



United States  
Department of  
Agriculture

Natural  
Resources  
Conservation  
Service

# Wyoming

## Basin Outlook Report

### June 1, 2007



# Basin Outlook Reports

## And

### Federal - State - Private

### Cooperative Snow Surveys

---

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

**Lee Hackleman**  
**Water Supply Specialist**  
**100 East "B" Street**  
**Casper, WY 82601**  
**(307) 233-6744**

---

#### *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 is. 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, 14<sup>th</sup> 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

The snow water equivalent (SWE) across Wyoming is way below average for this time of the year. SWE for the State of Wyoming as a whole is 17% of average for early June. Precipitation for last month in the basins varied from 35% to 190% of average for the various basins in the State. Year-to-date precipitation is also below average for the year and varies from 71-125% of average in the basins. Basin reservoir levels across Wyoming vary from 46-167% of average for an overall average of 96%. Forecasted runoff varies from 12-90% of average across Wyoming for an overall average of 45%.

## Snowpack

Snow water equivalent (SWE), across Wyoming is way below average for this time of year at 17%. SWE in the NW portion of Wyoming is now about 26% of average (48% of last year). The NE Wyoming snow is melted out. The SE portion of Wyoming SWE is currently about 27% of average (60% of last year). The SW portion of Wyoming SWE is about 15% of average (30% of last year).

## Precipitation

Last month's precipitation was below average across most of Wyoming. The Upper Green River Basin had the lowest precipitation for the month at 35% of average. The Belle Fourche & Cheyenne River Basins had the highest precipitation amount at 190% of average. The following table displays the major river basins and their departure from average for this month.

Basin	Departure from average	Basin	Departure from average
Snake River	-64%	Upper North Platte River	-31%
Yellowstone & Madison	-57%	Lower North Platte	-11%
Wind River	-12%	Little Snake River	-40%
Big Horn	+21%	Upper Green River	-65%
Shoshone & Clarks Fork	-50%	Lower Green River	-37%
Powder & Tongue River	+38%	Upper Bear River	-42%
Belle Fourche & Cheyenne	+90%		

## Streams

Stream flow yield is expected to be below average across Wyoming. Most probable yield for the entire State of Wyoming is forecast to be at 45% (varying from 12-90% of average). The Snake River and Upper Yellowstone & Madison River Basins are expected to yield about 39 and 55% of average, respectively -- 30-48% of average for the various forecast points in the basins. Yields from the Wind and Bighorn River Basins are expected to be about 46 and 54% of average, respectively -- varying from 40-87% of average in the basins. Yields from the Shoshone and Clarks Fork River Basins of Wyoming are expected to yield about 45 & 54% of average respectively-- varying from 46-54% of average. Yields from the Powder & Tongue River Basins are expected to be about 52 & 88% of average, respectively -- varying from 51-90% of average. Yields for the Belle Fourche & Cheyenne River Basins are expected to be about 68 & 54% of average, respectively. Yields for the Upper and Lower North Platte River of Wyoming are expected to be about 50 and 44% of average, respectively -- varying from 40-65% of average. Yields for the Little Snake, Upper Green River, Lower Green River and Little Bear of Wyoming are expected to be 17, 28, 24, and 39% of average respectively -- yield estimates vary from 12-63% of average.

## Reservoirs

Reservoir storage varies across the state at this time; however, reservoir storage is at 96% of average for the entire state. Reservoirs on the North Platte River are well below average at 61% of average. Most of the reservoirs in the northeast are below average in storage at 61%. Reservoirs in the Wind River Basin are below average at 79%. Reservoirs on the Big Horn are below average at 95%. The Buffalo Bill Reservoir on the Shoshone is above average at 142%. Reservoirs on the Green River are above average at 102%. See following table for further information about reservoir storage.

### Major Reservoirs in Wyoming

BASIN AREA RESERVOIR	CURRENT AS % CAPACITY	LAST YR AS % CAPACITY	AVERAGE AS % CAPACITY	CURRENT AS % AVERAGE	CURRENT AS % LAST YR
WYOMING AND SURROUNDING STATES					
ALCOVA	98	98	97	101	101
ANGOSTURA	39	46	96	40	84
BELLE FOURCHE	69	71	85	81	98
BIG SANDY	75	99	77	98	76
BIGHORN LAKE	67	59	64	105	115
BOYSEN	74	85	95	78	87
BUFFALO BILL	87	86	61	142	101
BULL LAKE	51	60	63	81	86
DEERFIELD	84	81	89	93	103
EDEN			NO REPORT		
ENNIS LAKE	91	85	86	105	107
FLAMING GORGE	84	80	81	104	105
FONTENELLE	38	76	53	71	50
GLENDO	98	82	99	99	120
GRASSY LAKE	101	91	95	106	110
GUERNSEY	60	61	79	76	99
HEBGEN LAKE	88	91	83	106	97
JACKSON LAKE	99	95	68	146	105
KEYHOLE	35	39	61	58	90
PACTOLA	62	73	88	70	84
PALISADES	80	76	74	108	104
PATHFINDER	27	30	76	35	91
PILOT BUTTE	57	54	77	74	106
SEMINOE	42	45	65	65	93
SHADEHILL	39	58	84	46	67
TONGUE RIVER	101	76	61	167	134
VIVA NAUGHTON RES	107	96	92	116	111
WHEATLAND #2	47	52	60	79	90
WOODRUFF NARROWS	94	100	70	134	94
TOTAL OF 28 RESERVOIRS	72	71	75	96	101

Raw KAF Totals Current=9613 Last Year=9495 Average=10028 Capacity=13288

**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    2007

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
-----						
WYOMING Snow Course and SNOTEL Stations						
BALD MOUNTAIN SNOTEL	9380	6/01/07	42	15.2	.0	16.7
BASE CAMP SNOTEL	7030	6/01/07	---	.0	.0	.0
BATTLE MTN. SNOTEL	7440	6/01/07	---	.0	.0	.0
BEARTOOTH LK. SNOTEL	9280	6/01/07	32	11.4	13.5	20.1
BEAR TRAP SNOTEL	8200	6/01/07	0	.0	.0	.0
BIG GOOSE SNOTEL	7760	6/01/07	0	.0	.0	2.7
BIG SANDY SNOTEL	9080	6/01/07	0	.0	.0	1.4
BLACKWATER SNOTEL	9780	6/01/07	28	10.1	12.5	24.7
BLIND BULL SNOTEL	8900	6/01/07	8	2.4	8.4	17.8
BLIND PARK SNOTEL	6870	6/01/07	0	.0	.0	.0
BONE SPGS. SNOTEL	9350	6/01/07	35	12.4	.0	8.2
BROOKLYN LK. SNOTEL	10220	6/01/07	0	.5	.0	11.6
BURGESS JCT. SNOTEL	7880	6/01/07	3	1.3	.0	2.6
BURROUGHS CRK SNOTEL	8750	6/01/07	0	.0	.0	3.4
CANYON SNOTEL	8090	6/01/07	0	.0	.0	1.3
CASPER MTN. SNOTEL	7850	6/01/07	0	.0	.0	4.2
CHALK CK #1 SNOTEL	9100	6/01/07	0	.0	3.4	12.0
CHALK CK #2 SNOTEL	8200	6/01/07	0	.0	.0	.8
CINNABAR PARK SNOTEL	9690	6/01/07	0	.0	.0	.2
CLOUD PEAK SNOTEL	9850	6/01/07	6	1.9	.0	7.7
COLE CANYON SNOTEL	5910	6/01/07	0	.0	.0	.0
COLD SPRINGS SNOTEL	9630	6/01/07	0	.0	.0	1.1
COTTONWOOD CR SNOTEL	7700	6/01/07	---	.0	.0	5.1
CROW CREEK SNOTEL	8830	6/01/07	0	.0	.0	.0
DEER PARK SNOTEL	9700	6/01/07	0	.0	.0	8.0
DIVIDE PEAK SNOTEL	8860	6/01/07	0	.0	.0	3.7
DOME LAKE SNOTEL	8880	6/01/07	0	.0	.0	3.2
EAST RIM DIV SNOTEL	7930	6/01/07	---	.0	.0	1.5
ELKHART PARK SNOTEL	9400	6/01/07	---	.0	.0	3.3
EVENING STAR SNOTEL	9200	6/01/07	7	2.7	10.8	26.7
GRAND TARGHEE SNOTEL	9260	6/01/07	42	20.3	--	--
GRANITE CRK SNOTEL	6770	6/01/07	---	.0	.0	.8
GRASSY LAKE SNOTEL	7270	6/01/07	0	.0	6.7	14.0
GRAVE SPRINGS SNOTEL	8550	6/01/07	0	.0	.0	1.8
GROS VENTRE SNOTEL	8750	6/01/07	0	.0	.0	3.7
HANSEN S.M. SNOTEL	8360	6/01/07	0	.0	.0	.2
HAMS FORK SNOTEL	7840	6/01/07	---	.0	.0	.0
HOBBS PARK SNOTEL	10100	6/01/07	2	1.0	.0	10.1
INDIAN CREEK SNOTEL	9430	6/01/07	---	.0	10.3	14.7
KELLEY R.S. SNOTEL	8180	6/01/07	---	.0	.0	1.4
KENDALL R.S. SNOTEL	7740	6/01/07	0	.0	.0	.0
KIRWIN SNOTEL	9550	6/01/07	0	.0	.0	5.5
LA PRELE SNOTEL	8380	6/01/07	0	.0	.0	.8
LEWIS LAKE SNOTEL	7850	6/01/07	0	.0	16.7	17.9
LEWIS LAKE DIVIDE	7850	6/01/07	0	.0	24.9	--
LITTLE WARM SNOTEL	9370	6/01/07	0	.0	.0	1.9
LOOMIS PARK SNOTEL	8240	6/01/07	---	.0	.0	2.3
MARQUETTE SNOTEL	8760	6/01/07	0	.0	.0	4.2
MIDDLE POWDER SNOTEL	7760	6/01/07	0	.0	.0	2.6
NEW FORK SNOTEL	8340	6/01/07	0	.0	.0	.0
NORTH FRENCH SNOTEL	10130	6/01/07	---	9.0	12.0	23.9
NORTH RAPID CK SNTL	6130	6/01/07	0	.0	.0	.0
OLD BATTLE SNOTEL	9920	6/01/07	34	14.0	26.1	25.6
OWL CREEK SNOTEL	8980	6/01/07	0	.0	.0	.5
PARKERS PEAK SNOTEL	9400	6/01/07	0	.0	4.8	18.5
PHILLIPS BNCH SNOTEL	8200	6/01/07	0	.0	9.0	14.0
POWDER RVR.PASS SNTL	9480	6/01/07	4	.9	.0	2.3
RENO HILL SNOTEL	8500	6/01/07	0	.0	.0	3.4
SAGE CK BASIN SNTL	7850	6/01/07	---	.0	.0	2.1
SALT RIVER SNOTEL	7600	6/01/07	---	.0	.0	.0

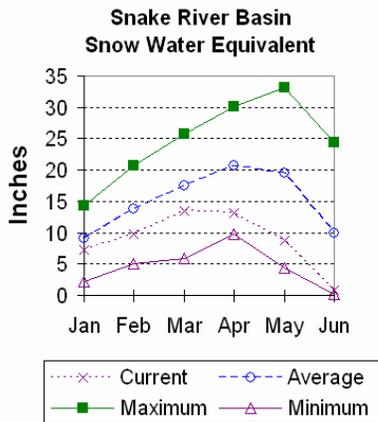
SAND LAKE SNOTEL	10050	6/01/07	---	18.5	18.1	25.8
SANDSTONE RS SNOTEL	8150	6/01/07	0	.0	.0	.0
SHELL CREEK SNOTEL	9580	6/01/07	20	5.9	.8	10.4
SNAKE RV STA SNOTEL	6920	6/01/07	0	.0	.0	.0
SNIDER BASIN SNOTEL	8060	6/01/07	0	.0	.0	.0
SOUTH BRUSH SNOTEL	8440	6/01/07	0	.0	.0	1.7
SOUTH PASS SNOTEL	9040	6/01/07	0	.0	.0	6.3
SPRING CRK. SNOTEL	9000	6/01/07	1	.3	13.1	15.0
ST LAWRENCE ALT SNTL	8620	6/01/07	0	.0	.0	.7
SUCKER CREEK SNOTEL	8880	6/01/07	9	2.2	.0	3.6
SYLVAN LAKE SNOTEL	8420	6/01/07	0	.0	.0	11.4
SYLVAN ROAD SNOTEL	7120	6/01/07	0	.0	.0	.0
THUMB DIVIDE SNOTEL	7980	6/01/07	0	.0	.0	1.9
TIE CREEK SNOTEL	6870	6/01/07	0	.0	.0	.0
TIMBER CREEK SNOTEL	7950	6/01/07	0	.0	.0	.5
TOGWOTEE PASS SNOTEL	9580	6/01/07	14	5.6	16.3	21.9
TOWNSEND CRK SNOTEL	8700	6/01/07	0	.0	.0	1.7
TRIPLE PEAK SNOTEL	8500	6/01/07	0	.0	.0	4.8
TWO OCEAN SNOTEL	9240	6/01/07	---	6.4	26.5	25.2
WEBBER SPRING SNOTEL	9250	6/01/07	0	.0	.0	6.5
WHISKEY PARK SNOTEL	8950	6/01/07	---	.0	4.3	13.6
WILLOW CREEK SNOTEL	8450	6/01/07	---	.0	.5	14.3
WINDY PEAK SNOTEL	7900	6/01/07	0	.0	.0	.1
WOLVERINE SNOTEL	7650	6/01/07	0	.0	.0	.0
YOUNTS PEAK SNOTEL	8350	6/01/07	0	.0	.0	7.0



# Snake River Basin

## Snow

The Snake River Basin snow water equivalent (SWE) is still below average. SWE in the Snake River Basin above Jackson Lake is 11% of average (13% of last year). Pacific Creek Basin SWE is 25% of average (24% of last year). Gros Ventre River Basin SWE is 22% of average (34% of last year). SWE in the Hoback River drainage is 9% of average (29% of last year). SWE in the Greys River drainage is 5% of average (12% of last year). In the Salt River Basin area snow is melted out. SWE in the Snake River Basin above Palisades is 9% of average (15% of last year). See the Basin Summary of Snow Courses at the beginning of this report for a detailed listing of snow course information.



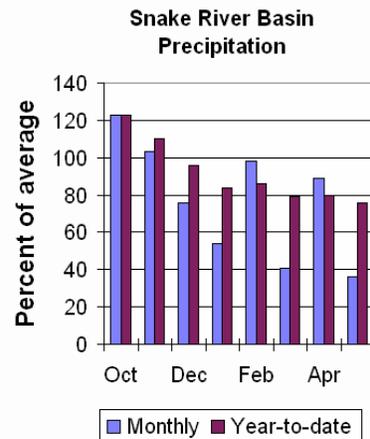
## Precipitation

Precipitation across the basin was below average last month. Monthly precipitation for the basin was 36% of average (56% of last year) for the 16 reporting stations. Last month's percentages range from 22-49% of average. Water-year-to-date precipitation is 76% of average for the Snake River Basin (74% of last year). Year-to-date percentages range from 68-86% of average.

## Reservoir

Currently, reservoir storage is 121% of

average for the three storage reservoirs in the basin. Grassy Lake storage is about 106% of average (15,300 ac-ft compared to 13,900 last year). Jackson Lake storage is 146% of average (838,300 ac-ft compared to 802,100 ac-ft last year). Palisades Reservoir storage is about 108% of average (1,113,900 ac-ft compared to 1,068,800 ac-ft 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 50% exceedance forecasts for June through September are below average for the basin. The Snake near Moran is 215,000 ac-ft (37% of average). Snake above reservoir near Alpine is 645,000 ac-ft (35% of average). The Snake near Irwin is 950,000 ac-ft (38% of average). The Snake near Heise is 1,020,000 ac-ft (39% of average). Pacific Creek at Moran is 32,000 ac-ft (30% of average). Greys River above Palisades Reservoir is 107,000 ac-ft (44% of average). Salt River near Etna is 96,000 ac-ft (40% of average). See the following page for detailed runoff volumes.

SNAKE RIVER BASIN  
Streamflow Forecasts - June 1, 2007

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>					30 Yr Avg (1000AF)	
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		
SNAKE nr Moran (1,2)							
JUN-JUL	77	148	181	37	215	285	490
JUN-SEP	87	175	215	37	255	345	580
SNAKE ab resv nr Alpine (1,2)							
JUN-JUL	255	435	515	35	595	775	1470
JUN-SEP	300	540	645	35	750	990	1840
SNAKE nr Irwin (1,2)							
JUN-JUL	350	620	740	38	860	1130	1950
JUN-SEP	515	815	950	38	1090	1390	2500
SNAKE near Heise (2)							
JUN-JUL	455	650	780	38	910	1100	2050
JUN-SEP	645	865	1020	39	1170	1400	2650
PACIFIC CREEK at Moran							
JUN-JUL	12.0	17.0	30	30	43	62	100
JUN-SEP		19.0	32	30	45	65	106
GREYS above Palisades							
JUN-JUL	60	74	83	44	92	106	188
JUN-SEP	74	94	107	44	120	140	245
SALT near Etna							
JUN-JUL	8.0	42	65	40	88	122	162
JUN-SEP	19.0	65	96	40	127	172	240

\* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level. Forecast issued in cooperation with Alberta Environment.

SNAKE RIVER BASIN  
Reservoir Storage (1000AF) End of May

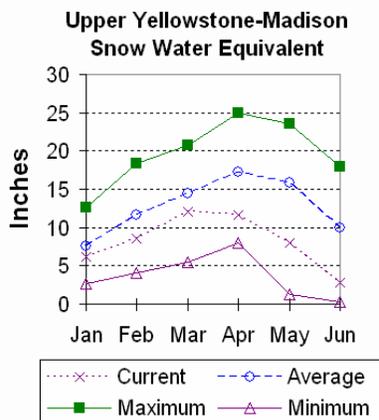
Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
GRASSY LAKE	15.2	15.3	13.9	14.4
JACKSON LAKE	847.0	838.3	802.1	572.6
PALISADES	1400.0	1113.9	1068.8	1033.6

SNAKE RIVER BASIN  
Watershed Snowpack Analysis - June 1, 2007

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
SNAKE above Jackson Lake	5	13	11
PACIFIC CREEK	2	24	25
GROS VENTRE RIVER	2	34	22
HOBACK RIVER	5	29	9
GREYS RIVER	4	12	5
SALT RIVER	3	0	0
SNAKE above Palisades	17	15	9

# Upper Yellowstone & Madison River Basins

## Snow



Snowfall in these basins has been low so far this year and the SWE in both basins is below average for this month. Snow is melted out in the Madison drainage. SWE in the Yellowstone drainage is about 28% of average (42% 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

Last month precipitation in the Upper Yellowstone and Madison drainages were about 43% of average (51% of last year) for the 5 reporting stations -- percentages range from 29-61% of average. Water-year-to-date precipitation is about 84% of average (84% of last year's amount). Year to date percentage

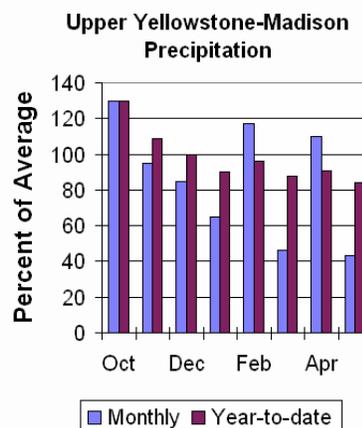
ranges from 74-98%.

## Reservoir

Ennis Lake is storing about 37,200 ac-ft of water (91% of capacity, 105% of average or 107% of last year's volume). Hebgen Lake is storing about 333,600 ac-ft of water (88% of capacity, 106% of average or 98% of last year's volume). Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.

## Streamflow

All the following yields are the 50% exceedance forecasts from June through September. Yellowstone at Lake Outlet is 335,000 ac-ft (48% of average). Yellowstone at Corwin Springs will yield around 805,000 ac-ft (82% of average). Yellowstone near Livingston will yield around 930,000 ac-ft (55% of average). Hebgen Reservoir inflow is 170,000 ac-ft (55% of average). See the following page for detailed runoff volumes.



UPPER YELLOWSTONE & MADISON RIVER BASINS  
Streamflow Forecasts - June 1, 2007

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>					30 Yr Avg (1000AF)
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)	
=====						
YELLOWSTONE at Lake Outlet						
JUN-JUL	125	190	235	49	280	485
JUN-SEP	215	285	335	48	385	695
YELLOWSTONE RIVER at Corwin Springs						
JUN-JUL	385	530	625	55	725	1140
JUN-SEP	515	685	805	55	925	1460
YELLOWSTONE RIVER near Livingston						
JUN-JUL	401	585	710	54	835	1310
JUN-SEP	517	765	930	55	1095	1700
HEBGEN Reservoir Inflow						
JUN-JUL	70	94	110	55	126	200
JUN-SEP	112	147	170	55	195	310

\* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level. Forecast issued in cooperation with Alberta Environment.

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

Reservoir	Usable	***** Usable Storage *****		
	Capacity	This Year	Last Year	Average
ENNIS LAKE	41.0	37.2	34.7	35.3
HEBGEN LAKE	377.5	333.6	344.3	314.7

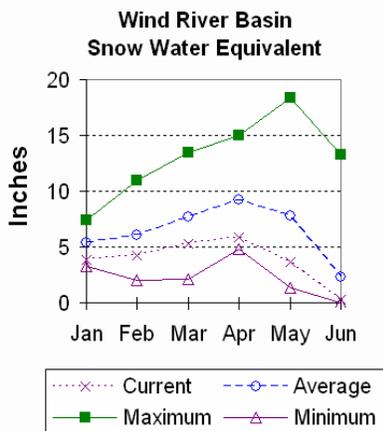
UPPER YELLOWSTONE & MADISON RIVER BASINS  
Watershed Snowpack Analysis - June 1, 2007

Watershed	Number of	This Year as Percent of	
	Data Sites	Last Year	Average
MADISON RIVER in WY	5	0	0
YELLOWSTONE RIVER in WY	8	42	28

# Wind River Basin

## Snow

The Wind River Basin has below average snow water equivalent (SWE) for this time of the year. SWE in the Wind River above Dubois is 21% of average (34% of last year at this time). The Little Wind SWE is 9% of average water content (melted out last year), and the Popo Agie drainage SWE is about 4% of average, and was melted out last year. The Wind River Basin, above Boysen Reservoir SWE is about 14% of average (40% of last year). See the Basin Summary of Snow Course Data at the front of this report for details.



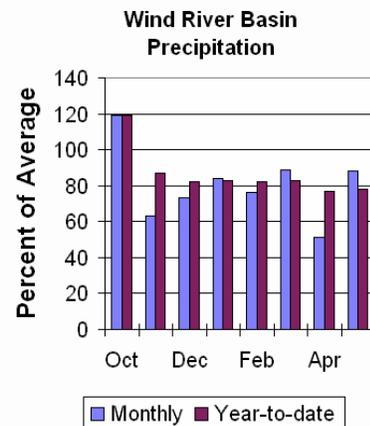
## Precipitation

Last months precipitation in the basin varied from 29-127% of average. Precipitation, for the basin, was about 88% of average from the 8 reporting stations; that is about 299% of last year's amount. Water year-to-date precipitation is 78% of average and about 106% of last year at this time. Year-to-date percentages range from 72-94% of average.

## Reservoirs

Current storage varies from 74-81% of average. Usable storage in Bull

Lake is currently about 77,500 ac-ft (51% of capacity) - last year the reservoir was at 60% of capacity at this time. Boysen Reservoir is storing about 74% of capacity (442,900 ac-ft) - last year the reservoir was at 85% of capacity at this time. Pilot Butte is at 57% of capacity (18,000 ac-ft) - last year the reservoir was at 54% of capacity at this time. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.



## Streamflow

Water supply is estimated to be below average this year. The following values reflect the 50% exceedance forecasts for the June through September runoff period. Dinwoody Creek near Burris is 48,000 ac-ft (60% of average). The Wind River above Bull Lake Creek is 255,000 ac-ft (61% of average). Bull Lake Creek near Lenore is 109,000 ac-ft (72% of average). Wind River at Riverton will yield around 285,000 ac-ft (57% of average). Little Popo Agie River near Lander is around 14,400 ac-ft (40% of average). South Fork of Little Wind near Fort Washakie will yield around 36,000 ac-ft (55% of average). Little Wind River near Riverton will yield around 115,000 ac-ft (51% of average). Boysen Reservoir inflow will yield around 280,000 ac-ft (46% of average). See the following page for detailed runoff volumes.

WIND RIVER BASIN  
Streamflow Forecasts - June 1, 2007

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>					30 Yr Avg (1000AF)	
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		
=====							
DINWOODY CREEK nr Burris							
JUN-JUL	26	31	35	66	39	44	53
JUN-SEP	33	42	48	60	54	63	80
WIND RIVER abv Bull Lake Cr (2)							
JUN-JUL	74	146	195	62	245	315	315
JUN-SEP	111	195	255	61	315	400	415
BULL LAKE CR near Lenore (2)							
JUN-JUL	65	76	85	72	94	108	118
JUN-SEP	80	97	109	72	121	138	152
WIND RIVER at Riverton (2)							
JUN-JUL	118	191	240	60	290	360	400
JUN-SEP	165	235	285	57	335	405	500
LT POPO AGIE RIVER nr Lander							
JUN-JUL	0.2	6.9	11.5	40	16.1	23	29
JUN-SEP	2.0	9.4	14.4	40	19.5	27	36
SF LT WIND nr Fort Washakie							
JUN-JUL	19.0	26	30	56	34	41	54
JUN-SEP	21	30	36	55	42	51	65
LT WIND RIVER nr Riverton							
JUN-JUL	42	47	95	51	143	213	188
JUN-SEP	48	62	115	51	168	246	225
BOYSEN RESERVOIR Inflow (2)							
JUN-JUL	109	193	250	48	305	390	516
JUN-SEP	73	196	280	46	365	485	609

- \* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.  
The average is computed for the 1971-2000 base period.
- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
  - (2) - The value is natural volume - actual volume may be affected by upstream water management.
  - (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level. Forecast issued in cooperation with Alberta Environment.

WIND RIVER BASIN  
Reservoir Storage (1000AF) End of May

Reservoir	Usable	***** Usable Storage *****		
	Capacity	This Year	Last Year	Average
BULL LAKE	151.8	77.5	90.6	95.3
BOYSEN	596.0	442.9	508.6	566.0
PILOT BUTTE	31.6	18.0	17.0	24.2

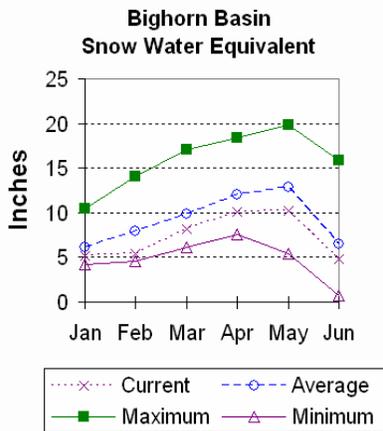
WIND RIVER BASIN  
Watershed Snowpack Analysis - June 1, 2007

Watershed	Number of	This Year as Percent of	
	Data Sites	Last Year	Average
WIND RIVER above Dubios	3	34	21
LITTLE WIND	2	0	9
POPO AGIE	4	0	4
WIND above Boysen Resv	7	40	14

# Bighorn River Basin

## Snow

Snowpack in this basin is below average for this time of year. The Nowood River is at 18% of average (melted out last year). The Greybull River SWE is at 6% of average (melted out last year). Shell Creek SWE is 95% of average (441% of last year). The Bighorn River Basin SWE, as a whole, is currently 74% of average (430% of last year). For more information see Basin Summary of Snow Courses at beginning of report.



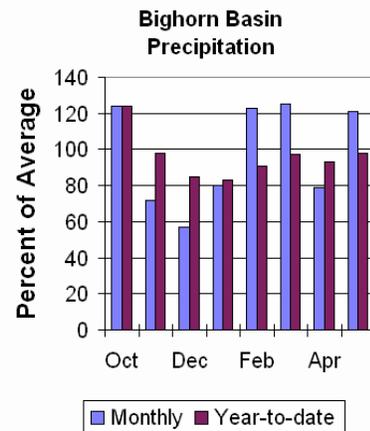
## Precipitation

Last month's precipitation was 121% of average (178% of last year). Sites ranged from 59-188% of average for the month. Year-to-date precipitation is 98% of average; that is 124% of last year at this time. Year-to-date percentages, from the 9 reporting stations, range from 89-120%.

## Reservoir

Boysen Reservoir is currently storing 442,900 ac-ft (78% of average). Bighorn

Lake is now at 105% of average (911,900 ac-ft). Boysen is currently storing 87% of last year volume at this time and Big Horn Lake is storing 115% of last year's volume. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.



## Streamflow

The 50% exceedance forecasts for the June through September runoffs are anticipated to be below average. Boysen Reservoir inflow is 280,000 ac-ft (46% of average); the Greybull River near Meeteetse should yield around 85,000 ac-ft (52% of average); Shell Creek near Shell should yield around 45,000 ac-ft (87% of average) and the Bighorn River at Kane should yield around 420,000 ac-ft (54% of average). See the following page for detailed runoff volumes.

=====

BIGHORN RIVER BASIN  
Streamflow Forecasts - June 1, 2007

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>					30 Yr Avg (1000AF)	
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		
BOYSEN RESERVOIR Inflow (2)							
JUN-JUL	109	193	250	48	305	390	516
JUN-SEP	73	196	280	46	365	485	609
GREYBULL RIVER nr Meeteetse							
JUN-JUL	29	46	58	53	70	87	110
JUN-SEP	45	69	85	52	101	125	163
SHELL CREEK nr Shell							
JUN-JUL	27	32	35	88	38	43	40
JUN-SEP	35	41	45	87	49	55	52
BIGHORN RIVER at Kane (2)							
JUN-JUL	143	250	320	47	390	495	675
JUN-SEP	86	335	420	54	505	755	785

\* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level. Forecast issued in cooperation with Alberta Environment.

BIGHORN RIVER BASIN  
Reservoir Storage (1000AF) End of May

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
	BOYSEN	596.0	442.9	508.6
BIGHORN LAKE	1356.0	911.9	796.0	867.1

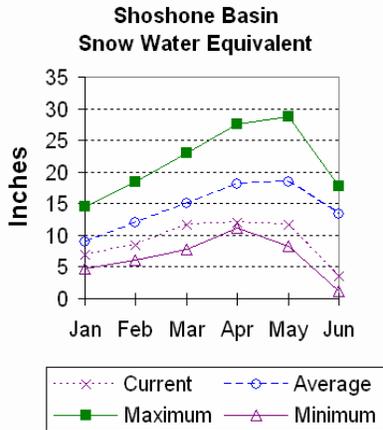
BIGHORN RIVER BASIN  
Watershed Snowpack Analysis - June 1, 2007

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
NOWOOD RIVER	2	0	18
GREYBULL RIVER	2	0	0
SHELL CREEK	3	4187	95
BIGHORN (Boysen-Bighorn)	7	4300	74

# Shoshone and Clarks Fork River Basins

## Snow

Snowpack in these basins are below average for this time of year. Snow Water Equivalent (SWE) is 17% of average (55% of last year) in the Shoshone River Basin. The Clarks Fork River Basin SWE is 38% of average (55% of last year). For more information see the Basin Summary of Snow Course Data at the beginning of this report.



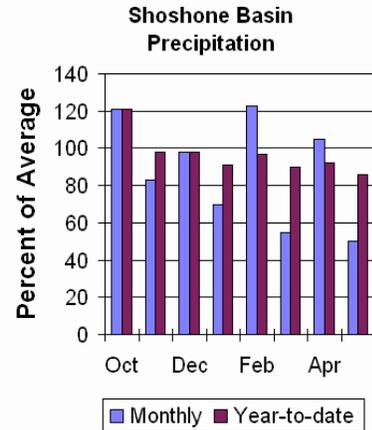
## Precipitation

Precipitation for last month was 50% of average (79% of last year) for the 8 reporting stations. Monthly percentages range from 19-91% of average. The basin year-to-date precipitation is now 86% of average (100% of last year). Year-to-date percentages range from 73-98% of average.

## Reservoir

Current storage in Buffalo Bill Reservoir is about 142% of average (101% of last

year's storage) – the reservoir is at about 87% of capacity. Currently, about 562,500 ac-ft are stored in the reservoir compared to 559,000 ac-ft 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 following values are the 50% exceedance forecasts for the June through September period. The North Fork Shoshone River at Wapiti is 169,000 ac-ft (46% of average). The South Fork of the Shoshone River near Valley is 96,000 ac-ft (46% of average), and the South Fork above Buffalo Bill Reservoir runoff is 79,000 ac-ft (45% of average). The Buffalo Bill Reservoir inflow is expected to yield around 320,000 ac-ft (54% of average). The yield for the Clarks Fork of the Yellowstone near Belfry, Montana is expected to be around 240,000 ac-ft (54% of average). See the following page for detailed runoff volumes.

=====
   
SHOSHONE & CLARKS FORK RIVER BASINS
   
Streamflow Forecasts - June 1, 2007
   
=====

Forecast Pt Forecast Period	<=== Drier ===		Future Conditions		=== Wetter ===>		30 Yr Avg (1000AF)
	90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
NF SHOSHONE RIVER at Wapiti							
JUN-JUL	17.0	91	141	46	191	266	305
JUN-SEP	30	114	169	46	224	309	365
SF SHOSHONE RIVER nr Valley							
JUN-JUL	41	63	78	45	93	115	172
JUN-SEP	48	77	96	46	115	144	210
SF SHOSHONE RIVER abv Buffalo Bill							
JUN-JUL	31	51	77	47	103	140	163
JUN-SEP	6.0	50	79	45	108	152	174
BUFFALO BILL DAM Inflow (2)							
JUN-JUL	200	245	275	53	305	350	515
JUN-SEP	230	285	320	54	355	410	595
CLARKS FORK RIVER nr Belfry							
JUN-JUL	51	146	210	54	275	370	390
JUN-SEP	54	165	240	54	315	425	445

\* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level. Forecast issued in cooperation with Alberta Environment.

=====
   
SHOSHONE & CLARKS FORK RIVER BASINS
   
Reservoir Storage (1000AF) End of May
   
=====

Reservoir	Usable	***** Usable Storage *****		Average
	Capacity	This Year	Last Year	
BUFFALO BILL	646.6	562.5	559.0	395.7

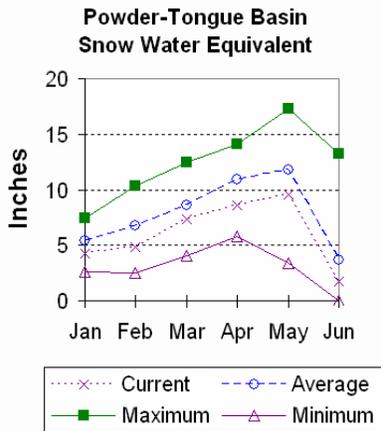
=====
   
SHOSHONE & CLARKS FORK RIVER BASINS
   
Watershed Snowpack Analysis - June 1, 2007
   
=====

Watershed	Number of	This Year as Percent of	
	Data Sites	Last Year	Average
SHOSHONE RIVER	6	55	17
CLARKS FORK in WY	7	55	38

# Powder and Tongue River Basins

## Snow

Snow water equivalent (SWE) in the Upper Tongue River drainage is 71% of average (2725% of last year). The Goose Creek drainage is melted out. SWE in the Clear Creek drainage is 24% of average and melted out last year. Crazy Woman Creek drainage is 39% of average and was melted out last year. Upper Powder River drainage SWE is 18% of average and was melted out last year. Powder River basin SWE, in Wyoming is 22% of average and was melted out last year. For more information see Basin Summary of Snow Courses at beginning of report.



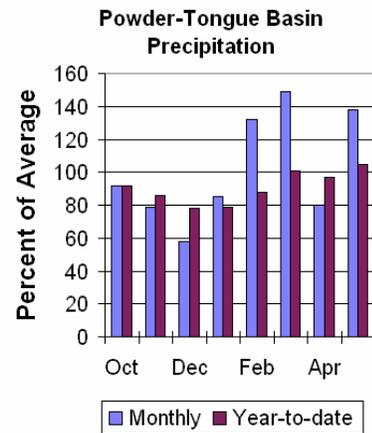
## Precipitation

Last month's precipitation was 138% of average for the 9 reporting stations (176% of last year). Monthly percentages range from 79-226% of average. Year-to-date precipitation is 105% of average in the basin; this is 125% of last year at this time. Precipitation for the year ranges from 76-122% of average at the reporting stations.

## Reservoir

Tongue River Reservoir current

storage is 80,200 ac-ft compared to 60,000 ac-ft last year, which is 101% of capacity or 167% of average.



## Streamflow

The following runoff values are the 50% probability forecasts for the June through September period. The yield for Tongue River near Dayton is 64,000 ac-ft (90% of average). Big Goose Creek near Sheridan is 37,000 ac-ft (84% of average). Little Goose Creek near Bighorn is 26,000 ac-ft (90% of average). The Tongue River Inflow is 134,000 ac-ft (88% of average). The Middle Fork of the Powder River near Barnum is 3,700 ac-ft (54% of average). The North Fork of the Powder River near Hazelton should yield around 3,000 ac-ft (51% of average). Rock Creek near Buffalo will yield about 11,100 ac-ft (70% of average), and Piney Creek at Kearny should yield about 21,000 ac-ft (66% of average). The Powder River at Moorehead is 68,000 ac-ft (53% of average). The Powder River near Locate is 73,000 ac-ft (52% of average). See the following page for detailed runoff volumes.

POWDER & TONGUE RIVER BASINS  
Streamflow Forecasts - June 1, 2007

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>					30 Yr Avg (1000AF)	
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		
=====							
TONGUE RIVER nr Dayton (2)							
JUN-JUL	34	45	52	90	59	70	58
JUN-SEP	43	56	64	90	72	85	71
BIG GOOSE CREEK nr Sheridan							
JUN-JUL	15.0	24	30	86	36	45	35
JUN-SEP	21	31	37	84	43	53	44
LITTLE GOOSE CREEK nr Big Horn							
JUN-JUL	13.4	16.8	19.1	91	21	24	21
JUN-SEP	17.7	23	26	90	29	34	29
TONGUE RIVER RESERVOIR Inflow (2)							
JUN-JUL	65	94	114	91	134	163	126
JUN-SEP	74	110	134	88	158	194	153
MIDDLE FORK POWDER nr Barnum							
JUN-JUL	1.9	2.2	3.2	54	4.8	7.1	5.9
JUN-SEP	1.8	2.1	3.7	54	5.3	7.8	6.9
NORTH FORK POWDER nr Hazelton							
JUN-JUL	0.6	1.7	2.6	51	3.5	4.8	5.1
JUN-SEP	0.5	2.0	3.0	51	4.0	5.5	5.9
ROCK CREEK nr Buffalo							
JUN-JUL	3.5	6.4	8.4	70	10.4	13.3	12.0
JUN-SEP	5.3	8.8	11.1	70	13.4	16.9	15.9
PINEY CREEK at Kearny							
JUN-JUL	15.7	16.9	19.4	67	24	31	29
JUN-SEP	5.8	14.8	21	66	27	36	32
POWDER RIVER at Moorehead							
JUN-JUL	24	30	56	53	82	121	105
JUN-SEP	23	41	68	53	95	135	128
POWDER RIVER near Locate							
JUN-JUL	4.0	22	34	29	46	64	116
JUN-SEP	24	58	73	52	88	121	141

\* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

Reservoir	Usable	***** Usable Storage *****		
	Capacity	This Year	Last Year	Average
TONGUE RIVER	79.1	80.2	60.0	48.0

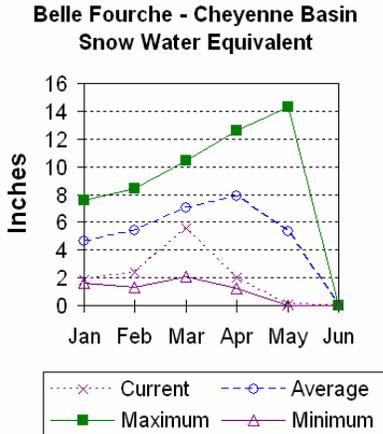
POWDER & TONGUE RIVER BASINS  
Watershed Snowpack Analysis - June 1, 2007

Watershed	Number of	This Year as Percent of	
	Data Sites	Last Year	Average
UPPER TONGUE RIVER	7	2725	71
GOOSE CREEK	2	0	0
CLEAR CREEK	2	0	24
CRAZY WOMAN CREEK	1	0	39
UPPER POWDER RIVER	3	0	18
POWDER RIVER in WY	5	0	22

# Belle Fourche and Cheyenne River Basins

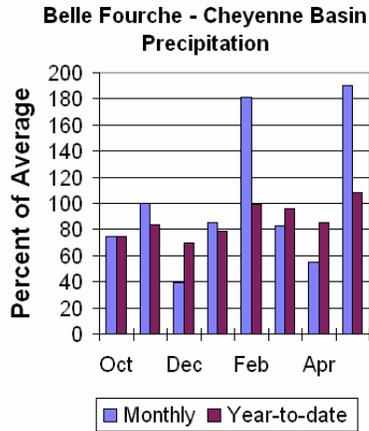
## Snow

The Belle Fourche River Basin is currently melted out. See the Basin summary of Snow Course Data at the beginning of this report for a detailed listing.



## Precipitation

Precipitation for last month was 190% of average or 137% of last year in the Black Hills. There were 2 reporting stations. Monthly percentages range from 166-231%. Year-to-date precipitation is 108% of average and 84% of last year's amount.



## Reservoir

Current reservoir storage is around 61% of average in the basin. Angostura is currently storing 40% of average (47,300 ac-ft), about 39% of capacity. Belle Fourche reservoir is storing 81% of average (123,600 ac-ft), about 69% of capacity. Deerfield reservoir is storing 93% of average (12,700 ac-ft), about 84% of capacity. Keyhole reservoir is storing 58% of average (68,700 ac-ft), 35% of capacity. Pactola reservoir is storing 70% of average (34,100 ac-ft), 62% of capacity. Shadehill reservoir is storing 46% of average (31,400 ac-ft), 39% of capacity. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.

## Streamflow

The following runoff values are the 50% probability forecasts for the June through July period. The Deerfield Reservoir Inflow is 1,560 ac-ft (68% of average). Pactola Reservoir Inflow is expected to yield around 5,800 ac-ft (54% of average). See the following page for detailed runoff volumes.

BELLE FOURCHE & CHEYENNE RIVER BASINS  
Streamflow Forecasts - June 1, 2007

Forecast Pt Forecast Period	<=== Drier ===		Future Conditions		=== Wetter ===>		30 Yr Avg (1000AF)
	90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
DEERFIELD RESERVOIR Inflow							
JUN-JUL	0.2	1.0	1.6	68	2.1	2.9	2.3
PACTOLA RESERVOIR Inflow							
JUN-JUL	2.8	3.1	5.8	54	9.3	14.5	10.8

\* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level. Forecast issued in cooperation with Alberta Environment.

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

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
ANGOSTURA	122.1	47.3	56.3	117.2
BELLE FOURCHE	178.4	123.6	126.0	152.3
DEERFIELD	15.2	12.7	12.3	13.6
KEYHOLE	193.8	68.7	76.1	118.9
PACTOLA	55.0	34.1	40.4	48.6
SHADEHILL	81.4	31.4	47.2	68.7

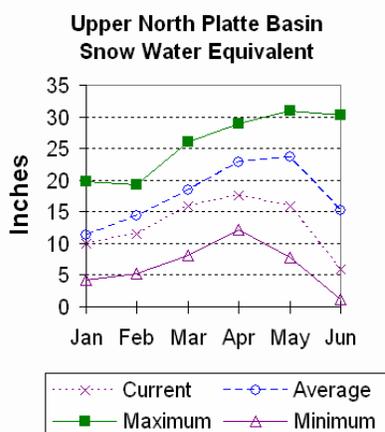
BELLE FOURCHE & CHEYENNE RIVER BASINS  
Watershed Snowpack Analysis - June 1, 2007

Watershed	Number of Data Sites	This Year as Percent of Last Year	Percent of Average
BELLE FOURCHE	2	0	0

# Upper North Platte River Basin

## Snow

Snowpack in this basin is below average for this time of year. SWE in the North Platte drainage area above Northgate is about 41% of average and 71% of last year at this time. SWE in the Encampment River drainage is about 31% of average and 46% of last year. Brush Creek SWE for the year is about 35% of average and 75% of last year's SWE. Medicine Bow and Rock Creek drainages SWE are about 51% of average and 105% of last year at this time. SWE in the North Platte River Basin above Seminoe Reservoir is showing about 39% of average for this time of the year (70% of last year). For more information see Basin Summary of Snow Courses at the beginning of this report.



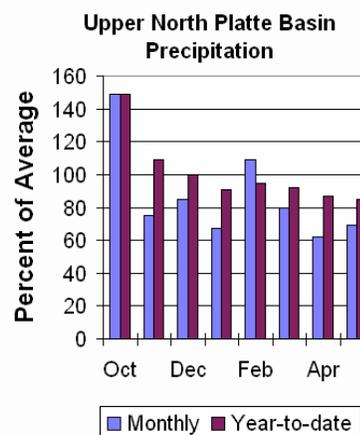
## Precipitation

Eight reporting stations indicate last month's precipitation at 69% of average or 152% of last year's amount. Precipitation varied from 55-112% of average last month. Total water-year-to-date precipitation is about 85% of average for the basin, which is about 83% of last year's amount. Year to date percentage ranges from 76-90% of average for the 8 reporting stations.

## Reservoirs

Seminoe Reservoir is estimated to be

storing 429,800 ac-ft or 42% of capacity. Seminoe Reservoir is also storing about 65% of average for this time of the year and 93% of 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 following yields are the 50% exceedance forecasts for the June through September period. Yield for the North Platte River near Northgate will be around 85,000 ac-ft (54% of average). The Encampment River near Encampment is 56,000 ac-ft (52% of average). Rock Creek near Arlington is 22,000 ac-ft (54% of average). Sweetwater River near Alcova runoff is 23,000 ac-ft (59% of average). Seminoe Reservoir inflow should be around 250,000 ac-ft (50% of average). See the following table for more detailed information on projected runoff.

UPPER NORTH PLATTE RIVER BASIN  
Streamflow Forecasts - June 1, 2007

Forecast Pt Forecast Period	<=== Drier ===		Future Conditions		=== Wetter ===>		30 Yr Avg (1000AF)
	90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	
NORTH PLATTE RIVER nr Northgate							
JUN-JUL	50	61	69	52	78	92	133
JUN-SEP	52	72	85	54	98	118	159
ENCAMPMENT RIVER nr Encampment							
JUN-JUL	24	41	52	53	63	80	99
JUN-SEP	25	43	56	52	69	87	108
ROCK CREEK nr Arlington							
JUN-JUL	16.8	18.5	19.6	52	21	23	38
JUN-SEP	19.0	21	22	54	23	25	41
SWEETWATER RIVER nr Alcova							
JUN-JUL	9.3	15.2	19.3	59	23	29	33
JUN-SEP	14.9	19.7	23	59	26	31	39
SEMINOE RESERVOIR Inflow							
JUN-JUL	104	167	210	48	253	316	435
JUN-SEP	76	180	250	50	320	424	500

\* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level. Forecast issued in cooperation with Alberta Environment.

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

Reservoir	Usable	***** Usable Storage *****		Average
	Capacity	This Year	Last Year	
SEMINOE	1016.7	429.8	460.2	658.3

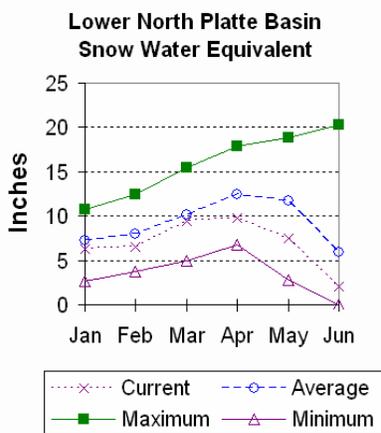
UPPER NORTH PLATTE RIVER BASIN  
Watershed Snowpack Analysis - June 1, 2007

Watershed	Number of	This Year as Percent of	
	Data Sites	Last Year	Average
N PLATTE above Northgate	5	71	41
ENCAMPMENT RIVER	3	46	31
BRUSH CREEK	2	75	35
MEDICINE BOW & ROCK CREEKS	2	105	51
N PLATTE above Seminoe	13	70	39

# Lower North Platte River Basin

## Snow

Snowpack in this basin is below average for this time of year. The Sweetwater drainage snow is melted out. Deer and LaPrele Creeks SWE are melted out. SWE for the North Platte above the Laramie River drainage is 35% of average (70% of last year). SWE for the Laramie River above Laramie is 48% of average (243% of last year). SWE for the Little Laramie River is 4% of average and was melted out last year. The Laramie River above mouth, SWE is 37% of average (251% of last year). SWE for the Lower North Platte River Basin is at 35% of average (70% of last year). For more information see Basin Summary of Snow Courses at the beginning of this report.



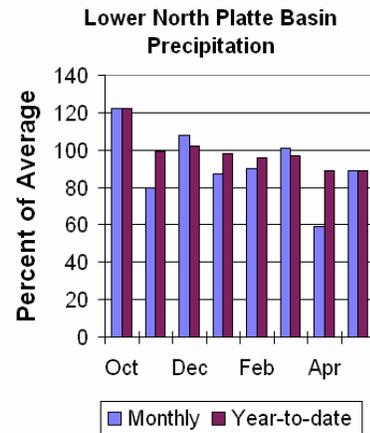
## Precipitation

Last month's precipitation was 89% of average or 181% of last year's amount. Of the 8 reporting stations, percentages for the month range from 50-133%. The water year-to-date precipitation for the basin is currently 89% of average (98% of last year). Year-to-date percentages range from 72-127%.

## Reservoir

The Lower North Platte River basin reservoir storage is below average at 66%.

Reservoir storage is as follows: Alcova 180,700 ac-ft (101% of average); Glendo 498,600 ac-ft (99% of average); Guernsey 27,500 ac-ft (76% of average); Pathfinder 274,100 ac-ft (35% of average); Seminoe 429,800 ac-ft (65% of average); and Wheatland #2 46,600 ac-ft (79% of average).



## Streamflow

The following yields are based on the 50% exceedance forecasts for the June through September period. The Sweetwater near Alcova is forecast to yield about 23,000 ac-ft (59% of average). LaPrele Creek above the reservoir is forecast to yield 2,500 ac-ft (48% of average). Alcova to Orin Gain is forecast to yield 13,500 ac-ft (41% of average). North Platte River below Guernsey Reservoir is 220,000 ac-ft (44% of average), and below Glendo Reservoir is anticipated to yield around 190,000 ac-ft (40% of average). Laramie River near Woods Landing should yield around 58,000 ac-ft (65% of average). The Little Laramie near Filmore should produce about 28,000 ac-ft (60% of average). See the following table for more detailed information on projected runoff.

LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS  
Streamflow Forecasts - June 1, 2007

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>					30 Yr Avg (1000AF)	
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		
SWEETWATER RIVER nr Alcova							
JUN-JUL	9.3	15.2	19.3	59	23	29	33
JUN-SEP	14.9	19.7	23	59	26	31	39
LaPRELE CREEK abv Reservoir							
JUN-JUL	0.1	0.6	2.3	47	4.0	6.5	4.9
JUN-SEP	0.1	0.8	2.5	48	4.2	6.7	5.2
NORTH PLATTE - Alcova to Orin Gain							
JUN-JUL	0.2	1.2	9.0	36	17.7	31	25
JUN-SEP	0.3	4.1	13.5	41	23	37	33
NORTH PLATTE RIVER blw Glendo Res							
JUN-JUL	66	133	178	41	225	290	440
JUN-SEP	72	142	190	40	240	310	470
NORTH PLATTE RIVER blw Guernsey Res							
JUN-JUL	59	139	193	43	245	325	450
JUN-SEP	73	161	220	44	280	365	500
LARAMIE RIVER nr Woods							
JUN-JUL	23	39	50	65	61	77	77
JUN-SEP	29	46	58	65	70	87	89
LITTLE LARAMIE RIVER nr Filmore							
JUN-JUL	17.0	22	25	60	28	33	42
JUN-SEP	19.3	25	28	60	32	37	47

\* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level. Forecast issued in cooperation with Alberta Environment.

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

Reservoir	Usable	***** Usable Storage *****		
	Capacity	This Year	Last Year	Average
ALCOVA	184.3	180.7	179.7	178.8
GLENDO	506.4	498.6	415.1	503.4
GUERNSEY	45.6	27.5	27.8	36.2
PATHFINDER	1016.5	274.1	301.5	775.1
SEMINOE	1016.7	429.8	460.2	658.3
WHEATLAND #2	98.9	46.6	51.5	59.0

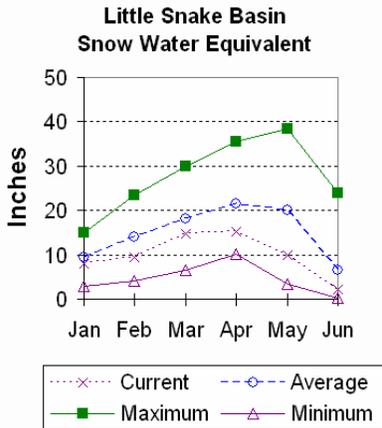
LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS  
Watershed Snowpack Analysis - June 1, 2007

Watershed	Number of Data Sites	This Year as Percent of	
		Last Year	Average
SWEETWATER	2	0	0
DEER & LaPRELE CREEKS	2	0	0
N PLATTE abv Laramie R.	17	70	35
LARAMIE RIVER abv Laramie	5	243	48
LITTLE LARAMIE RIVER	2	0	4
LARAMIE RIVER above mouth	6	251	37
NORTH PLATTE	17	70	35

# Little Snake River Basin

## Snow

Currently, snow water equivalent (SWE) in the Little Snake River drainage is 32% of average (46% of last year). For more information see Basin Summary of Snow Courses at beginning of this report.



## Streamflow

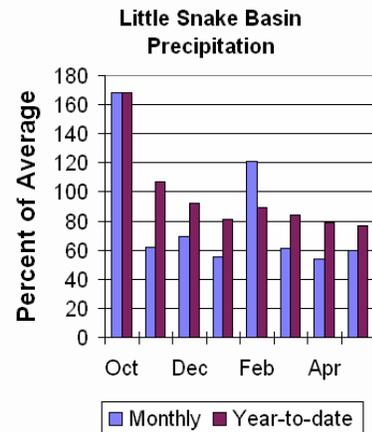
The 50% exceedance forecast for the Little Snake River drainage is expected to be below average this year. Stream yields are based on the 50% exceedance forecast for the June through July period. The Little Snake River near Slater should yield around 19,000 ac-ft (27% of average). The Little Snake River near Dixon is estimated to yield around 23,000 ac-ft (17% of average). See the following table for more detailed information on projected runoff.

## Precipitation

Precipitation across the basin was below average this past month. Last Month's precipitation was 60% of average (118% of last year) for the 5 reporting stations. Last month's precipitation ranged from 43-78% of average. The Little Snake River basin water-year-to-date precipitation is currently 77% of average (72% of last year). Year-to-date percentages range from 74-87% of average.

## Reservoir

High Savery Dam - Pending



=====

LITTLE SNAKE RIVER BASIN  
Streamflow Forecasts - June 1, 2007

=====

Forecast Pt Forecast Period	<=== Drier ===		Future Conditions		=== Wetter ===>		30 Yr Avg (1000AF)
	90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
Little Snake River nr Slater							
APR-JUL	83	86	90	57	96	105	159
JUN-JUL	12.0	15.0	19.0	27	25	34	71
Little Snake River nr Dixon							
APR-JUL	143	149	155	47	165	184	330
JUN-JUL	11.0	17.0	23	17	33	52	133

\* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level. Forecast issued in cooperation with Alberta Environment.

=====

LITTLE SNAKE RIVER BASIN  
Watershed Snowpack Analysis - June 1, 2007

=====

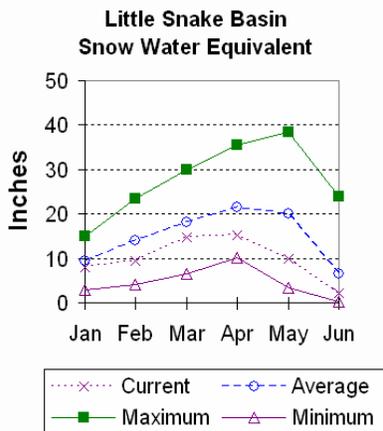
Watershed	Number of Data Sites	This Year as Percent of Last Year	Percent of Average
LITTLE SNAKE RIVER	6	46	32

=====

# Upper Green River Basin

## Snow

Snow water equivalent (SWE) is below average in the Upper Green River drainage this year. The Green River Basin snow above Warren Bridge is melted out. SWE on the west side of the Upper Green River Basin is about 5% of average (8% of last year). Newfork River Basin snow is now melted out. Big Sandy-Eden Valley Basin is melted out. SWE in the Green River Basin above Fontenelle Reservoir is about 4% of average (8% of last year). For more information see the Basin Summary of Snow Courses at the beginning of this report.



This is 98% of average. Eden Reservoir - No Report. Fontenelle Reservoir is 129,800 ac-ft or 38% of capacity. This is 71% of average. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.

## Streamflow

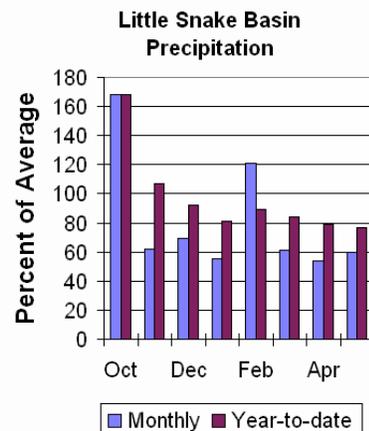
The 50% exceedance forecasts for the June through July runoff period in the Upper Green River Basin are forecast below average. The yield on the Green River at Warren Bridge is around 90,000 ac-ft (48% of average). Pine Creek above Fremont Lake is 37,000 ac-ft (44% of average). New Fork River near Big Piney is 98,000 ac-ft (33% of average). Fontenelle Reservoir Inflow is estimated to be 160,000 ac-ft (28% of average), and Big Sandy near Farson is expected to be around 13,000 ac-ft (33% of average). See the following table for more detailed information on projected runoff.

## Precipitation

The 11 reporting precipitation sites in the basin were 35% of average last month (99% of last year). Last month's precipitation varied from 14-60% of average. Water year-to-date precipitation is about 74% of average (78% of last year). Year to date percentage of average ranges from 68-85% for the 11 reporting stations.

## Reservoir

Storage in Big Sandy Reservoir is 28,700 ac-ft or 75% of capacity.



UPPER GREEN RIVER BASIN  
Streamflow Forecasts - June 1, 2007

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>					30 Yr Avg (1000AF)	
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		
Green River at Warren Bridge							
APR-JUL	128	143	153	58	165	183	265
JUN-JUL	65	79	90	48	102	120	186
Pine Creek abv Fremont Lake							
APR-JUL	59	61	64	62	69	77	104
JUN-JUL	26	32	37	44	42	51	84
New Fork River nr Big Piney							
APR-JUL	142	164	182	46	210	235	395
JUN-JUL	58	80	98	33	125	149	293
Fontenelle Reservoir Inflow							
APR-JUL	255	285	320	37	355	420	860
JUN-JUL	98	128	160	28	198	265	570
Big Sandy River nr Farson							
APR-JUL	24	26	29	50	32	37	58
JUN-JUL	7.4	10.5	13.0	33	15.9	21	39

\* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level. Forecast issued in cooperation with Alberta Environment.

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

Reservoir	Usable	***** Usable Storage *****		Average
	Capacity	This Year	Last Year	
BIG SANDY	38.3	28.7	37.8	29.4
EDEN		NO REPORT		
FONTENELLE	344.8	129.8	261.2	181.9

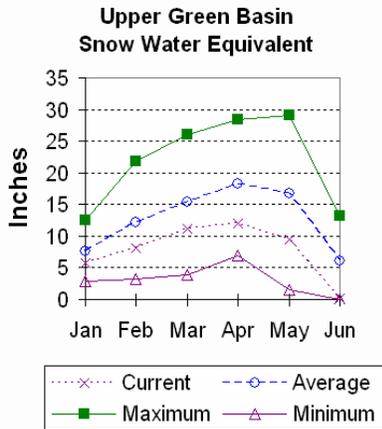
UPPER GREEN RIVER BASIN  
Watershed Snowpack Analysis - June 1, 2007

Watershed	Number of	This Year as Percent of	
	Data Sites	Last Year	Average
GREEN above Warren Bridge	4	0	0
UPPER GREEN (West Side)	5	8	5
NEWFORK RIVER	2	0	0
BIG SANDY/EDEN VALLEY	1	0	0
GREEN above Fontenelle	11	8	4

# Lower Green River Basin

## Snow

The Hams Fork Basin is melted out. Blacks Fork Basin SWE is currently 19% of average (32% of last year). The Henrys Fork drainage is melted out. SWE in the Green River Basin above Flaming Gorge is 7% of average (13% of last year). For more information see Basin Summary of Snow Courses at beginning of this report.



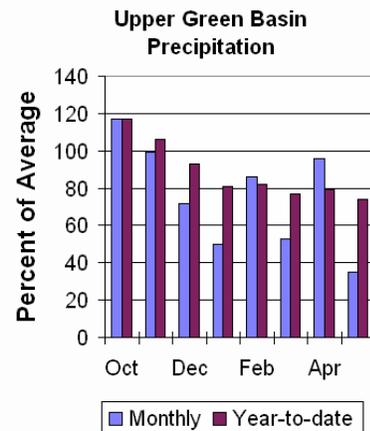
## Precipitation

Precipitation was below average for the 3 reporting stations during last month at 63% of average or 156% of last year. Precipitation ranged from 61-66% of average for the month. The basin year-to-date precipitation is currently 70% of average (71% of last year). Year-to-date percentages range from 66-76%.

## Reservoirs

Fontenelle Reservoir is currently storing 129,800 ac-ft; this is 71% of average (50% of last

year). Flaming Gorge is currently storing 3,149,000 ac-ft; this is 104% of average (105% of last year). Viva Naughton is storing 45,400 ac-ft or 107% of capacity; this is 116% of average.



## Streamflow

The 50% exceedance forecasts for the June through July runoff period in the Lower Green River Basin are forecast below average. The Green River near Green River is forecast to yield about 165,000 ac-ft (28% of average). The Blacks Fork near Robertson is forecast to yield 30,000 ac-ft (45% of average). East Fork of Smiths Fork near Robertson is forecast to yield 10,000 ac-ft (48% of average). Hams Fork below Pole Creek near Frontier is 10,000 ac-ft (30% of average). The Hams Fork Inflow to Viva Naughton Reservoir is 9,000 ac-ft (25% of average). The Flaming Gorge Reservoir inflow will be about 1754,000 ac-ft (24% of average). See the following table for more detailed information on projected runoff.

LOWER GREEN RIVER BASIN  
Streamflow Forecasts - June 1, 2007

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>					30 Yr Avg (1000AF)	
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		
Green River nr Green River, WY (2)							
APR-JUL	260	285	320	37	360	430	875
JUN-JUL	106	131	165	28	205	275	580
Blacks Fork nr Robertson							
APR-JUL	45	53	60	63	68	82	95
JUN-JUL	14.4	23	30	45	38	51	67
EF of Smiths Fork nr Robertson							
APR-JUL	12.2	13.2	15.2	52	18.0	23	29
JUN-JUL	7.0	8.0	10.0	48	12.8	17.8	21
Hams Fk blw Pole Ck nr Frontier							
APR-JUL	23	26	28	43	31	36	65
JUN-JUL	4.5	7.5	10.0	30	12.8	17.6	33
Hams Fork Inf to Viva Naughton Res							
APR-JUL	27	31	34	38	38	45	89
JUN-JUL	2.2	5.7	9.0	25	13.1	21	37
Flaming Gorge Reservoir Inflow (2)							
APR-JUL	345	365	410	35	475	590	1190
JUN-JUL	110	130	175	24	240	355	730

\* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level. Forecast issued in cooperation with Alberta Environment.

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

Reservoir	Usable	***** Usable Storage *****		Average
	Capacity	This Year	Last Year	
FONTENELLE	344.8	129.8	261.2	181.9
FLAMING GORGE	3749.0	3149.0	3009.0	3040.0
VIVA NAUGHTON RES	42.4	45.4	40.8	39.0

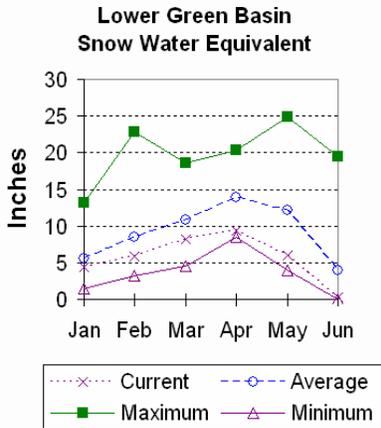
LOWER GREEN RIVER BASIN  
Watershed Snowpack Analysis - June 1, 2007

Watershed	Number of Data Sites	This Year as Percent of	
		Last Year	Average
HAMS FORK RIVER	3	0	0
BLACKS FORK	2	32	19
HENRYS FORK	2	0	0
GREEN above Flaming Gorge	18	13	7

# Upper Bear River Basin

## Snow

Snow in the Upper Bear River Basin in Utah is melted out. Snow in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is melted out. Bear River Basin snow, above the Idaho State line, is melted out. See the Basin Summary of Snow Course Data at the beginning of this report for more detailed information.



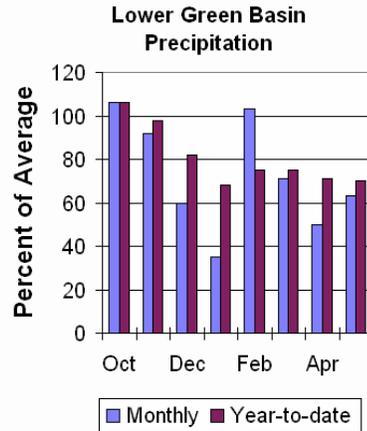
## Precipitation

Precipitation for last month was 58% of average for the 2 reporting stations; this is 143% of the precipitation received last year. The year-to-date precipitation, for the basin, is 72% of average; this is 75% of last year's amount.

## Reservoir

Storage, in Woodruff Narrows reservoir, is about 54,000 ac-ft (134% of average). Current reservoir

storage is about 94% of capacity. Reservoir storage last year at this time was 57,300 ac-ft at this time.



## Streamflow

The following 50% exceedance forecasts are for the June through September period. The Bear River near the Utah-Wyoming State Line is 27,000 ac-ft (33% of average). The Bear River above Reservoir near Woodruff is 8,500 ac-ft (12% of average). The Smiths Fork River near Border is 30,000 ac-ft (39% of average). See the following table for more detailed information on projected runoff.

=====
   
UPPER BEAR RIVER BASIN
   
Streamflow Forecasts - June 1, 2007
   
=====

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>					30 Yr Avg (1000AF)	
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		
Bear River nr UT-WY State Line							
APR-JUL	60	68	74	66	80	88	113
APR-SEP	63	72	79	63	86	95	125
JUN-JUL	8.1	16.4	22	31	28	36	70
JUN-SEP	10.9	20	27	33	34	43	82
Bear River ab Reservoir nr Woodruff							
APR-JUL	25	43	56	41	69	87	136
APR-SEP	28	46	59	42	72	90	142
JUN-JUL	2.0	3.8	5.1	8	13.6	26	64
JUN-SEP	3.4	6.0	8.5	12	17.5	31	71
Smiths Fork nr Border							
APR-JUL	40	44	46	45	48	52	103
APR-SEP	48	53	56	46	59	64	121
JUN-JUL	12.8	16.4	18.9	31	21	25	61
JUN-SEP	22	27	30	39	33	38	77

\* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level. Forecast issued in cooperation with Alberta Environment.

=====
   
UPPER BEAR RIVER BASIN
   
Reservoir Storage (1000AF) End of May
   
=====

Reservoir	Usable Capacity	***** Usable Storage *****		
		This Year	Last Year	Average
WOODRUFF NARROWS	57.3	54.0	57.3	40.3

=====
   
UPPER BEAR RIVER BASIN
   
Watershed Snowpack Analysis - June 1, 2007
   
=====

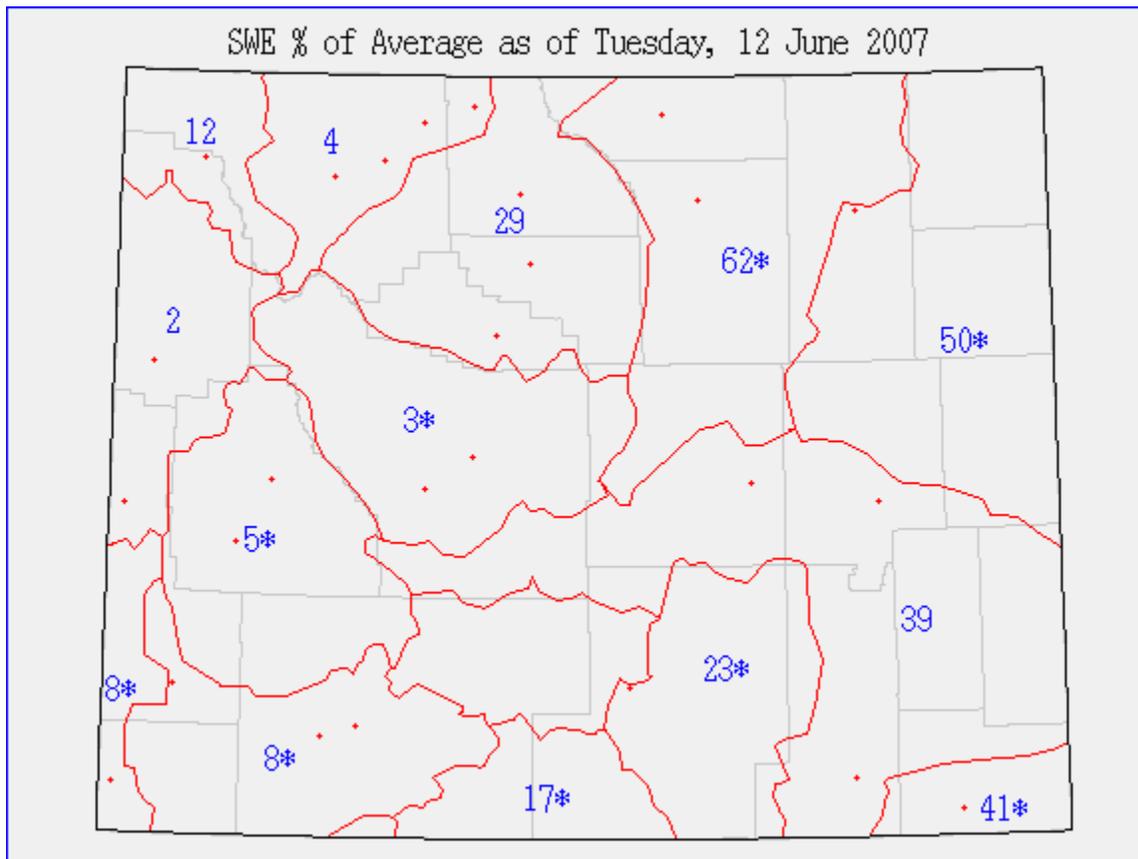
Watershed	Number of Data Sites	This Year as Percent of	
		Last Year	Average
UPPER BEAR RIVER in Utah	5	0	0
SMITHS & THOMAS FORKS	3	0	0
BEAR RIVER abv ID line	6	0	0
NORTHWEST	47	48	26
NORTHEAST	11	0	72
SOUTHEAST	20	60	27
SOUTHWEST	25	30	15

Issued by

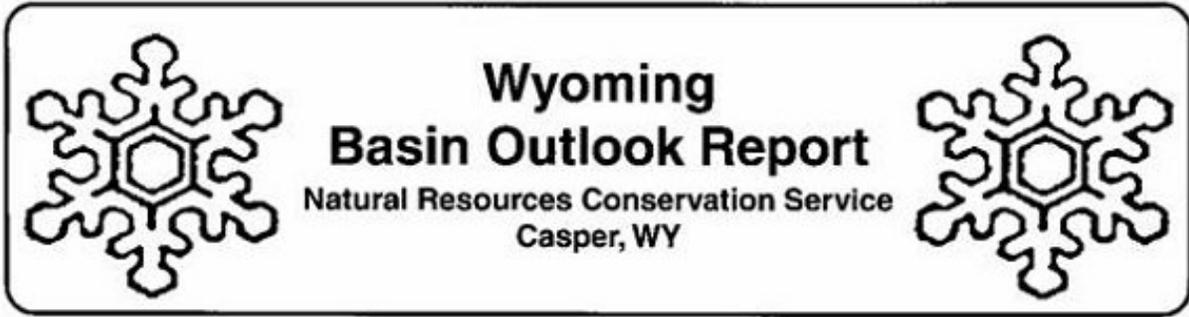
**Arlen Lancaster, Chief  
U.S. Department of Agriculture  
Natural Resources Conservation Service  
Washington D.C.**

Released by

**J Xavier Montoya  
State Conservationist  
N R C S  
Casper, Wyoming**



\* = Data may not provide a valid measure of conditions



P.O. Box 33124  
Casper, WY 82601

«NAME»  
«TITLE»  
«ADDRESS1»  
«ADDRESS2»  
«CITY», «STATE» «PostalCode»

«MailingListID»