
WHISKEY PARK SNOTEL	8950	6/01/00	---	.5	26.5	12.0
WILLOW CREEK SNOTEL	8450	6/01/00	---	.0	17.8	19.2
WINDY PEAK SNOTEL	7900	6/01/00	---	.0	.0	.0
WOLVERINE SNOTEL	7650	6/01/00	---	.0	.0	.0
WOOD ROCK G.S.	8440				---	---
YOUNTS PEAK SNOTEL	8350	6/01/00	---	1.2	14.2	9.1

(d) Denotes discontinued site.

# Snake River Basin (1)

## Snow

Percentage of average snow water equivalent (SWE) for each drainage in the basin is: Snake above Jackson Lake -- 25 percent (15% of last year at this time), Pacific Creek -- 60 percent (39% of last year at this time), Gros Ventre River -- 45 percent (35% of last year at this time), Hoback River -- 20 percent (11% of last year at this time), Greys River -- 10 percent (8% of last year at this time), Salt River -- 0 percent (0% of last year at this time). Snake River Basin above Palisades is 20 percent of average (14% 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.



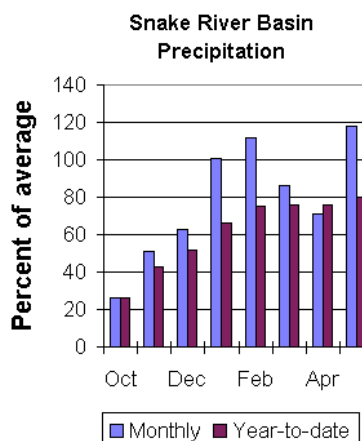
## Precipitation.

Precipitation across the basin was above average for last month. Monthly precipitation, for the basin, was 118 percent of average (101 percent of last year). May percentages range from 81 to 176 percent of average. Water-year-to-date precipitation is 80 percent of normal for the Snake River basin (75 percent of last year at this time). Year-to-date percentages range from 67 to 90 percent of average.

## Reservoir.

Current storage compared to average for the three storage reservoirs in the basin is as follows:

Grassy Lake —105 percent of average (14,300 acre feet compared to 13,600 last year), Jackson lake — 156 percent of average (843,900 acre feet compared to 646,000 acre feet last year), and Palisades Reservoir —125 percent of average (1,323,800 acre feet compared to 723,300 acre feet last year).



## Streamflow.

The most probable, 50 percent chance, June through September runoff yield forecast is below average for the basin. The Snake near Moran is expected to yield 418,000 acre-feet (72 percent of normal). Yield from the Snake River above Palisades Reservoir is estimated to be 1,565,000 acre-feet (86 percent of normal). The 50 percent chance yield near Heise is expected to be 2,140,000 acre-feet (82 percent of normal). Pacific Creek at Moran is expected to yield about 85,000 acre-feet (82 percent of average). Greys River above Palisades Reservoir is estimated to yield 149,000 acre-feet (62 percent of normal). Salt River near Etna is estimated to have a yield of 121,000 acre-feet (53 percent of normal).



=====

SNAKE RIVER BASIN  
Streamflow Forecasts - June 1, 2000

=====

Forecast Point	Forecast Period	<<----- Drier ----- Future Conditions ----- Wetter ----->>						30-Yr Avg. (1000AF)		
		90% (1000AF)		70% (1000AF)		Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)			30% (1000AF) 10% (1000AF)	
SNAKE near Moran (1,2)	JUN-SEP	262	369	418	72	467	574	579		
SNAKE above Palisades (2)	JUN-SEP	1326	1468	1565	86	1662	1804	1823		
SNAKE near Heise (2)	JUN-SEP	1763	1988	2140	82	2292	2517	2622		
PACIFIC CREEK at Moran	JUN-SEP	61	75	85	82	95	109	104		
GREYS above Palisades	JUN-SEP	111	134	149	62	164	187	241		
SALT near Etna	JUN-SEP	75	102	121	53	140	167	228		

SNAKE RIVER BASIN Reservoir Storage (1000 AF) - End of May					SNAKE RIVER BASIN Watershed Snowpack Analysis - June 1, 2000			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
GRASSY LAKE	15.2	14.3	13.6	13.6	SNAKE above Jackson Lake	5	15	25
JACKSON LAKE	847.0	843.9	646.0	540.5	PACIFIC CREEK	2	39	60
PALISADES	1400.0	1323.8	723.3	1055.0	GROS VENTRE RIVER	2	25	45
					HOBACK RIVER	5	11	20
					GREYS RIVER	4	8	10
					SALT RIVER	3	0	0
					SNAKE above Palisades	17	13	20

=====

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

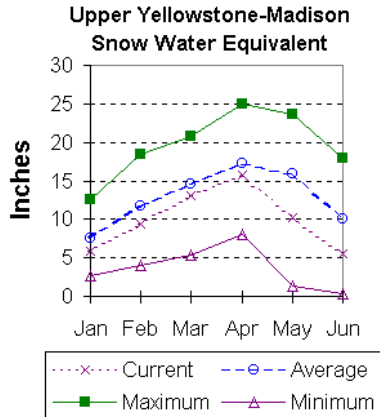
The average is computed for the 1961-1990 base period.

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

## Upper Yellowstone and Madison River Basins (2)

### Snow

Snowfall in the basin this year has been well below average, and very much below the SWE last year at this time. For this time of the year, snow water equivalent (SWE) is about 62 percent of average (28 percent of last year) in the Madison drainage. SWE in the Yellowstone drainage is about 49 percent of average (36 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.



of water (115 percent of average and 94 percent of capacity). Hebgen Lake is storing about 119 percent and Ennis Lake is storing about 93 percent of last year's volume.

### Streamflow

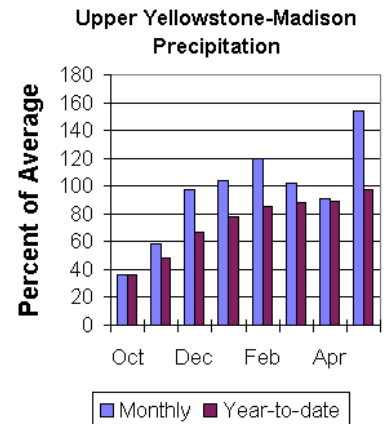
All the following forecasts are the 50 percent chance runoff for the June through September runoff period. Yellowstone at Lake Outlet is expected to yield about 420,000 acre feet (61 percent of normal). Yellowstone at Corwin Springs will yield about 1,010,000 acre-feet (68 percent of normal). Yellowstone near Livingston will yield about 1,150,000 acre feet (67 percent of normal). Hebgen lake inflow is estimated to be 220,000 acre feet (72 percent of normal). See the following page for detailed runoff volumes.

### Precipitation

May precipitation in the Madison and Yellowstone drainage was about 154 percent of average (129 percent of previous year) for the 8 reporting stations -- percentage range was from 115 to 303 percent of average. Water-year-to-date precipitation is about 97 percent of average (81 percent of last year's amount). Year to date percentage ranges from 79 to 113 percent

### Reservoir

Ennis Lake is storing 32,100 acre-feet (90 percent of average and 78 percent of capacity). Hebgen Lake is storing about 355,500 acre-feet



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

Forecast Point	Forecast Period	Future Conditions				Wetter		30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	Chance Of Exceeding * (% AVG.)	30% (1000AF)	10% (1000AF)	
YELLOWSTONE at Lake Outlet	JUN-SEP	389	408	420	61	432	451	691
YELLOWSTONE RIVER at Corwin Spgs.	JUN-SEP	845	943	1010	68	1077	1175	1484
YELLOWSTONE RIVER near Livingston	JUN-SEP	951	1069	1150	67	1231	1349	1721
HEBGEN Reservoir Inflow	JUN-SEP	190	208	220	72	232	250	307

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

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

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
ENNIS LAKE	41.0	32.1	34.6	35.8	MADISON RIVER in WY	6	28	62
HEBGEN LAKE	377.5	355.5	298.8	309.8	YELLOWSTONE RIVER in WY	8	36	49

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

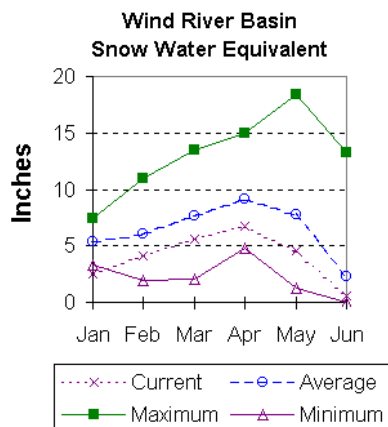
The average is computed for the 1961-1990 base period.

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

## Wind River Basin (3)

### Snow

The Wind River basin has well below average snow water equivalent (SWE) for this time of the year. SWE in the Wind River above Dubois is 41 percent of average (20 percent of last year). The Little Wind SWE is 2 percent of average water content (1 percent of last year), and the Popo Agie drainage SWE is about 1 percent of average (1 percent of last year). The Wind River basin, above Boysen Reservoir, SWE is about 23 percent of average (about 11 percent of last year). Snow has mostly melted from the Wind River Basin collection sites. See the Basin Summary of Snow Course Data at the front of this report for details.

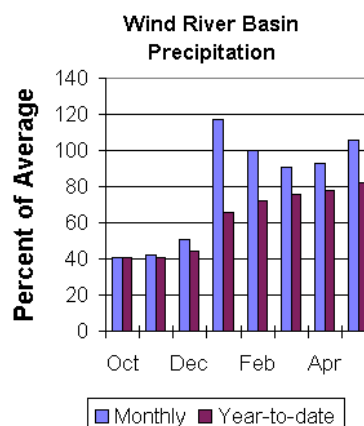


### Precipitation

May precipitation in the basin varied from 60 to 190 percent of average. May precipitation for the basin was about 106 percent of average for the 8 reporting stations; that is about 106 percent of last year's amount. Water year-to-date precipitation is 82 percent of normal. The current water-year-to-date average is about 63 percent of last year at this time. Year to date figures range from 58 to 92 percent of average.

### Reservoirs

Current storage varies from 96 to 102 percent of average. Bull Lake is currently storing about 61 percent of capacity at this time of the year. Boysen Reservoir is storing about 91 percent of capacity (542,900 acre feet) -- normally the reservoir is at 92 percent of capacity at this time of the year. Pilot Butte is storing 78 percent of capacity (24,500 acre feet) -- normally the reservoir is at 81 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 June through September runoff period. The Wind River above Bull Lake Creek is expected to yield 360,000 acre feet (86 percent of average). Wind River at Riverton will yield about 370,000 acre feet (73 percent of average). Boysen Reservoir inflow will yield about 355,000 acre feet (58 percent of normal). Bull Lake Creek near Lenore is expected to yield about 115,000 acre feet (75 percent of average). Little Popo Agie River near Lander is expected to yield about 12,500 acre feet (34 percent of average). South Fork of Little Wind near Fort Washakie will yield about 37,000 acre feet (59 percent of average). Little Wind River near Riverton will yield about 110,000 acre feet (46 percent of average).

WIND RIVER BASIN  
Streamflow Forecasts - June 1, 2000

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		Chance Of Exceeding *		===== Wetter =====>>		
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
WIND RIVER abv Bull Lake Cr (2)	JUN-SEP	324	345	360	86	375	396	420
WIND RIVER at Riverton (2)	JUN-SEP	250	321	370	73	419	490	505
BOYSEN RESERVOIR Inflow (2)	JUN-SEP	148	271	355	58	439	562	609
BULL LAKE CR near Lenore (2)	JUN-SEP	100	109	115	75	121	130	154
LT POPO AGIE RIVER nr Lander	JUN-SEP	7.8	10.6	12.5	34	14.4	17.2	37
SF LT WIND nr Fort Washakie	JUN-SEP	30	34	37	59	40	44	63
LT WIND RIVER nr Riverton	JUN-SEP	72	95	110	46	125	148	241

WIND RIVER BASIN Reservoir Storage (1000 AF) - End of May					WIND RIVER BASIN Watershed Snowpack Analysis - June 1, 2000			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
BULL LAKE	151.8	112.9	94.4	92.7	WIND RIVER above Dubios	3	20	41
BOYSEN	596.0	542.9	490.4	546.4	LITTLE WIND	2	1	2
PILOT BUTTE	31.6	24.5	16.6	25.5	POPO AGIE	3	1	1
					WIND above Boyesen Resv	7	11	23

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

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

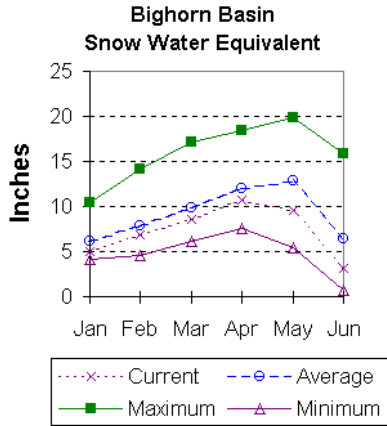
- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.

BIGHORN RIVER BASIN as of June 1, 2000

# Bighorn River Basin (4)

## Snow

Snowpack in this basin is well below average for this time of year. The Nowood and Greybull river drainage's are melted out. Shell Creek SWE is 61 percent of average (47 percent of last year). The basin SWE, as a whole, is currently 49 percent of average (33 percent of last year). For more information see Basin Summary of Snow Courses at beginning of report.

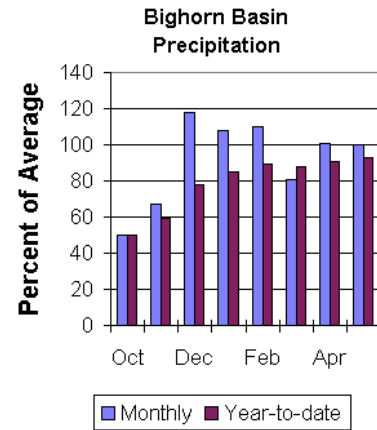


## Precipitation

May precipitation was 100 percent of the monthly average (76 percent of last year). Sites ranged from 58 to 136 percent of average for the month. Year-to-date precipitation is 93 percent of normal; that is 72 percent of last year at this time. Year to date percentages, from the 14 reporting stations, range from 56 to 111.

## Reservoir

Boysen Reservoir is currently storing 542,900-acre feet (99 percent of average). Bighorn Lake is now at 111 percent of average (947,600-acre feet). Boysen is currently storing 111 percent of last year at this time and Big Horn Lake is storing 104 percent of last year's volume.



## Streamflow

The 50 percent chance June through September runoff is anticipated to be well below normal. The Boysen Reservoir inflow is forecast to yield 355,000 acre feet (58 percent of average); the Greybull River nr Meeteese should yield 60,000 acre feet (36 percent of average); Shell Creek near Shell should yield 45,000 acre feet (82 percent of average) and the Bighorn River at Kane should yield 475,000 acre feet (59 percent of average).

BIGHORN RIVER BASIN  
Streamflow Forecasts - June 1, 2000

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		=====		===== Wetter =====>>		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
BOYSEN RESERVOIR Inflow (2)	JUN-SEP	148	271	355	58	439	562	609
GREYBULL RIVER nr Meeteetse	JUN-SEP	49	55	60	36	65	71	167
SHELL CREEK nr Shell	JUN-SEP	35	41	45	82	49	55	55
BIGHORN RIVER at Kane (2)	JUN-SEP	227	324	475	59	626	722	811

BIGHORN RIVER BASIN Reservoir Storage (1000 AF) - End of May					BIGHORN RIVER BASIN Watershed Snowpack Analysis - June 1, 2000			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
BOYSEN	596.0	542.9	490.4	546.4	NOWOOD RIVER	2	0	0
BIGHORN LAKE	1356.0	947.6	911.5	855.6	GREYBULL RIVER	2	0	0
					SHELL CREEK	3	47	61
					BIGHORN (Boysen-Bighorn)	7	33	49

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

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

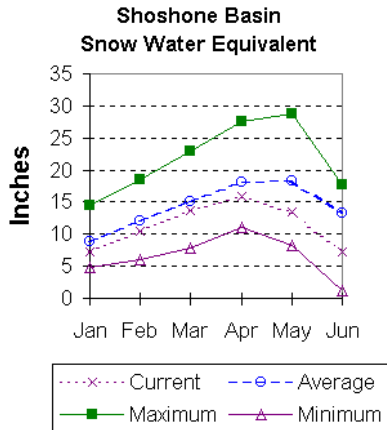
- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.

SHOSHONE & CLARKS FORK RIVER BASINS as of June 1, 2000

# Shoshone and Clarks Fork River Basin (5)

## Snow

Snow Water Equivalent (SWE) is 40 percent of the June 1 average (26 percent of last year) in the Shoshone River basin. The Clarks Fork River basin SWE is 68 percent of the June 1 average (58 percent of last year). For more information see the Basin Summary of Snow Course Data at the beginning of this report.



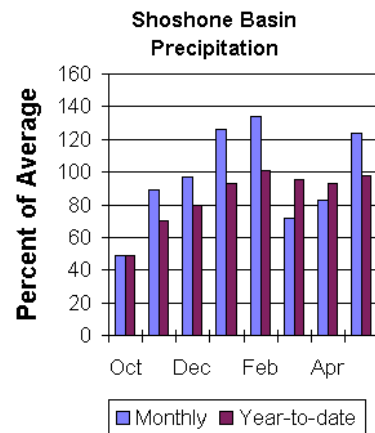
## Precipitation

Precipitation for the month of May was 124 percent of normal (156 percent of last year). Monthly percentages range from 72 to 165 percent of average. The basin year-to-date precipitation is now 98 percent of average (83 percent of last year). Year-to-date percentages range from 54 to 129 percent of average.

## Reservoir

Current storage in Buffalo Bill Reservoir is 134 percent of average (129 percent of last year's storage). Currently, about 504,000 acre-feet are

stored in the reservoir compared to 392,100 acre feet last year. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.



## Streamflow

The fifty percent yield (June through September period) for North Fork Shoshone River at Wapiti is expected to be 255,000 acre-feet (70 percent of average). South Fork of the Shoshone River near Valley is estimated to yield of 130,000 acre-feet (61 percent of average), and South Fork above Buffalo Bill Reservoir is expected to be 115,000 acre-feet (66 percent of average). At the Buffalo Bill Reservoir, the fifty percent chance yield for the Shoshone River is expected to be about 470,000 acre-feet (78 percent of average). The fifty-percent chance yield for the Clarks Fork of the Yellowstone near Belfry, Montana is expected to be about 350,000 acre-feet (77 percent of average).



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

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
NF SHOSHONE RIVER at Wapiti	JUN-SEP	207	235	255	70	275	303	365
SF SHOSHONE RIVER nr Valley	JUN-SEP	58	101	130	61	159	202	215
SF SHOSHONE RIVER abv Buffalo Bill	JUN-SEP	16.0	75	115	66	155	214	175
BUFFALO BILL DAM Inflow (2)	JUN-SEP	382	434	470	78	506	558	606
CLARKS FORK RIVER nr Belfry	JUN-SEP	295	328	350	77	372	405	453

SHOSHONE & CLARKS FORK RIVER BASINS Reservoir Storage (1000 AF) - End of May					SHOSHONE & CLARKS FORK RIVER BASINS Watershed Snowpack Analysis - June 1, 2000			
Reservoir	Usable Capacity	*** Usable Storage This Year	*** Usable Storage Last Year	*** Avg	Watershed	Number of Data Sites	This Year as % of Last Yr	% of Average
BUFFALO BILL	646.6	504.0	392.1	375.6	SHOSHONE RIVER	6	26	40
					CLARKS FORK in WY	7	58	68

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

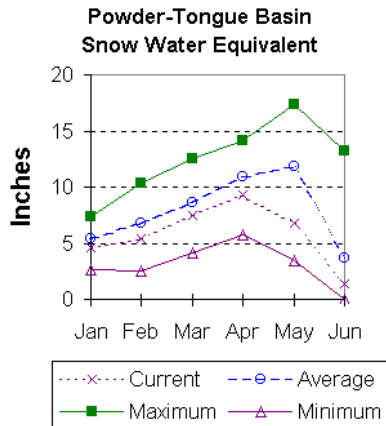
The average is computed for the 1961-1990 base period.

- (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.

## Powder and Tongue River Basins (6)

### Snow

Snow water equivalent (SWE) in the Upper Tongue River drainage is 32 percent of normal (23 percent of last year). The Goose Creek, Upper Powder, and Crazy Woman drainage's are melted out. Clear Creek drainage is 53 percent of normal SWE (32 percent of last year). The Powder River basin snow water equivalent (SWE), in Wyoming, is about 37 percent of average (21 percent of last year). For more information see Basin Summary of Snow Courses at beginning of report.



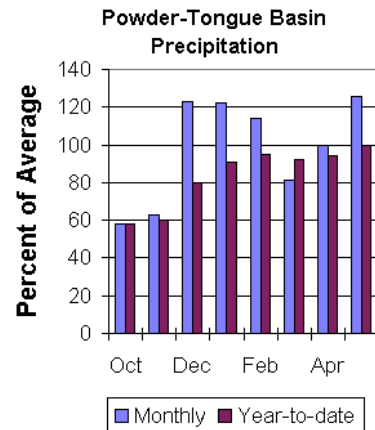
### Precipitation

May precipitation was 126 percent of average for the 10 reporting stations (112 percent of last year). Monthly percentages range from 56 to 154 percent of average. Precipitation for the year ranges from 81 to 111 percent of average. Year-to-date precipitation is about 100 percent of average in the basin; this is 82 percent of last year at this time.

### Reservoir

Tongue River Reservoir is currently at 165 percent of average storage for this time of

year (that is 79,400 acre feet). 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 June through September forecast period. The estimated yield for Tongue River near Dayton is 63,000 acre-feet (82 percent of normal).

The North Fork of the Powder near Hazelton should yield about 3,400 acre-feet (57 percent of normal). The estimated yield for Clear Creek near Buffalo is 15,000 acre-feet (54 percent of average). Rock Creek near Buffalo will yield about 11,000 acre-feet (66 percent of normal), and Piney Creek at Kearny should yield about 25,000 acre-feet (78 percent of average).

POWDER & TONGUE RIVER BASINS  
Streamflow Forecasts - June 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)	
TONGUE RIVER nr Dayton (2)	JUN-SEP	47	57	63	82	69	79	77
NORTH FORK POWDER nr Hazelton	JUN-SEP	1.91	2.80	3.40	57	4.00	4.89	6.00
CLEAR CREEK nr Buffalo	JUN-SEP	4.1	10.6	15.0	54	19.4	26	28
ROCK CREEK nr Buffalo	JUN-SEP	7.1	9.4	11.0	66	12.6	14.9	16.8
PINEY CREEK at Kearny	JUN-SEP	16.3	22	25	78	29	34	32

POWDER & TONGUE RIVER BASINS Reservoir Storage (1000 AF) - End of May					POWDER & TONGUE RIVER BASINS Watershed Snowpack Analysis - June 1, 2000			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
TONGUE RIVER	68.0	79.4	65.0	48.2	UPPER TONGUE RIVER	5	23	32
					GOOSE CREEK	1	0	0
					CLEAR CREEK	2	32	53
					CRAZY WOMAN CREEK	1	0	0
					UPPER POWDER RIVER	3	0	0
					POWDER RIVER in WY	5	21	37

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

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

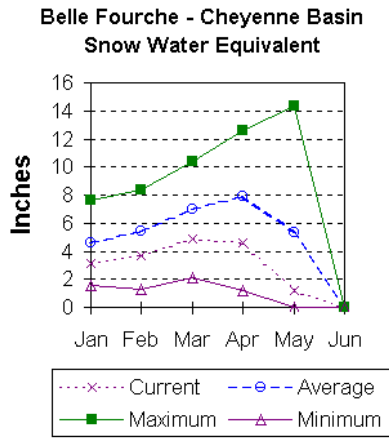
- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.

BELLE FOURCHE & CHEYENNE RIVER BASINS as of June 1, 2000

# Belle Fourche and Cheyenne River Basins (7)

## Snow.

The Belle Fourche River basin, as of June 1, is melted out. The basin was also melted out at this time last year. See Basin summary of Snow Course Data at the beginning of this report for a detailed listing.



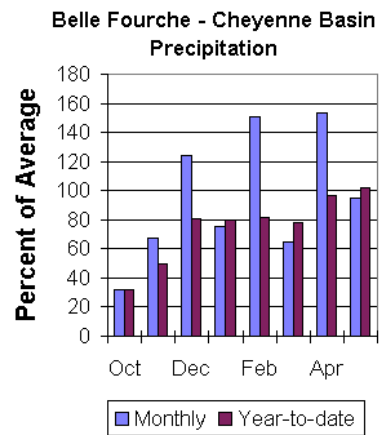
## Precipitation.

Precipitation, for the month of May was 95 percent of average in the Black Hills (93 percent of last May). Monthly percentages range from 34 to 120 percent. Year-to-date precipitation is 102 percent of average and 76 percent of last year's amount. Year to date percentages range from 83 to 129. This is from the 2 reporting stations.

## Reservoir.

Reservoir storage is above average in the basin.

Angostura is currently storing 102 percent of average (119,900-acre feet). Belle Fourche reservoir is storing 125 percent of average (190,500-acre feet). Deerfield reservoir is storing 111 percent of average (15,100-acre feet). Keyhole reservoir is storing 155 percent of average (176,000-acre feet). Pactola reservoir is storing 113 percent of average (54,700-acre feet), and Shadehill reservoir is storing 82 percent of average (56,200-acre feet).



## Streamflow

Streamflow forecast are below average as of June 1. Deerfield Reservoir inflow is forecast at 1150 acre feet (64 percent of average). Pactola is forecast at 4650 acre feet (52 percent of average). This is for the June – July forecast period.

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

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						
		Chance Of Exceeding *						30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
DEERFIELD RESERVOIR Inflow	JUN-JUL	0.14	0.60	1.15	64	1.70	2.51	1.80
PACTOLA RESERVOIR Inflow	JUN-JUL	0.72	1.14	4.65	52	8.16	13.32	9.00

BELLE FOURCHE & CHEYENNE RIVER BASINS Reservoir Storage (1000 AF) - End of May					BELLE FOURCHE & CHEYENNE RIVER BASINS Watershed Snowpack Analysis - June 1, 2000			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
ANGOSTURA	122.1	119.9	121.1	117.2	BELLE FOURCHE	2	0	100
BELLE FOURCHE	178.4	190.5	186.8	152.3				
DEERFIELD	15.2	15.1	15.2	13.6				
KEYHOLE	193.8	176.0	179.9	113.6				
PACTOLA	55.0	54.7	54.9	48.6				
SHADEHILL	81.4	56.2	78.3	68.7				

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

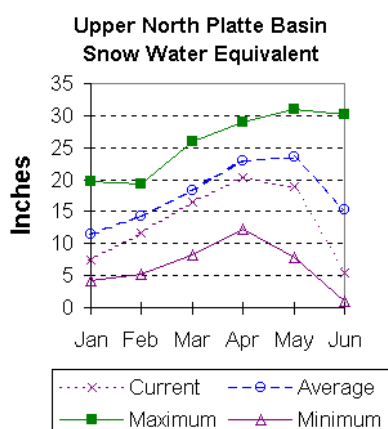
The average is computed for the 1961-1990 base period.

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

## Upper North Platte River Basin (8)

### Snow

The snow courses above Seminoe Reservoir have about 36 percent of average snow water equivalent (SWE) recorded for this time of the year (28 percent of last year). SWE in the drainage area above Northgate is about 43 percent of average and 43 percent of last year at this time. SWE in the Encampment River drainage is about 29 percent of normal and 23 percent of last year. Brush Creek SWE for the year is about 43 percent of normal and 23 percent of last year's SWE. Medicine Bow and Rock Creek drainage SWE is about 30 percent of average and 19 percent of last year at this time. For more information see Basin Summary of Snow Courses at the beginning of this report.

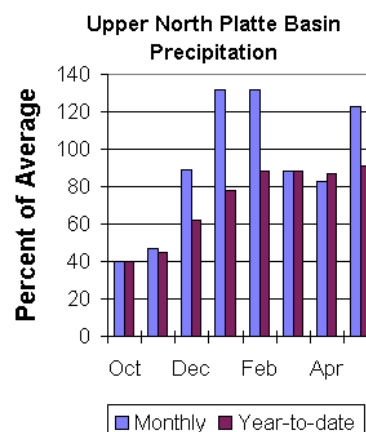


### Precipitation

Eight reporting stations indicate May precipitation was 123 percent of average and about 96 percent of last year's amount. May precipitation varied from 89 to 254 percent of average. Total water-year-to-date precipitation is about 91 percent of average for the basin, which is about 77 percent of last year's amount. Year to date percentage ranges from 73 to 111 percent of average for the 8 reporting stations.

### Reservoirs

Seminoe Reservoir is currently storing about 166 percent of normal for this time of the year. Currently, the reservoir is storing 108 percent of last year's amount. Currently, Seminoe Reservoir storage is estimated to be storing 914,000 acre-feet (90 percent of capacity). Last year, at this time, the reservoir had 842,900 acre-feet in storage.



### Streamflow

All the following yields are based on the fifty percent chance June through September yield. Yield for the North Platte River near Northgate is expected to be about 120,000 acre-feet (76 percent of average). Encampment River near Encampment is estimated to yield 73,000 acre-feet (71 percent of normal). North Platte River near Sinclair will yield about 315,000 acre-feet (73 percent of normal). Rock Creek near Arlington is estimated to yield 17,600 acre-feet (42 percent of average). Medicine Bow River above Seminoe Reservoir is expected to yield about 25,000 acre-feet (39 percent of normal). Seminoe Reservoir inflow should be about (340,000 acre-feet (69 percent of normal). See the following table for more detailed information on projected runoff.

=====

UPPER NORTH PLATTE RIVER BASIN  
Streamflow Forecasts - June 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)	
North Platte River nr Northgate	JUN-SEP	87	107	120	76	133	152	158
Encampment River nr Encampment	JUN-SEP	42	60	73	71	86	104	103
North Platte River nr Sinclair	JUN-SEP	208	272	315	73	358	422	431
Rock Creek nr Arlington	JUN-SEP	15.0	16.5	17.6	42	18.7	21	42
Medicine Bow River ab Seminoe Reserv	JUN-SEP	13.5	19.9	25	39	31	40	64
Seminoe Reservoir inflow	JUN-JUL	184	247	290	68	333	394	428
	JUN-SEP	166	270	340	69	410	514	491

UPPER NORTH PLATTE RIVER BASIN Reservoir Storage (1000 AF) - End of May					UPPER NORTH PLATTE RIVER BASIN Watershed Snowpack Analysis - June 1, 2000			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
SEMINOE	1016.7	914.2	842.9	551.0	N PLATTE above Northgate	5	43	43
					ENCAMPMENT RIVER	3	23	29
					BRUSH CREEK	2	23	43
					MEDICINE BOW & ROCK CREEK	2	19	30
					N PLATTE above Seminoe	13	28	36

=====

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

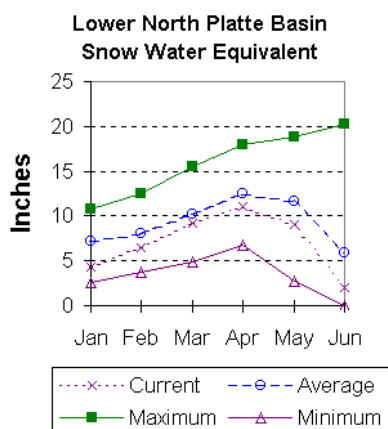
The average is computed for the 1961-1990 base period.

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

## Lower North Platte River Basin (9)

### Snow

SWE for the North Platte River basin in Wyoming averages 34 percent of normal (27 % of last year). The Sweetwater drainage is melted out as of June 1. Deer and LaPrele Creeks are also melted out. SWE for the North Platte above the Laramie River drainage is 34 percent of average (27 % of last year). SWE for the Laramie River above the mouth is 26 percent of average (22 % of last year). SWE for the Laramie River above Laramie is 35 percent of average (32 % of last year). The Little Laramie River is melted out.. For more information see Basin Summary of Snow Courses at beginning of report.



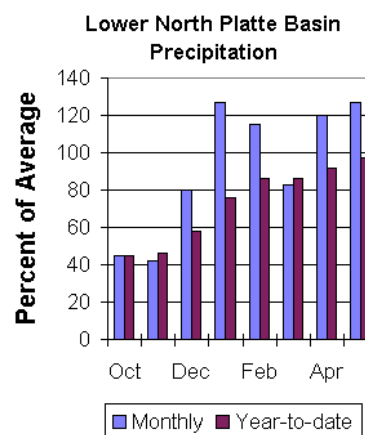
### Precipitation

Of the 6 reporting stations, percentages for the month range from 35 to 285. May precipitation for the basin was 127 percent of average (125 percent of last year). The water year-to-date precipitation for the basin is currently 97 percent of average (79 percent of last year). Year to date percentages range from 70 to 132.

### Reservoir

The Lower North Platte River basin reservoir storage is average to well above average. Reservoir storage is as follows:

Alcova 180,700 acre feet (100 percent of average); Glendo 507,100 acre feet (101 percent of average); Guernsey 35,900 acre feet (104 percent of average); Pathfinder 993,100 acre feet (156 percent of average); Seminoe 914,200 acre feet (166 percent of average); and Wheatland No.2 81,000 acre feet (148 percent of average). Water allocated to project use is also above average with North Platte Project users at 117 percent of average, Kendrick Project users at 124 percent of average, and Glendo Project users at 115 percent of average.



### Streamflow

Yields from 37 to 99 percent are expected in the basin during the forecast period. The following yields are based on the fifty percent chance probability runoff for the June through September forecast period. The Sweetwater near Alcova is forecast to yield about 15,800 acre-feet (44 percent of average). Deer Creek at Glenrock is expected to yield about 99 percent of average (7,200 acre-feet). LaPrele Creek above the reservoir is estimated to yield 79 percent of average (4,900 acre-feet). North Platte River below Guernsey Reservoir is expected to yield about 64 percent of normal (306,000 acre-feet), and below Glendo Reservoir is anticipated to yield about 68 percent of average (315,000 acre-feet). Laramie River near Woods should yield about 88 percent of average (78,000 acre-feet). The Little Laramie near Filmore should produce about 21,000 acre-feet (44 percent of average).



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

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)		
		90% (1000AF)		70% (1000AF)		Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)			30% (1000AF) 10% (1000AF)	
Sweetwater River nr Alcova	JUN-JUL	4.7	7.5	11.6	37	15.7	22	31		
	JUN-SEP	6.5	10.7	15.8	44	21	28	36		
Deer Creek at Glenrock	JUN-SEP	3.53	5.56	7.20	99	9.05	12.16	7.25		
La Prele Creek ab La Prele Reservoir	JUN-SEP	1.69	3.33	4.90	79	6.90	10.73	6.20		
North Platte River blw Glendo	JUN-SEP	255		315	68		422	464		
North Platte River blw Guernsey	JUN-SEP	248		306	64		409	476		
Laramie River nr Woods	JUN-SEP	49	66	78	88	90	107	89		
Little Laramie River nr Filmore	JUN-SEP	12.3	17.5	21	44	25	30	48		

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

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

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
ALCOVA	184.3	180.7	179.1	180.4	SWEETWATER	1	1	0
GLENDO	506.4	507.1	553.4	501.0	DEER & LAPRELE CREEKS	2	0	0
GUERNSEY	45.6	35.9	33.8	34.5	N PLATTE abv Laramie R.	16	25	34
PATHFINDER	1016.5	993.1	993.3	638.0	LARAMIE RIVER abv Laramie	3	32	35
SEMINOE	1016.7	914.2	842.9	551.0	LITTLE LARAMIE RIVER	1	0	0
WHEATLAND #2	98.9	81.0	90.0	54.6	LARAMIE RIVER above mouth	4	22	26
NORTH PLATTE PROJ	1062.1	1061.5	1061.5	909.8	NORTH PLATTE	17	27	34
KENDRICK PROJECT	1201.7	1047.4	1047.4	844.4				
GLENDO PROJECT USERS	183.2	172.2	172.2	149.7				

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

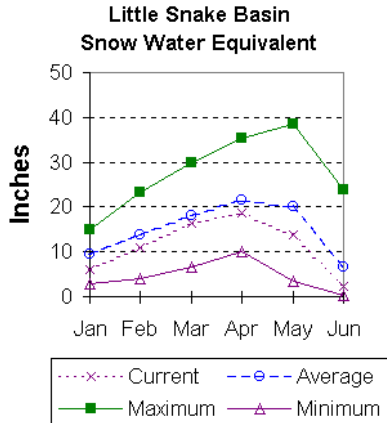
The average is computed for the 1961-1990 base period.

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

# Little Snake River Basin (10)

## Snow

Snowfall has been below average across the basin this year. Currently, snow water equivalent (SWE) in the Little Snake River drainage is 34 percent of average (22 percent of last year at this time). For more information see Basin Summary of Snow Courses at beginning of this report.



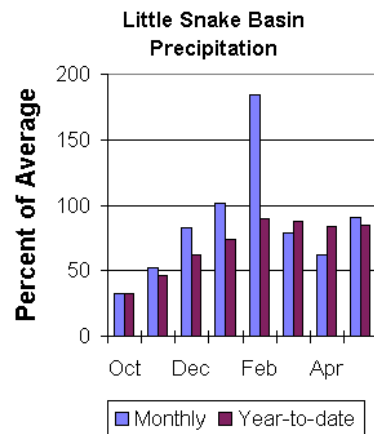
## Precipitation

Precipitation across the basin was just below average this past month. May precipitation was 91 percent of average (78 percent of last year) for the 5 reporting stations. The Little Snake River basin water-year-to-date precipitation is currently 85 percent of average (75 percent of last year). Year-to-date percentages range from 73 to 95 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 105,000 acre-feet (68 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 - June 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)	
Little Snake River nr Slater	APR-JUL	74	90	105	68	122	135	155
LITTLE SNAKE R nr Dixon	APR-JUL	125	158	200	61	242	276	329

LITTLE SNAKE RIVER BASIN Reservoir Storage (1000 AF) - End of May				LITTLE SNAKE RIVER BASIN Watershed Snowpack Analysis - June 1, 2000				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of Last Yr	Average
		This Year	Last Year	Avg				
					LITTLE SNAKE RIVER	6	22	34

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

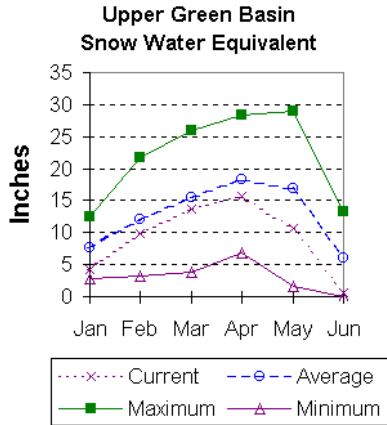
The average is computed for the 1961-1990 base period.

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

# Upper Green River Basin (11)

## Snow

The Upper Green River Basin snow water equivalent (SWE), above Fontenelle Reservoir, is 11 percent of average (7 percent of last year). The Green River basin SWE above Warren Bridge is 0 percent of normal (0 percent of last year). SWE on the west side of the Upper Green River basin is about 12 percent of normal, 9 percent of this time last year. Newfork River SWE is now 0 percent of normal (0 percent of last year). Big Sandy-Eden Valley SWE is about 0 percent of average (0 percent of last year). For more information see the Basin Summary of Snow Courses at the beginning of this report.



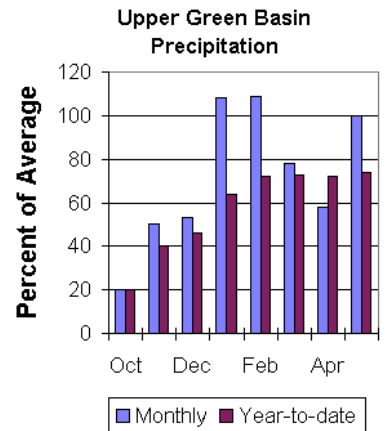
## Precipitation

The 11 reporting precipitation sites in the basin were 100 percent of the May average (90 percent of last year at this time). May precipitation varied from 73 to 119 percent of average. Water year-to-date precipitation is about 74 percent of average (71 percent of last year). Year to date percentage of average ranges from 67 to 87 for the reporting stations.

## Reservoir

Data for Big Sandy Reservoir, Eden Reservoir, and Flaming Gorge were not reported this

month. Fontenelle Reservoir is storing 187,100 acre-feet (96 percent of average and 30 percent of the total capacity). There is no average established for Flaming Gorge. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.



## Streamflow

The fifty-percent chance April through July runoff in the Upper Green River basin is forecast well below average. Green River at Warren Bridge is expected to yield about 200,000 acre-feet (75 percent of normal). Pine Creek above Fremont Lake is expected to yield 80,000 acre-feet (77 percent of normal). New Fork River near Big Piney is expected to yield about 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 38,000 acre-feet (67 percent of normal).

UPPER GREEN RIVER BASIN  
Streamflow Forecasts - June 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)	
Green River at Warren Bridge	APR-JUL	165	186	200	75	214	235	266
Pine Creek abv Fremont Lake	APR-JUL	69	75	80	77	85	92	104
	JUN-JUL	38	48	54	64	61	70	85
New Fork River nr Big Piney	APR-JUL	142	209	235	61	261	323	385
Fontenelle Reservoir Inflow	APR-JUL	331	485	525	62	566	722	849
Big Sandy River nr Farson	APR-JUL	26	35	38	67	41	50	57

UPPER GREEN RIVER BASIN Reservoir Storage (1000 AF) - End of May					UPPER GREEN RIVER BASIN Watershed Snowpack Analysis - June 1, 2000			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
BIG SANDY		NO REPORT			GREEN above Warren Bridge	4	0	0
EDEN		NO REPORT			UPPER GREEN (West Side)	5	9	12
FLAMING GORGE		NO REPORT			NEWFORK RIVER	2	0	0
FONTENELLE	344.8	187.1	206.0	195.5	BIG SANDY/EDEN VALLEY	1	0	0
					GREEN above Fontenelle	11	7	11

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

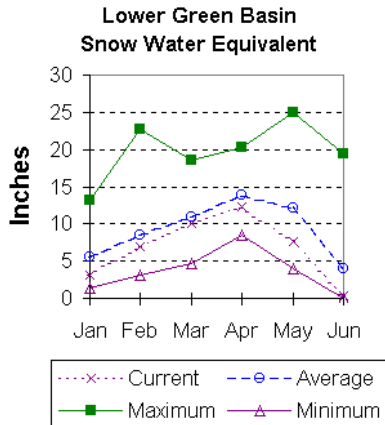
The average is computed for the 1961-1990 base period.

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

# Lower Green River Basin (12)

## Snow

The Blacks Fork and Henrys Fork drainage's, as of June 1, are melted out. SWE in the Hams Fork, as of June 1, is 9 percent of average (5% of last year). The basin, as a whole, is 9 percent of average (6 percent of last year). For more information see Basin Summary of Snow Courses at beginning of this report.



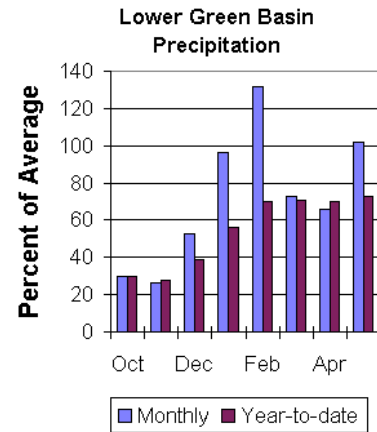
## Precipitation

Precipitation was above average for the 3 reporting stations during May. Precipitation ranged from 67 to 110 percent of average for the month. The entire basin received 102 percent of average (89 percent of last year). The basin year-to-date precipitation is currently 73 percent of average (68 percent of last year). Year to date percentages range from 69 to 78.

## Reservoir

Fontenelle Reservoir is currently storing 187,100 acre

feet; this is 96 percent of average (91 % of last year). Flaming Gorge did not report this month. Viva Naughton is currently storing 45,200 acre feet; this is 133 percent of average (132 % of last year).



## Streamflow

Expected yields vary from 54 to 70 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 535,000-acre feet (60 percent of average). Blacks Fork near Robertson is forecast to yield 66,000-acre feet (70 percent of average). East Fork of Smiths Fork near Robertson is estimated to yield 19,800 acre-feet (66 percent of average). The estimated yield for Hams Fork near Frontier is 38,000-acre feet (58 percent of average). Viva Naughton Reservoir inflow will be about 48,000-acre feet (54 percent of average). Flaming Gorge Reservoir inflow will be about 675,000-acre feet (56 percent of average).

LOWER GREEN RIVER BASIN  
Streamflow Forecasts - June 1, 2000

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		Chance Of Exceeding *		===== Wetter =====>>		
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
Green River nr Green River, WY	APR-JUL	414	479	535	60	591	656	899
Blacks Fork nr Robertson	APR-JUL	55	61	66	70	71	78	95
EF of Smiths Fork nr Robertson	APR-JUL	15.0	18.8	19.8	66	21	25	30
Hams Fk blw Pole Ck nr Frontier	APR-JUL	28	34	38	58	43	50	66
Hams Fk Inflow to Viva Naughton Res	APR-JUL	29	40	48	54	56	67	89
Flaming Gorge Reservoir Inflow	APR-JUL	395	598	675	56	752	945	1196

LOWER GREEN RIVER BASIN Reservoir Storage (1000 AF) - End of May					LOWER GREEN RIVER BASIN Watershed Snowpack Analysis - June 1, 2000			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of Last Yr	Average
		This Year	Last Year	Avg				
FONTENELLE	344.8	187.1	206.0	195.5	HAMS FORK RIVER	3	5	9
FLAMING GORGE		NO REPORT			BLACKS FORK	2	0	0
VIVA NAUGHTON RES	42.4	45.2	34.3	34.0	HENRYS FORK	2	0	0
					GREEN above Flaming Gorge	18	6	9

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

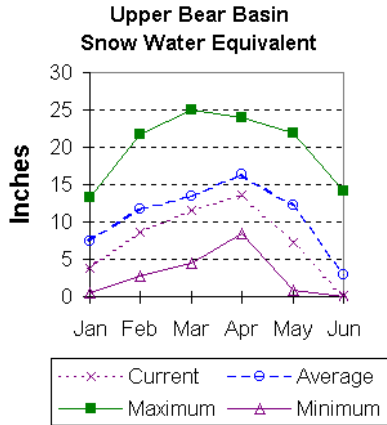
The average is computed for the 1961-1990 base period.

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

# Upper Bear River Basin (13)

## Snow

Snow water equivalent (SWE), at snow courses in the Bear River above the Idaho State line, is 5 percent of average (4 percent of last year). SWE for the Bear River in Utah is estimated to be 1 percent of average; that is about 1 percent of last year at this time. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is estimated at 9 percent of average (5 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.

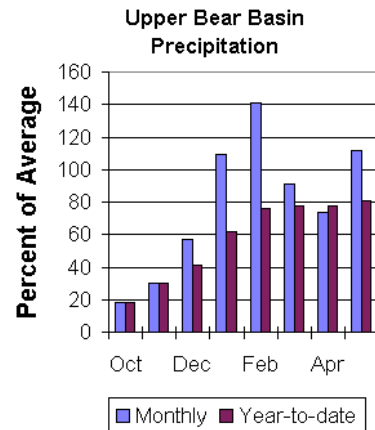


## Precipitation

Precipitation for the month of May was 112 percent of average for the 2 reporting stations; this is 102 percent of the previous May. The monthly percentages range from 102 to 123 percent of average. The year-to-date precipitation, for the basin, is 81 percent of average; this is 75 percent of last year's amount.

## Reservoir

Woodruff Narrows did not report this month.



## Streamflow

The following 50 percent chance stream flow yields are for the May through September period. Smiths Fork near Border is estimated to yield 63,000 acre-feet (58 percent of normal), and Thomas Fork drainage near the Idaho-Wyoming state line is estimated to yield 14,000 acre-feet or 47 percent of normal. The following 50 percent chance stream flow yields are for the June through September period. Bear River near the Utah-Wyoming State Line is expected to yield about 50,000 acre feet; that is 60 percent of average, while Bear River near Woodruff is expected to yield about 43,000 acre-feet, about 56 percent of normal.



UPPER BEAR RIVER BASIN  
Streamflow Forecasts - June 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)	
SMITHS FK nr Border, WY	MAY-SEP	50	57	63	58	69	80	109
THOMAS FK nr WY-ID State Line (Disc.)	MAY-SEP	8.9	11.7	14.0	47	16.8	22	30
Bear R nr UT-WY State Line	APR-SEP	68	72	76	60	80	86	126
	JUN-SEP	38	45	50	60	56	66	84
BEAR R nr Woodruff, UT	APR-SEP	62	77	90	58	105	131	154
	JUN-SEP	24	34	43	56	54	76	77

UPPER BEAR RIVER BASIN Reservoir Storage (1000 AF) - End of May					UPPER BEAR RIVER BASIN Watershed Snowpack Analysis - June 1, 2000			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
WOODRUFF NARROWS		NO REPORT			UPPER BEAR RIVER in Utah	5	1	1
					SMITHS & THOMAS FORKS	3	5	9
					BEAR RIVER abv ID line	6	4	5

\* 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.