



United States  
Department of  
Agriculture

Natural  
Resources  
Conservation  
Service

# Wyoming Basin Outlook Report February 1, 2006



# Basin Outlook Reports

## And

### Federal - State - Private

### Cooperative Snow Surveys

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#### *How forecasts are made*

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snow courses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be either above or below, the predicted value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast 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.

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# Wyoming Water Supply Outlook Report

## General

Generally, the snow water equivalent (SWE) across Wyoming is above average for this time of the year. Dec.-Jan. storms have covered Wyoming mountains with snow, especially in the western and southern mountains. SWE for the State of Wyoming as a whole is 111% of average for early February. Most of the snowfall has fallen in the mountains but not as much in the lowlands. Precipitation for last month in the basins varied from 62% of average to 149% of average for the State. Year-to-date precipitation is also above average for the year and varies from 92-132% of average in the basins. Basin reservoir levels for Wyoming vary from 64-135% of average for an overall average of 90%. Forecast runoff varies from 76-137% of average across Wyoming.

## Snowpack

Snow water equivalent (SWE), across Wyoming is above average for this time of year at 111%. SWE in the NW portion of Wyoming is now about 108% of average (148% of last year). NE Wyoming SWE is currently about 81% of average (124% of last year). The SE portion of Wyoming SWE is currently about 122% of average (134% of last year). The SW portion of Wyoming SWE is about 121% of average (122% of last year).

## Precipitation

Last month's precipitation varied across all of Wyoming. The Big Horn Basin had the lowest precipitation for the month at 62% of average. The Lower Green and Upper Bear River Basins had the highest precipitation amounts at 149% 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	+35%	Upper North Platte River	+10%
Yellowstone & Madison	+16%	Lower North Platte	+26%
Wind River	-01%	Little Snake River	+05%
Big Horn	-38%	Upper Green River	+26%
Shoshone & Clarks Fork	+04%	Lower Green River	+49%
Powder & Tongue River	-32%	Upper Bear River	+49%
Belle Fourche & Cheyenne	-35%		

## Streams

Stream flow yield is expected to be average across Wyoming. Most probable yield for the entire State of Wyoming is forecast to be about 102%; varying from 76-137%. The Snake River, Upper Yellowstone & Madison River Basins are expected to yield about 117, 109% of average, respectively; yield estimates range from 108-152% of average for the various forecast points in these basins. Yields from the Wind and Bighorn River Basins are expected to be about 82 and 84% of average; varying from 73-95% of average in the basins. Yields from the Shoshone and Clarks Fork River Basins of Wyoming are expected to yield about 90% of average; varying from 85-101% of average. Yields from the Powder & Tongue River Basins are expected to be about 76% of average; varying from 74-97%. Yields for the Belle Fourche & Cheyenne River Basins are expected to be about 132% of average. Yields for the Upper and Lower North Platte River of Wyoming will be about 129 and 134% of average, respectively -- varying from 76-138%. Yields for the Little Snake, Upper Green River, Lower Green River and Little Bear River Basins of Wyoming are expected to be 127, 111, 112 and 134% of average respectively -- yield estimates vary from 106-137%.

## Reservoirs

Two reservoirs are not reporting. Reservoirs on the North Platte River are well below average at 63% of average. Most of the reservoirs in the northeast are below average in storage at 65%. Reservoirs in the Wind River Basin are below average at 92%. Reservoirs on the Big Horn are below average at 97%. The Buffalo Bill Reservoir on the Shoshone is at 114%. Reservoirs on the Green River are above average at 102%. Reservoir storage varies across the state; however, reservoir storage is at 90% of average for the entire state. See the 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	85	85	84	101	100
ANGOSTURA	41	44	80	50	92
BELLE FOURCHE	32	38	57	57	84
BIG SANDY	65	29	49	134	224
BIGHORN LAKE	64	49	63	101	130
BOYSEN	91	98	99	92	93
BUFFALO BILL	73	72	64	114	101
BULL LAKE	47	68	57	84	70
DEERFIELD	78	87	84	92	89
EDEN			NO REPORT		
ENNIS LAKE	73	71	76	96	102
FLAMING GORGE	81	74	79	103	110
FONTENELLE	49	54	53	92	90
GLENDO	51	51	66	77	101
GRASSY LAKE	53	57	78	69	93
GUERNSEY	30	39	20	148	75
HEBGEN LAKE	74	82	71	105	91
JACKSON LAKE	48	16	58	82	302
KEYHOLE	37	49	53	71	77
PACTOLA	64	75	83	77	86
PALISADES	61	41	74	83	150
PATHFINDER	28	24	67	42	117
PILOT BUTTE	79	76	63	125	104
SEMINOE	40	26	56	71	152
SHADEHILL	42	59	60	69	70
TONGUE RIVER			NO REPORT		
VIVA NAUGHTON RES	76	76	71	107	100
WHEATLAND #2	47	30	46	104	156
WOODRUFF NARROWS	59	24	44	135	243
TOTAL OF 27 RESERVOIRS	63	54	70	90	115
Raw KAF Totals Current= 8303 Last Year= 7195 Average= 9239 Capacity= 13209					

# Basin Summary of Snow Course Data

FEBRUARY 2006

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
WYOMING Snow Course and SNOTEL Stations						
ASTER CREEK	7750	1/30/06	85	24.8	13.2	19.6
BALD MOUNTAIN SNOTEL	9380	2/01/06	42	10.5	10.1	13.5
BASE CAMP SNOTEL	7030	2/01/06	---	16.5	9.0	12.7
BATTLE MTN. SNOTEL	7440	2/01/06	32	10.2	8.5	7.8
BEARLODGE DIVIDE	4680	1/27/06	2	.6	.0	1.8
BEARTOOTH LK. SNOTEL	9280	2/01/06	60	16.8	9.8	16.2
BEAR TRAP SNOTEL	8200	2/01/06	18	3.7	2.6	3.5
BIG GOOSE	7760	1/29/06	11	1.9	.6	4.0
BIG GOOSE SNOTEL	7760	2/01/06	21	4.0	4.1	6.0
BIG PARK	8620	1/27/06	54	14.3	12.3	12.3
BIG SANDY SNOTEL	9080	2/01/06	50	11.3	11.5	9.5
BLACKWATER SNOTEL	9780	2/01/06	---	16.3	9.4	16.6
BLIND BULL SNOTEL	8900	2/01/06	78	20.3	12.8	18.4
BLIND PARK SNOTEL	6870	2/01/06	22	4.7	3.3	5.2
BLUE RIDGE	9620	1/25/06	22	5.1	10.8	7.7
BONE SPGS. SNOTEL	9350	2/01/06	38	8.9	9.0	10.6
BROOKLYN LK. SNOTEL	10220	2/01/06	63	17.6	11.3	15.3
BUCK CREEK	7960	1/30/06	29	8.2	4.1	6.3
BURGESS JCT. SNOTEL	7880	2/01/06	27	6.4	4.6	7.4
BURROUGHS CRK SNOTEL	8750	2/01/06	44	10.2	6.5	10.1
CANYON SNOTEL	8090	2/01/06	46	11.0	6.3	8.9
CASPER MTN. SNOTEL	7850	2/01/06	42	10.8	6.7	9.0
CASTLE CREEK	8400	1/25/06	9	1.7	.6	3.3
CCC CAMP	7000	1/30/06	38	9.3	7.1	8.4
CHALK CK #1 SNOTEL	9100	2/01/06	70	19.6	19.0	15.3
CHALK CK #2 SNOTEL	8200	2/01/06	46	10.3	12.3	9.9
CINNABAR PARK SNOTEL	9690	2/01/06	57	16.3	11.4	9.5
CLOUD PEAK SNOTEL	9850	2/01/06	35	8.2	8.9	8.1
COLE CANYON SNOTEL	5910	2/01/06	14	3.0	1.5	4.0
COLD SPRINGS SNOTEL	9630	2/01/06	17	3.5	5.6	6.0
COTTONWOOD CR SNOTEL	7700	2/01/06	---	20.5	10.6	14.2
CROW CREEK SNOTEL	8830	2/01/06	12	3.4	5.3	5.1
DEER PARK SNOTEL	9700	2/01/06	48	12.6	16.8	11.7
DITCH CREEK	6870	1/30/06	9	1.9	1.5	2.8
DIVIDE PEAK SNOTEL	8860	2/01/06	45	12.7	14.5	13.0
DOME LAKE SNOTEL	8880	2/01/06	29	6.9	6.5	7.9
DU NOIR	8760	1/26/06	18	3.2	3.4	5.8
EAST RIM DIV SNOTEL	7930	2/01/06	---	8.0	5.7	8.5
ELBO RANCH	7100	2/03/06	44	9.8	4.6	8.0
ELKHART PARK SNOTEL	9400	2/01/06	---	10.0	7.8	8.8
EVENING STAR SNOTEL	9200	2/01/06	70	18.6	11.8	19.7
FOUR MILE MEADOWS	7860	1/31/06	38	9.3	5.0	8.7
FOX PARK	9060	1/31/06	24	6.1	4.0	4.9
GEYSER CREEK	8500	1/26/06	14	2.4	2.3	4.8
GLADE CREEK	7040	1/30/06	75	20.8	10.3	16.1
GRANITE CRK SNOTEL	6770	2/01/06	---	16.2	9.2	12.4
GRANNIER MEADOWS	8860	1/25/06	33	7.5	9.9	9.1
GRASSY LAKE SNOTEL	7270	2/01/06	104	28.4	15.8	23.0
GRAVE SPRINGS SNOTEL	8550	2/01/06	26	6.3	4.0	5.7
GREYS BOUNDARY	5720	1/30/06	49	11.3	6.3	8.3
GROS VENTRE SNOTEL	8750	2/01/06	39	8.9	7.9	9.5
GROVER PARK DIVIDE	7000	1/30/06	33	7.4	5.0	7.5
HAIRPIN TURN	9480	1/31/06	47	13.2	8.7	11.1
HANSEN S.M. SNOTEL	8360	2/01/06	10	2.3	3.5	4.2
HAMS FORK SNOTEL	7840	2/01/06	---	11.2	8.0	8.4
HASKINS CREEK	8980	1/30/06	87	25.1	20.6	19.6
HOBACK GS	6640	1/26/06	34	8.3	5.2	--
HOBBS PARK SNOTEL	10100	2/01/06	31	7.1	11.3	9.8
HUCKLEBERRY DIVIDE	7300	1/30/06	60	16.9	9.6	14.2
INDIAN CREEK SNOTEL	9430	2/01/06	---	22.9	18.8	17.6
KELLEY R.S. SNOTEL	8180	2/01/06	---	15.5	11.6	10.7
KENDALL R.S. SNOTEL	7740	2/01/06	---	10.6	7.8	9.8
KIRWIN SNOTEL	9550	2/01/06	30	7.2	4.6	7.7
LA PRELE SNOTEL	8380	2/01/06	28	6.3	4.4	7.3
LARSEN CREEK	9020	1/25/06	37	9.3	10.1	8.4
LEWIS LAKE SNOTEL	7850	2/01/06	108	31.5	15.1	23.1
LIBBY LODGE	8750	1/31/06	36	9.5	6.5	7.8

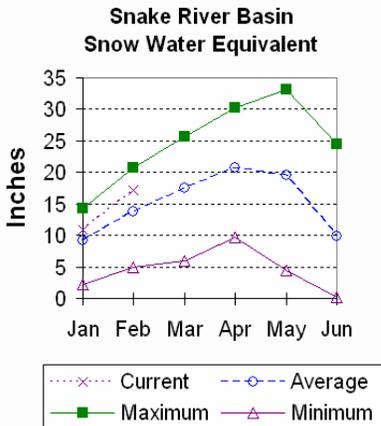
SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
LITTLE BEAR RUN	6240	1/30/06	13	2.9	1.1	2.6
LITTLE WARM SNOTEL	9370	2/01/06	26	6.2	5.6	7.8
LOOMIS PARK SNOTEL	8240	2/01/06	---	13.6	9.3	11.2
LUPINE CREEK	7380	1/30/06	27	6.0	3.5	6.4
MALLO	6420	1/30/06	23	5.3	1.9	5.2
MARQUETTE SNOTEL	8760	2/01/06	5	1.3	2.3	5.9
MEDICINE LODGE LAKES	9340	1/28/06	26	5.3	5.8	7.5
MIDDLE POWDER SNOTEL	7760	2/01/06	32	8.6	4.1	7.2
MORAN	6750	1/31/06	47	10.7	5.6	9.3
MOSS LAKE	9800	1/31/06	61	18.2	11.4	15.3
NEW FORK SNOTEL	8340	2/01/06	---	7.5	6.8	7.7
NORRIS BASIN	7500	1/29/06	28	7.2	4.0	7.6
NORTH BARRETT CREEK	9400	1/31/06	61	16.6	11.8	12.8
NORTH FRENCH SNOTEL	10130	2/01/06	81	24.1	15.8	18.4
NORTH RAPID CK SNTL	6130	2/01/06	18	3.9	2.0	5.0
NORTH TONGUE	8450	1/28/06	23	5.2	4.7	8.4
OLD BATTLE SNOTEL	9920	2/01/06	92	27.3	24.4	20.0
ONION GULCH	8780	1/29/06	20	2.1	2.4	5.2
OWL CREEK SNOTEL	8980	2/01/06	9	1.5	2.5	3.4
PARKERS PEAK SNOTEL	9400	2/01/06	54	13.8	10.7	14.8
PHILLIPS BENCH SNTL	8200	2/01/06	86	23.8	15.7	18.5
POCKET CREEK	9350	1/25/06	42	10.5	9.8	8.6
POLE MOUNTAIN	8700	1/30/06	18	3.8	4.4	6.1
POWDER RVR. PASS SNTL	9480	2/01/06	31	6.6	7.5	7.2
PURGATORY GULCH	8970	1/30/06	31	7.7	6.9	7.1
RANGER CREEK	8120	1/28/06	21	3.2	3.4	6.2
RENO HILL SNOTEL	8500	2/01/06	42	10.5	5.5	8.4
REUTER CANYON	6280	1/27/06	27	7.6	2.4	6.5
ROWDY CREEK	8300	1/26/06	53	15.0	10.8	14.6
RYAN PARK	8400	1/31/06	36	9.2	5.5	7.4
SAGE CK BASIN SNTL	7850	2/01/06	37	8.5	10.8	7.5
SALT RIVER SNOTEL	7600	2/01/06	---	11.9	8.3	9.2
SAND LAKE SNOTEL	10050	2/01/06	72	23.2	14.3	19.9
SANDSTONE RS SNOTEL	8150	2/01/06	46	10.9	7.4	9.7
SAWMILL DIVIDE	9260	1/29/06	29	6.2	5.2	8.8
SHELL CREEK SNOTEL	9580	2/01/06	41	8.8	8.8	9.9
SHERIDAN R.S.	7750	1/27/06	17	3.6	2.4	4.1
SNAKE RIVER STATION	6920	1/30/06	62	16.2	8.2	14.1
SNAKE RV STA SNOTEL	6920	2/01/06	66	16.1	7.9	12.6
SNIDER BASIN SNOTEL	8060	2/01/06	51	12.9	9.9	9.8
SOLDIER PARK	8780	1/29/06	10	1.1	.9	3.5
SOUTH BRUSH SNOTEL	8440	2/01/06	33	8.7	6.2	7.4
SOUTH PASS SNOTEL	9040	2/01/06	49	12.0	14.6	11.4
SPRING CRK. SNOTEL	9000	2/01/06	87	23.6	16.3	17.4
ST LAWRENCE ALT SNTL	8620	2/01/06	8	1.7	5.3	4.8
SUCKER CREEK SNOTEL	8880	2/01/06	28	7.0	6.5	7.2
SYLVAN LAKE SNOTEL	8420	2/01/06	48	12.8	10.1	15.2
SYLVAN ROAD SNOTEL	7120	2/01/06	33	8.1	5.6	8.8
T CROSS RANCH	7900	1/25/06	19	4.0	1.5	5.3
TETON PASS W.S.	7740	2/01/06	86	24.0	14.2	18.5
THUMB DIVIDE SNOTEL	7980	2/01/06	53	13.7	9.6	11.8
THUMB DIVIDE	7980	1/30/06	46	12.5	8.5	12.2
TIE CREEK SNOTEL	6870	2/01/06	14	3.4	.1	4.0
TIMBER CREEK SNOTEL	7950	2/01/06	5	.9	1.1	3.6
TOGWOTEE PASS SNOTEL	9580	2/01/06	72	18.4	11.3	16.9
TOWNSEND CRK SNOTEL	8700	2/01/06	18	4.0	7.8	5.6
TRIPLE PEAK SNOTEL	8500	2/01/06	---	22.4	12.1	16.6
TURPIN MEADOWS	6900	1/31/06	43	9.9	3.5	7.6
TWO OCEAN SNOTEL	9240	2/01/06	---	27.7	15.7	19.0
UPPER SPEARFISH	6500	1/31/06	21	5.0	1.4	4.7
WEBBER SPRING SNOTEL	9250	2/01/06	---	21.9	17.1	16.1
WHISKEY PARK SNOTEL	8950	2/01/06	87	25.8	16.9	18.5
WILLOW CREEK SNOTEL	8450	2/01/06	---	24.9	14.8	20.2
WINDY PEAK SNOTEL	7900	2/01/06	---	3.7	3.9	4.5
WOLVERINE SNOTEL	7650	2/01/06	29	7.6	5.1	8.6
WOOD ROCK G.S.	8440	1/29/06	21	4.6	2.5	6.5
YOUNTS PEAK SNOTEL	8350	2/01/06	50	10.9	7.0	12.0



# Snake River Basin

## Snow

The Snake River Basin snow water equivalent (SWE) is above average. SWE in the Snake River Basin above Jackson Lake is 128% of average (185% of last year at this time). Pacific Creek Basin SWE is 134% of average (181% of last year). Gros Ventre River Basin SWE is 108% of average (156% of last year). SWE in the Hoback River drainage is 112% of average (149% of last year). SWE in the Greys River drainage is 127% of average (165% of last year). In the Salt River area SWE is 124% of average (162% of last year). SWE in the Snake River Basin above Palisades is 124% of average (171% of last year). See the Basin Summary of Snow Courses at the beginning of this report for a detailed listing of snow course information.



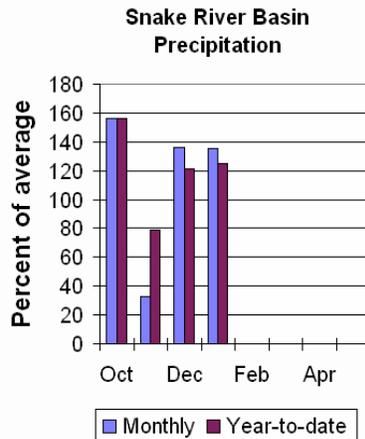
## Precipitation

Precipitation across the basin was above average last month. Monthly precipitation for the basin was 135% of average (226% of last year); last month's percentages range from 88-174% of average. Water-year-to-date precipitation is 125% of average for the Snake River Basin (167% of last year). Year-to-date percentages range from 106-135% of average.

## Reservoir

Currently, usable reservoir storage is 82% of average for the

three storage reservoirs in the basin. Grassy Lake storage is about 69% of average (8,100 ac-ft compared to 8,700 last year). Jackson Lake storage is 82% of average (403,400 ac-ft compared to 133,500 ac-ft last year). Palisades Reservoir storage is about 83% of average (858,500 ac-ft compared to 571,5 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 April through September are above average for the basin. The Snake near Moran is 1,080,000 ac-ft (119% of average). Snake above reservoir near Alpine is 3,170,000 ac-ft (116% of average). The Snake near Irwin is 4,550,000 ac-ft (118% of average). The Snake near Heise is 4,870,000 ac-ft (117% of average). Pacific Creek at Moran is 235,000 ac-ft (132% of average). Greys River above Palisades Reservoir is 480,000 ac-ft (122% of average). Salt River near Etna is 505,000 ac-ft (120% of average). See the following page for detailed runoff volumes.

SNAKE RIVER BASIN  
Streamflow Forecasts - February 1, 2006

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Avg (1000AF)
	90% (1000AF)	70% (1000AF)	50% (1000AF)	30% (1000AF)	10% (1000AF)	Chance of Exceeding * (% AVG.)	
SNAKE nr Moran (1,2)							
APR-JUL	805	920	975	120	1025	1145	815
APR-SEP	890	1020	1080	119	1140	1270	905
SNAKE ab resv nr Alpine (1,2)							
APR-JUL	2280	2630	2780	117	2930	3280	2370
APR-SEP	2610	2990	3170	116	3350	3730	2730
SNAKE nr Irwin (1,2)							
APR-JUL	3150	3680	3920	118	4160	4690	3330
APR-SEP	3680	4280	4550	118	4820	5420	3870
SNAKE near Heise (2)							
APR-JUL	3510	3900	4170	117	4440	4830	3560
APR-SEP	4120	4570	4870	117	5170	5620	4160
PACIFIC CREEK at Moran							
APR-JUL	192	210	225	132	240	260	171
APR-SEP	200	220	235	132	250	270	178
GREYS above Palisades							
APR-JUL	335	385	415	122	445	495	340
APR-SEP	395	445	480	122	515	565	395
SALT near Etna							
APR-JUL	315	370	410	121	450	505	340
APR-SEP	390	460	505	120	550	620	420

\* 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 January

Reservoir	Usable Capacity	***** This Year	***** Usable Storage Last Year	***** Average
GRASSY LAKE	15.2	8.1	8.7	11.8
JACKSON LAKE	847.0	403.4	133.5	490.1
PALISADES	1400.0	858.5	571.5	1040.3

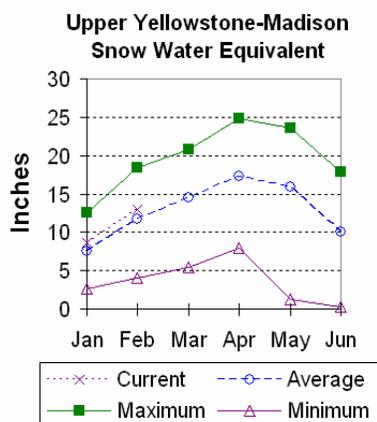
SNAKE RIVER BASIN  
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
SNAKE above Jackson Lake	9	185	128
PACIFIC CREEK	3	181	134
GROS VENTRE RIVER	3	150	108
HOBACK RIVER	5	150	112
GREYS RIVER	5	165	128
SALT RIVER	5	162	124
SNAKE above Palisades	28	170	124

# Yellowstone and Madison River Basins

## Snow

Snowfall in these basins has been good so far this year and the SWE in both basins is above average for this month. Snow water equivalent (SWE) is about 125% of average (151% of last year) in the Madison drainage. SWE in the Yellowstone drainage is about 111% of average (159% of last year at this time). See the "Snow Course Basin Summary" at the beginning of this document for more details on specific sites.



water (73% of capacity, 96% of average or 102% of last year's volume). Hebgen Lake is storing about 279,500 ac-ft of water (74% of capacity, 105% of average or 91% 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

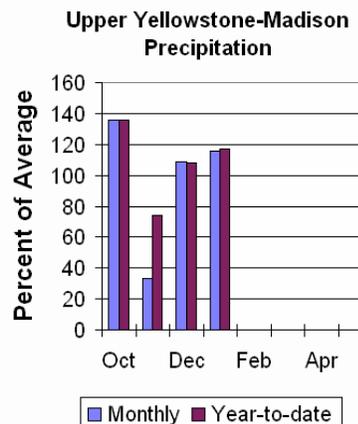
Water supply is estimated to be above average this year. All the following yields are the 50% exceedance forecasts from April through September. Yellowstone at Lake Outlet is 905,000 ac-ft (112% of average). Yellowstone at Corwin Springs will yield around 2,130,000 ac-ft (108% of average). Yellowstone near Livingston will yield around 2,480,000 ac-ft (109% of average). Hebgen Reservoir inflow is 550,000 ac-ft (110% of average). See the following page for detailed runoff volumes.

## Precipitation

Last month precipitation in the Madison and Yellowstone drainage was about 116% of average (181% of last year) for the 5 reporting stations: percentage range was from 86-130% of average. Water-year-to-date precipitation is about 117% of average (158% of last year's amount); year to date percentage ranges from 114-125%.

## Reservoir

Ennis Lake is storing about 29,900 ac-ft of



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UPPER YELLOWSTONE & MADISON RIVER BASINS  
Streamflow Forecasts - February 1, 2006

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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							
APR-JUL	545	615	665	113	715	785	590
APR-SEP	750	840	905	112	970	1060	805
YELLOWSTONE RIVER at Corwin Springs							
APR-JUL	1500	1670	1790	109	1910	2080	1650
APR-SEP	1790	1990	2130	108	2270	2470	1970
YELLOWSTONE RIVER near Livingston							
APR-JUL	1810	1970	2070	109	2170	2330	1900
APR-SEP	2180	2360	2480	109	2600	2780	2280
HEBGEN Reservoir Inflow							
APR-JUL	360	405	435	112	465	510	390
APR-SEP	465	515	550	110	585	635	500

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\* 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.

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

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Reservoir	Usable	***** Usable Storage *****		
	Capacity	This Year	Last Year	Average
ENNIS LAKE	41.0	29.9	29.2	31.3
HEBGEN LAKE	377.5	279.5	307.9	266.5

=====

UPPER YELLOWSTONE & MADISON RIVER BASINS  
Watershed Snowpack Analysis - February 1, 2006

=====

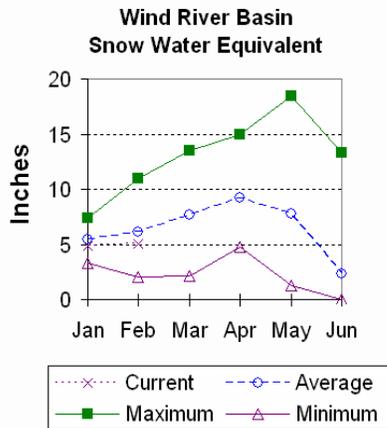
Watershed	Number of	This Year as Percent of	
	Data Sites	Last Year	Average
MADISON RIVER in WY	8	149	124
YELLOWSTONE RIVER in WY	12	156	112

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# 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 85% of average (148% of last year at this time). The Little Wind SWE is 60% of average water content (53% of last year), and the Popo Agie drainage SWE is about 87% of average (68% of last year). The Wind River Basin, above Boysen Reservoir SWE is about 82% of average (94% of last year). See the Basin Summary of Snow Course Data at the front of this report for details.

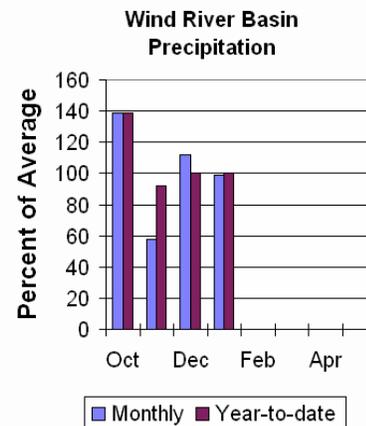


## Precipitation

Last months precipitation in the basin varied widely from 27-237% of average. Precipitation for the basin was about 99% of average from the 8 reporting stations; that is about 112% of last year's amount. Water year-to-date precipitation is 100% of average and about 106% of last year at this time. Year-to-date percentages range from 70-115% of average.

## Reservoirs

Current storage varies from 47-91% of average. Usable storage in Bull Lake is currently about 72,100 ac-ft (47% of capacity) - last year the reservoir was at 68% of capacity at this time. Boysen Reservoir is storing about 91% of capacity (543,800 ac-ft) - last year the reservoir was at 98% of capacity at this time. Pilot Butte is at 79% of capacity (25,000 ac-ft) - last year the reservoir was at 76% 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 April through September runoff period. Dinwoody Creek near Burris is 88,000 ac-ft (94% of average). The Wind River above Bull Lake Creek is 510,000 ac-ft (95% of average). Bull Lake Creek near Lenore is 146,000 ac-ft (80% of average). Wind River at Riverton will yield around 535,000 ac-ft (84% of average). Little Popo Agie River near Lander is around 45,000 ac-ft (85% of average). South Fork of Little Wind near Fort Washakie will yield around 64,000 ac-ft (76% of average). Little Wind River near Riverton will yield around 280,000 ac-ft (89% of average). Boysen Reservoir inflow will yield around 665,000 ac-ft (82% of average). See the following page for detailed runoff volumes.

WIND RIVER BASIN  
Streamflow Forecasts - February 1, 2006

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Avg (1000AF)
	90% (1000AF)	70% (1000AF)	50% (1000AF)	30% (1000AF)	10% (1000AF)	Chance of Exceeding * (% AVG.)	
DINWOODY CREEK nr Burris							
APR-JUL	42	53	61	92	69	80	67
APR-SEP	65	79	88	94	97	111	94
WIND RIVER abv Bull Lake Cr (2)							
APR-JUL	295	365	415	95	465	535	435
APR-SEP	380	460	510	95	560	640	535
BULL LAKE CR near Lenore (2)							
APR-JUL	76	102	120	81	138	164	148
APR-SEP	92	124	146	80	168	198	182
WIND RIVER at Riverton (2)							
APR-JUL	235	370	460	84	550	685	545
APR-SEP	300	440	535	84	630	770	640
LT POPO AGIE RIVER nr Lander							
APR-JUL	9.3	26	38	83	50	67	46
APR-SEP	14.7	33	45	85	57	75	53
SF LT WIND nr Fort Washakie							
APR-JUL	31	46	57	78	68	83	73
APR-SEP	35	52	64	76	76	93	84
LT WIND RIVER nr Riverton							
APR-JUL	107	190	250	89	310	395	280
APR-SEP	131	220	280	89	340	430	315
BOYSEN RESERVOIR Inflow (2)							
APR-JUL	295	480	600	84	720	905	717
APR-SEP	345	535	665	82	795	990	809

\* 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 January

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
BULL LAKE	151.8	72.1	103.6	85.9
BOYSEN	596.0	543.8	582.4	592.0
PILOT BUTTE	31.6	25.0	24.1	20.0

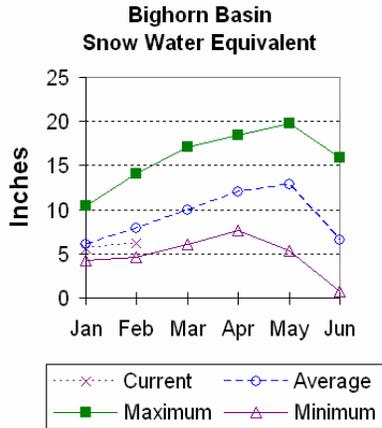
WIND RIVER BASIN  
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as Percent of Last Year	Percent of Average
WIND RIVER above Dubios	7	144	86
LITTLE WIND	2	53	60
POPO AGIE	7	69	86
WIND above Boysen Resv	14	96	82

# Bighorn River Basin

## Snow

Snowpack in this basin is below average for this time of year. Nowood River is at 83% of average (114% of last year). Greybull River SWE is at 72% of average (142% of last year). Shell Creek SWE is 78% of average (100% of last year). The Bighorn River Basin SWE, as a whole, is currently 79% of average (109% of last year). For more information see Basin Summary of Snow Courses at beginning of report.



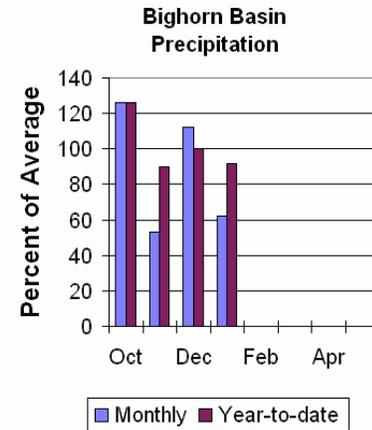
## Precipitation

Last month's precipitation was 62% of average (123% of last year). Sites ranged from 4-90% of average for the month. Year-to-date precipitation is 92% of average; that is 115% of last year at this time. Year-to-date percentages, from the 10 reporting stations, range from 72-105%.

## Reservoir

Boysen reservoir is currently storing 543,800 ac-ft (92% of average). Bighorn

Lake is now at 101% of average (870,000 ac-ft). Boysen is currently storing 93% of last year volume at this time and Big Horn Lake is storing 130% 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 April through September runoffs are anticipated to be below average. Boysen Reservoir inflow is 665,000 ac-ft (82% of average); the Greybull River near Meeteetse should yield around 152,000 ac-ft (76% of average); Shell Creek near Shell should yield around 63,000 ac-ft (88% of average) and the Bighorn River at Kane should yield around 935,000 ac-ft (84% of average). See the following page for detailed runoff volumes.

BIGHORN RIVER BASIN  
Streamflow Forecasts - February 1, 2006

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Avg (1000AF)
	90% (1000AF)	70% (1000AF)	Chance of Exceeding * (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
BOYSEN RESERVOIR Inflow (2)							
APR-JUL	295	480	600	84	720	905	717
APR-SEP	345	535	665	82	795	990	809
GREYBULL RIVER nr Meeteetse							
APR-JUL	81	97	108	73	119	135	148
APR-SEP	118	138	152	76	166	186	200
SHELL CREEK nr Shell							
APR-JUL	41	48	52	87	56	63	60
APR-SEP	52	58	63	88	68	74	72
BIGHORN RIVER at Kane (2)							
APR-JUL	580	735	840	84	950	1100	1000
APR-SEP	645	815	935	84	1055	1225	1110

\* 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 January

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
BOYSEN	596.0	543.8	582.4	592.0
BIGHORN LAKE	1356.0	870.0	670.6	859.5

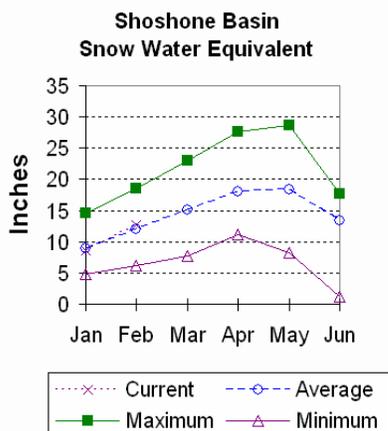
BIGHORN RIVER BASIN  
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as Percent of Last Year	Percent of Average
NOWOOD RIVER	5	131	91
GREYBULL RIVER	2	142	72
SHELL CREEK	4	100	78
BIGHORN (Boysen-Bighorn)	11	116	82

# Shoshone and Clarks Fork River Basin

## Snow

Snow Water Equivalent (SWE) is 87% of average (147% of last year) in the Shoshone River Basin. The Clarks Fork River Basin SWE is 106% of average (165% of last year). For more information see the Basin Summary of Snow Course Data at the beginning of this report.



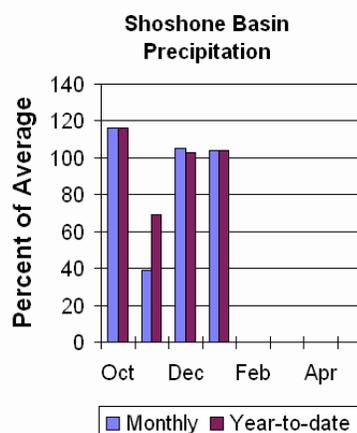
## Precipitation

Precipitation for last month was 104% of average (197% of last year). Monthly percentages range from 34-124% of average. The basin year-to-date precipitation is now 104% of average (157% of last year). Year-to-date percentages range from 70-118% of average.

## Reservoir

Current storage in Buffalo Bill Reservoir is about 114% of

average (101% of last year's storage); the reservoir is at about 73% of capacity. Currently, about 472,500 ac-ft are stored in the reservoir compared to 466,900 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

Water supply is estimated to be below average this year. The following values are the 50% exceedance forecasts for the April through September period. The North Fork Shoshone River at Wapiti is 520,000 ac-ft (100% of average). The South Fork of the Shoshone River near Valley is 230,000 ac-ft (87% of average), and the South Fork above Buffalo Bill Reservoir runoff is 191,000 ac-ft (85% of average). The Buffalo Bill Reservoir inflow is expected to yield around 725,000 ac-ft (90% of average). The yield for the Clarks Fork of the Yellowstone near Belfry, Montana is expected to be around 600,000 ac-ft (101% of average). See the following page for detailed runoff volumes.

SHOSHONE & CLARKS FORK RIVER BASINS  
Streamflow Forecasts - February 1, 2006

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Avg (1000AF)
	90% (1000AF)	70% (1000AF)	50% (1000AF)	30% (1000AF)	10% (1000AF)	Chance of Exceeding * (% AVG.)	
NF SHOSHONE RIVER at Wapiti							
APR-JUL	375	425	460	100	495	545	460
APR-SEP	430	485	520	100	555	610	520
SF SHOSHONE RIVER nr Valley							
APR-JUL	157	186	205	91	225	255	225
APR-SEP	175	210	230	87	250	285	265
SF SHOSHONE RIVER abv Buffalo Bill							
APR-JUL	110	153	183	85	214	254	215
APR-SEP	113	159	191	85	224	269	225
BUFFALO BILL DAM Inflow (2)							
APR-JUL	470	580	650	90	720	830	720
APR-SEP	530	645	725	90	805	920	805
CLARKS FORK RIVER nr Belfry							
APR-JUL	445	505	545	101	585	645	540
APR-SEP	500	560	600	101	640	700	595

\* 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 January

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
BUFFALO BILL	646.6	472.5	466.9	414.3

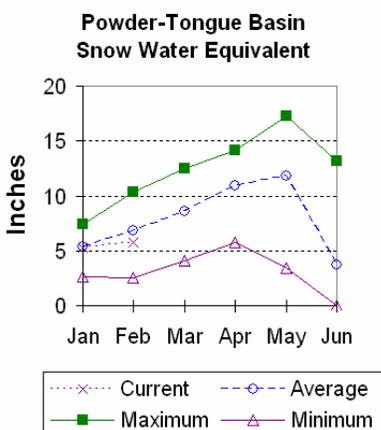
SHOSHONE & CLARKS FORK RIVER BASINS  
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
SHOSHONE RIVER	6	147	87
CLARKS FORK in WY	7	165	106

# Powder and Tongue River Basins

## Snow

Snow water equivalent (SWE) in the Upper Tongue River drainage is 80% of average (118% of last year). The Goose Creek drainage is 75% of average or 108% of last year. SWE in the Clear Creek drainage is 73% of average or 87% of last year. Crazy Woman Creek drainage is 70% of average or 88% of last year. Upper Powder River drainage SWE is 91% of average or 127% of last year. Powder River basin SWE, in Wyoming is 84% of average or 109% of last year. For more information see Basin Summary of Snow Courses at beginning of report.



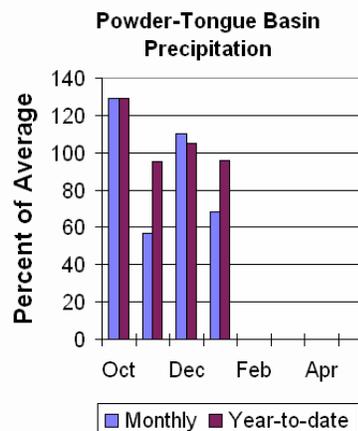
## Precipitation

Last month's precipitation was 68% of average for the 9 reporting stations (104% of last year). Monthly percentages range from 16-94% of average. Year-to-date precipitation is 96% of average in the basin; this is 113% of last year. Precipitation for the year ranges from 79-108% of average at the reporting stations.

## Reservoir

This is the Jan. report as there is no data for Feb. Tongue River

Reservoir was at 186% of average (114% of last year and 53% of capacity). Current storage was 41,800 ac-ft. Last year at this time the reservoir was storing about 36,600 ac-ft (average storage is about 22,500 ac-ft 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 runoff values are the 50% probability forecasts for the April through September period. The yield for Tongue River near Dayton is 94,000 ac-ft (86% of average). Little Goose Creek near Bighorn is 37,000 ac-ft (88% of average). The Tongue River Inflow is 200,000 ac-ft (80% of average). The Middle Fork of the Powder River near Barnum is 18,200 ac-ft (97% of average). The North Fork of the Powder River near Hazelton should yield around 10,000 ac-ft (96% of average). The estimated yield for Clear Creek near Buffalo is 35,000 ac-ft (90% of average). Rock Creek near Buffalo will yield about 19,700 ac-ft (82% of average), and Piney Creek at Kearny should yield about 42,000 ac-ft (81% of average). March through September values for the Powder River at Moorehead is 230,000 ac-ft (87% of average). The Powder River near Locate is 255,000 ac-ft (76% of average). See the following page for detailed runoff volumes.

POWDER & TONGUE RIVER BASINS  
Streamflow Forecasts - February 1, 2006

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)							
APR-JUL	54	71	82	85	93	110	96
APR-SEP	63	82	94	86	106	125	109
LITTLE GOOSE CREEK nr Big Horn							
APR-JUL	17.7	24	29	85	34	40	34
APR-SEP	24	32	37	88	42	50	42
TONGUE RIVER RESERVOIR Inflow (2)							
APR-JUL	85	140	178	81	217	272	220
APR-SEP	102	160	200	80	240	300	250
MIDDLE FORK POWDER nr Barnum							
APR-JUL	9.8	14.2	17.2	97	20	25	17.8
APR-SEP	10.6	15.1	18.2	97	21	26	18.7
NORTH FORK POWDER nr Hazelton							
APR-JUL	6.7	8.1	9.1	95	10.1	11.5	9.6
APR-SEP	7.4	8.9	10.0	96	11.1	12.6	10.4
CLEAR CREEK nr Buffalo							
APR-JUL	23	27	30	88	33	37	34
APR-SEP	27	32	35	90	38	43	39
ROCK CREEK nr Buffalo							
APR-JUL	10.9	14.0	16.1	81	18.2	21	19.9
APR-SEP	14.4	17.6	19.7	82	22	25	24
PINEY CREEK at Kearny							
APR-JUL	11.9	27	38	78	49	64	49
APR-SEP	15.6	31	42	81	53	68	52
POWDER RIVER at Moorehead							
MAR-JUL	91	159	205	85	250	320	240
MAR-SEP	115	185	230	87	275	345	265
POWDER RIVER near Locate							
MAR-JUL	149	195	230	74	265	310	310
MAR-SEP	165	220	255	76	290	345	335

\* 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.

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TONGUE RIVER RESERVOIR

NO REPORT

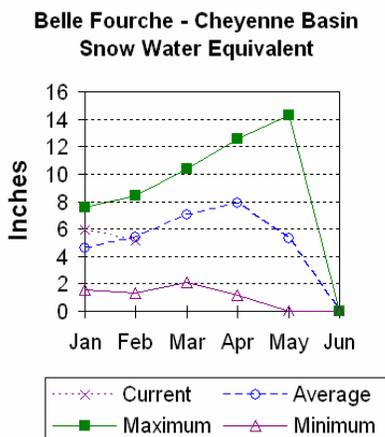
POWDER & TONGUE RIVER BASINS  
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as Percent of Last Year	Percent of Average
UPPER TONGUE RIVER	10	118	80
GOOSE CREEK	3	108	75
CLEAR CREEK	4	103	81
CRAZY WOMAN CREEK	3	111	83
UPPER POWDER RIVER	4	140	101
POWDER RIVER in WY	8	122	92

# Belle Fourche and Cheyenne River Basins

## Snow

The Belle Fourche River Basin is currently at 93% of average or 238% of last year at this time. See the Basin summary of Snow Course Data at the beginning of this report for a detailed listing.

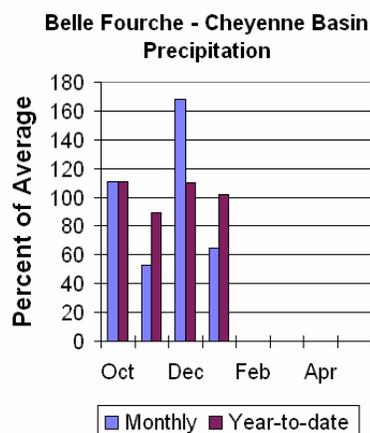


## Precipitation

Precipitation for last month was 65% of average or 94% of last year in the Black Hills. There were 2 reporting stations. Monthly percentages range from 5-74%. Year-to-date precipitation is 102% of average and 134% of last year's amount.

## Reservoir

Current reservoir storage is around 64% of average in the basin.



Angostura is currently storing 50% of average (49,500 ac-ft), about 41% of capacity. Belle Fourche reservoir is storing 57% of average (57,800 ac-ft), about 32% of capacity. Deerfield reservoir is storing 92% of average (11,800 ac-ft), about 78% of capacity. Keyhole reservoir is storing 71% of average (72,600 ac-ft), about 37% of capacity. Pactola reservoir is storing 77% of average (35,300 ac-ft), about 64% of capacity. Shadehill reservoir is storing 69% of average (34,000 ac-ft), about 42% 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 April through July period. The Deerfield Reservoir Inflow is 6,300 ac-ft (118% of average). Pactola Reservoir Inflow is expected to yield around 25,000 ac-ft (132% of average). See the following page for detailed runoff volumes.

BELLE FOURCHE & CHEYENNE RIVER BASINS  
Streamflow Forecasts - February 1, 2006

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Avg (1000AF)
	90% (1000AF)	70% (1000AF)	Chance of Exceeding * (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
DEERFIELD RESERVOIR Inflow							
MAR-JUL	3.9	6.0	7.5	119	9.0	11.1	6.3
APR-JUL	3.2	5.1	6.3	118	7.6	9.4	5.3
PACTOLA RESERVOIR Inflow							
MAR-JUL	11.2	22	29	138	36	47	21
APR-JUL	7.7	18.0	25	132	32	42	18.9

\* 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 January

Reservoir	Usable Capacity	***** Usable Storage *****		
		This Year	Last Year	Average
ANGOSTURA	122.1	49.5	53.6	98.1
BELLE FOURCHE	178.4	57.8	68.6	101.4
DEERFIELD	15.2	11.8	13.2	12.8
KEYHOLE	193.8	72.6	94.0	102.3
PACTOLA	55.0	35.3	41.1	45.8
SHADEHILL	81.4	34.0	48.4	49.1

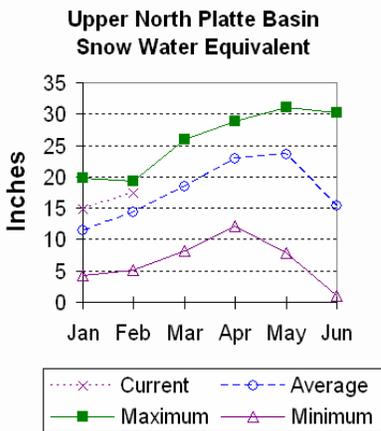
BELLE FOURCHE & CHEYENNE RIVER BASINS  
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as Percent of	
		Last Year	Average
BELLE FOURCHE	8	242	96

# Upper North Platte River Basin

## Snow

The snow courses above Seminoe Reservoir have about 122% of average snow water equivalent (SWE) recorded for this time of the year or 136% of last year. SWE in the drainage area above Northgate is about 119% of average or 134% of last year at this time. SWE in the Encampment River drainage is about 134% of average or 124% of last year. Brush Creek SWE for the year is about 125% of average or 151% of last year's SWE. Medicine Bow and Rock Creek drainages SWE are about 117% of average or 159% of last year at this time. For more information see Basin Summary of Snow Courses at the beginning of this report.



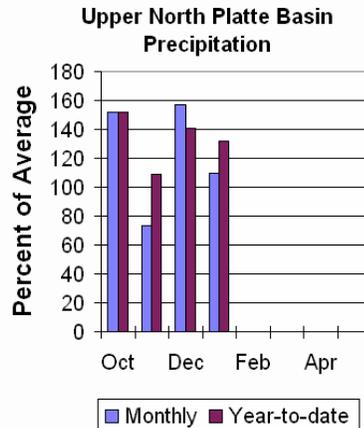
## Precipitation

Eight reporting stations indicate last month's precipitation was 110% of average or 97% of last year's amount. Precipitation varied from 56-175% of average last month. Total water-year-to-date precipitation is about 132% of average for the basin, which is about 132% of last year's amount. Year to date percentage ranges from 115-146% of average.

## Reservoirs

storing 407,500 ac-ft or 40% of capacity. Seminoe Reservoir is also storing about 71% of average for this time of the year and 152% of last year. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.

Seminoe Reservoir is estimated to be



## Streamflow

Water supply is estimated to be above average this year. The following yields are the 50% exceedance forecasts for the April through September period. Yield for the North Platte River near Northgate will be around 360,000 ac-ft (133% of average). The Encampment River near Encampment is 225,000 ac-ft (136% of average). Rock Creek near Arlington is 68,000 ac-ft (119% of average). Sweetwater River near Alcova runoff is 83,000 ac-ft (104% of average). Seminoe Reservoir inflow should be around 1,110,000 ac-ft (129% of average). See the following table for more detailed information on projected runoff.

UPPER NORTH PLATTE RIVER BASIN  
Streamflow Forecasts - February 1, 2006

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>					30 Yr Avg (1000AF)	
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		
NORTH PLATTE RIVER nr Northgate							
APR-JUL	219	279	325	133	374	452	245
APR-SEP	250	315	360	133	405	470	270
ENCAMPMENT RIVER nr Encampment							
APR-JUL	174	199	215	138	230	255	156
APR-SEP	183	210	225	136	240	265	165
ROCK CREEK nr Arlington							
APR-JUL	45	55	63	119	71	84	53
APR-SEP	49	60	68	119	76	90	57
SWEETWATER RIVER nr Alcova							
APR-JUL	31	59	77	104	95	123	74
APR-SEP	36	64	83	104	102	130	80
SEMINOE RESERVOIR Inflow							
APR-JUL	710	900	1030	129	1160	1350	800
APR-SEP	820	995	1110	129	1230	1400	860

\* 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 January

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
SEMINOE	1016.7	407.5	267.9	573.2

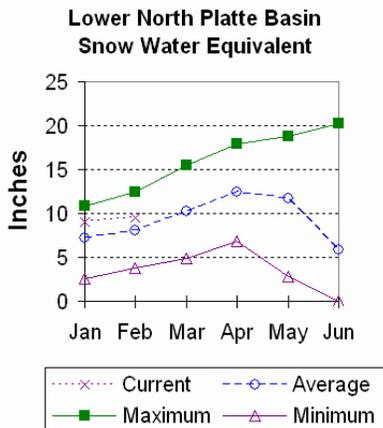
UPPER NORTH PLATTE RIVER BASIN  
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
N PLATTE above Northgate	7	134	119
ENCAMPMENT RIVER	4	127	134
BRUSH CREEK	5	151	125
MEDICINE BOW & ROCK CREEKS	3	159	117
N PLATTE above Seminoe	19	136	122

# Lower North Platte River Basin

## Snow

SWE for the North Platte River Basin is at 119% of average (132% of last year). The Sweetwater drainage SWE is currently at 102% of average (81% of last year). Deer and LaPrele Creek SWE is at 114% of average and 179% of last year. SWE for the North Platte above the Laramie River drainage is 119% of average (128% of last year). SWE for the Laramie River above Laramie is 112% of average (126% of last year). SWE for the Little Laramie River is 130% of average and 149% of last year. The Laramie River above mouth, SWE is 113% of average (133% of last year). For more information see Basin Summary of Snow Courses at the beginning of this report.



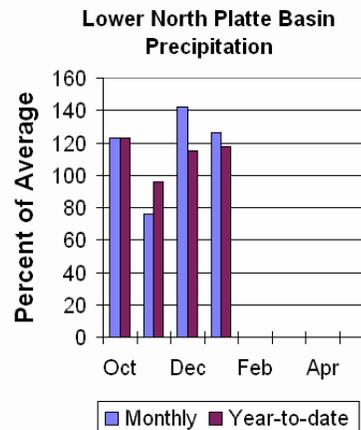
average at 65%. Reservoir storage is as follows: Alcova 156,200 ac-ft (101% of average); Glendo 258,500 ac-ft (77% of average); Guernsey 13,500 ac-ft (148% of average); Pathfinder 283,400 ac-ft (42% of average); Seminoe 407,500 ac-ft (71% of average); and Wheatland #2 46,900 ac-ft (104% of average).

## Precipitation

Last month's precipitation was 126% of average and 149% of last year's amount. Of the 8 reporting stations, percentages for the month range from 11-243%. The water year-to-date precipitation for the basin is currently 118% of average (127% of last year). Year-to-date percentages range from 87-185%.

## Reservoir

The Lower North Platte River Basin reservoir storage is below



## Streamflow

Water supply is estimated to be above average this year. The following yields are based on the 50% exceedance forecasts for the April through September period. The Sweetwater near Alcova is forecast to yield about 83,000 ac-ft (104% of average). Deer Creek at Glenrock is forecast to yield 31,000 ac-ft (76% of average). LaPrele Creek above the reservoir is forecast to yield 19,300 ac-ft (80% of average). North Platte Alcova to Orin Gain 134,000 ac-ft (83% of average). North Platte River below Guernsey Reservoir is 1,300,000 ac-ft (131% of average), and below Glendo Reservoir is anticipated to yield around 1,350,000 ac-ft (134% of average). Laramie River near Woods Landing should yield around 161,000 ac-ft (119% of average). The Little Laramie near Filmore should produce about 77,000 ac-ft (120% of average). See the following table for more detailed information on projected runoff.

LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS  
Streamflow Forecasts - February 1, 2006

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Avg (1000AF)
	90% (1000AF)	70% (1000AF)	50% (1000AF)	30% (1000AF)	10% (1000AF)	* (% AVG.)	
SWEETWATER RIVER nr Alcova							
APR-JUL	31	59	77	104	95	123	74
APR-SEP	36	64	83	104	102	130	80
DEER CREEK at Glenrock							
APR-JUL	18.0	25	30	80	35	42	38
APR-SEP	18.0	26	31	76	36	44	41
LaPRELE CREEK abv Reservoir							
APR-JUL	2.0	12.1	19.0	79	26	36	24
APR-SEP	2.1	12.3	19.3	80	26	36	24
NORTH PLATTE - Alcova to Orin Gain							
APR-JUL	31	88	126	83	164	221	152
APR-SEP	37	95	134	83	173	229	161
NORTH PLATTE RIVER blw Glendo Res							
APR-JUL	985	1140	1250	130	1360	1510	960
APR-SEP	1020	1190	1300	131	1410	1580	990
NORTH PLATTE RIVER blw Guernsey Res							
APR-JUL	960	1160	1290	133	1420	1620	970
APR-SEP	1010	1210	1350	134	1490	1690	1010
LARAMIE RIVER nr Woods							
APR-JUL	87	123	147	120	171	209	123
APR-SEP	95	134	161	119	188	228	135
LITTLE LARAMIE RIVER nr Filmore							
APR-JUL	54	64	71	120	78	88	59
APR-SEP	56	69	77	120	85	98	64

- \* 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 January

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
ALCOVA	184.3	156.2	155.8	155.0
GLENDO	506.4	258.5	256.1	334.9
GUERNSEY	45.6	13.5	17.9	9.1
PATHFINDER	1016.5	283.4	241.6	678.3
SEMINOE	1016.7	407.5	267.9	573.2
WHEATLAND #2	98.9	46.9	30.0	45.3

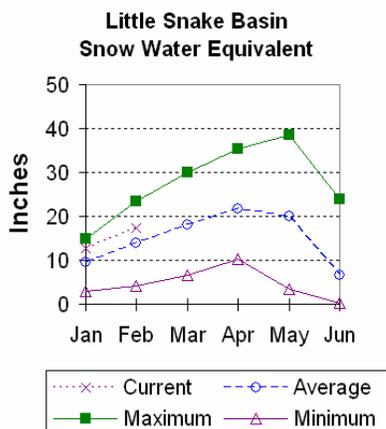
LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS  
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
SWEETWATER	4	81	102
DEER & LaPRELE CREEKS	3	179	114
N PLATTE abv Laramie R.	26	128	119
LARAMIE RIVER abv Laramie	9	126	112
LITTLE LARAMIE RIVER	4	149	130
LARAMIE RIVER above mouth	12	133	113
NORTH PLATTE	31	132	119

# Little Snake River Basin

## Snow

Currently, snow water equivalent (SWE) in the Little Snake River drainage is 125% of average (120% of last year at this time). For more information see Basin Summary of Snow Courses at beginning of this report.

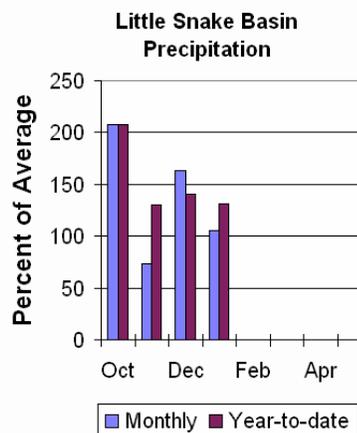


## Precipitation

Precipitation across the basin was above average this past month. Last Month's precipitation was 105% of average (95% of last year) for the 5 reporting stations. Last month's precipitation ranged from 93-122% of average. The Little Snake River basin water-year-to-date precipitation is currently 131% of average (119% of last year). Year-to-date percentages range from 115-140% of average.

## Reservoir

High Savery Dam -Pending



## Streamflow

The 50% exceedance forecast for the Little Snake River drainage is expected to be above average this year. Stream yields are based on the 50% exceedance forecast for the April through July period. The Little Snake River near Slater should yield around 210,000 ac-ft (132% of average). The Little Snake River near Dixon is estimated to yield around 430,000 ac-ft (127% of average). See the following table for more detailed information on projected runoff.

LITTLE SNAKE RIVER BASIN  
Streamflow Forecasts - February 1, 2006

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Avg (1000AF)
	90% (1000AF)	70% (1000AF)	Chance of Exceeding * (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
Little Snake River nr Slater APR-JUL	157	188	210	132	234	271	159
Little Snake River nr Dixon APR-JUL	301	375	430	127	489	582	340

\* 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.

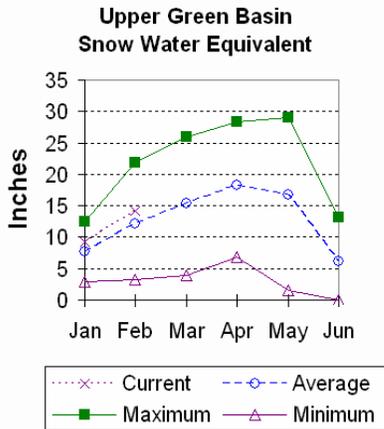
LITTLE SNAKE RIVER BASIN  
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
LITTLE SNAKE RIVER	8	120	125

# Upper Green River Basin

## Snow

Snow water equivalent (SWE) is above average in the Upper Green River drainage this year. The Green River Basin SWE above Warren Bridge is at 105% or 134% of last year. SWE on the west side of the Upper Green River Basin is about 123% of average (141% of last year). Newfork River Basin SWE is now about 112% of average or 115% of last year. Big Sandy-Eden Valley Basin is at 115% or 95% of last year. SWE in the Green River Basin above Fontenelle Reservoir is about 117% of average (135% of last year). For more information see the Basin Summary of Snow Courses at the beginning of this report.



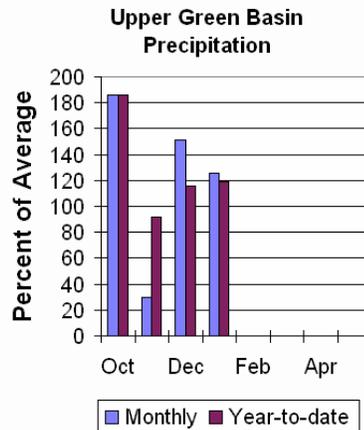
## Precipitation

The 11 reporting precipitation sites in the basin were 126% of average last month (164% of last year). Last month's precipitation varied from 88-161% of average. Water year-to-date precipitation is about 119% of average (134% of last year). Year to date percentage of average ranges from 115-146% for the reporting stations.

## Reservoir

Storage in Big Sandy Reservoir

is 24,900 ac-ft or 65% of capacity and 134% of average. Eden Reservoir - No Report. Fontenelle Reservoir is 167,900 ac-ft or 49% of capacity and 92% 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 April through July runoff period in the Upper Green River Basin are forecast to be above average. The yield on the Green River at Warren Bridge is around 280,000 ac-ft (106% of average). Pine Creek above Fremont Lake is 110,000 ac-ft (106% of average). New Fork River near Big Piney is 425,000 ac-ft (108% of average). Fontenelle Reservoir Inflow is estimated to be 950,000 ac-ft (111% of average), and Big Sandy near Farson is expected to be around 63,000 ac-ft (109% of average). See the following table for more detailed information on projected runoff.

UPPER GREEN RIVER BASIN  
Streamflow Forecasts - February 1, 2006

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	222	256	280	106	305	345	265
Pine Creek abv Fremont Lake							
APR-JUL	93	103	110	106	117	129	104
New Fork River nr Big Piney							
APR-JUL	307	375	425	108	478	562	395
Fontenelle Reservoir Inflow							
APR-JUL	629	812	950	111	1099	1337	860
Big Sandy River nr Farson							
APR-JUL	45	55	63	109	71	85	58

\* 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 January

Reservoir	Usable	***** Usable Storage *****		Average
	Capacity	This Year	Last Year	
BIG SANDY	38.3	24.9	11.1	18.6
EDEN		NO REPORT		
FONTENELLE	344.8	167.9	186.3	182.2

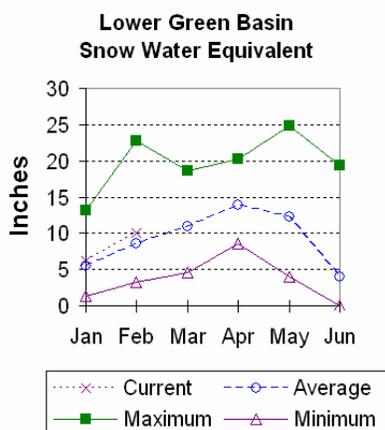
UPPER GREEN RIVER BASIN  
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of	This Year as Percent of	
	Data Sites	Last Year	Average
GREEN above Warren Bridge	4	133	106
UPPER GREEN (West Side)	7	141	123
NEWFORK RIVER	3	115	112
BIG SANDY/EDEN VALLEY	2	95	115
GREEN above Fontenelle	14	136	118

# Lower Green River Basin

## Snow

SWE in the Hams Fork Basin is 130% of average (126% of last year). Blacks Fork Basin SWE is currently 116% of average (109% of last year). The Henrys Fork drainage is at 91% of average or 68% of last year. SWE in the Green River Basin above Flaming Gorge is 118% of average (126% of last year). For more information see Basin Summary of Snow Courses at beginning of this report.



167,900 ac-ft; this is 92% of average (90% of last year). Flaming Gorge is currently storing 3,054,000 ac-ft; this is 103% of average (110% of last year). Viva Naughton is storing 32,400 ac-ft or 76% of capacity and 107% of average.

## Streamflow

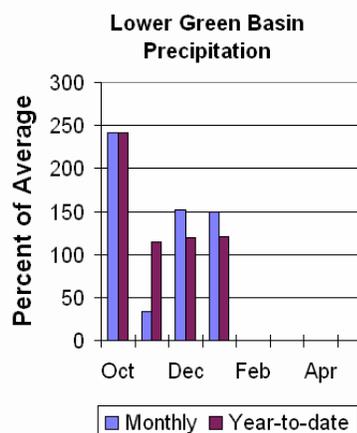
Expected yields vary from 110-131% of average across the basin. The following values are the 50% exceedance forecasts for the April through July period. The Green River near Green River is forecast to yield about 965,000 ac-ft (110% of average). The Blacks Fork near Robertson is forecast to yield 104,000 ac-ft (110% of average). East Fork of Smiths Fork near Robertson is forecast to yield 32,000 ac-ft (110% of average). The 50% chance yield for Hams Fork near Frontier is 85,000 ac-ft (131% of average). The Hams Fork Inflow to Viva Naughton Reservoir is 116,000 ac-ft (130% of average). The Flaming Gorge Reservoir inflow will be about 1,330,000 ac-ft (112% of average). See the following table for more detailed information on projected runoff.

## Precipitation

Precipitation was above average for the 3 reporting stations during last month at 149% of average or 149% of last year. Precipitation ranged from 136-167% of average for the month. The basin year-to-date precipitation is currently 121% of average (120% of last year). Year-to-date percentages range from 118-124%.

## Reservoir

Fontenelle Reservoir is currently storing



LOWER GREEN RIVER BASIN  
Streamflow Forecasts - February 1, 2006

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	674	841	965	110	1097	1308	875
Blacks Fork nr Robertson							
APR-JUL	73	91	104	110	118	140	95
EF of Smiths Fork nr Robertson							
APR-JUL	21	27	32	110	37	45	29
Hams Fk blw Pole Ck nr Frontier							
APR-JUL	56	73	85	131	98	120	65
Hams Fork Inf to Viva Naughton Res							
APR-JUL	75	99	116	130	135	165	89
Flaming Gorge Reservoir Inflow (2)							
APR-JUL	848	1122	1330	112	1556	1921	1190

\* 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 January

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
FONTENELLE	344.8	167.9	186.3	182.2
FLAMING GORGE	3749.0	3054.0	2765.0	2966.0
VIVA NAUGHTON RES	42.4	32.4	32.3	30.3

LOWER GREEN RIVER BASIN  
Watershed Snowpack Analysis - February 1, 2006

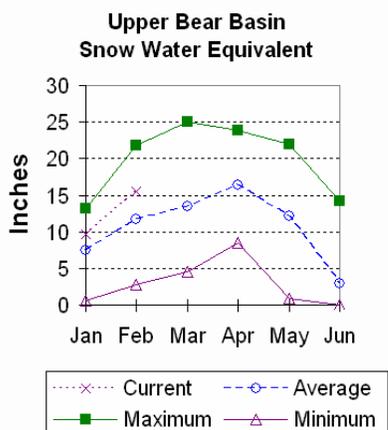
Watershed	Number of Data Sites	This Year as Percent of Last Year	Percent of Average
HAMS FORK RIVER	4	126	131
BLACKS FORK	2	109	116
HENRYS FORK	2	68	91
GREEN above Flaming Gorge	22	126	118

# Upper Bear River Basin

## Snow

Snow water equivalent (SWE) in the Upper Bear River Basin in Utah is estimated to be 130% of average; that is about 100% of last year at this time. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is estimated at 130% of average (127% of last year). Bear River Basin SWE, above the Idaho State line, is 132% of average and 117% of last year.

See the Basin Summary of Snow Course Data at the beginning of this report for more detailed information.



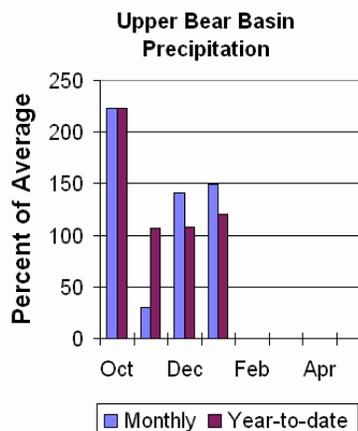
## Precipitation

Precipitation for last month was 149% of average for the 2 reporting stations; this is 161% of the precipitation received last year. The year-to-date precipitation, for the basin, is 120% of average; this is 128% of last year's amount.

## Reservoir

Storage in Woodruff

Narrows reservoir is about 34,000 ac-ft (135% of average). Current reservoir storage is about 59% of capacity. Reservoir storage last year at this time was 14,000 ac-ft at this time.



## Streamflow

The following 50% exceedance forecasts are for the April through September period. The Bear River above the Utah-Wyoming State Line is 149,000 ac-ft (119% of average). The Bear River above Woodruff Reservoir is 177,000 ac-ft (125% of average). The Smiths Fork River near Border is 162,000 ac-ft (134% of average). See the following table for more detailed information on projected runoff.

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UPPER BEAR RIVER BASIN  
Streamflow Forecasts - February 1, 2006

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Avg (1000AF)
	90% (1000AF)	70% (1000AF)	50% (1000AF)	30% (1000AF)	10% (1000AF)	Chance of Exceeding * (% AVG.)	
Bear River nr UT-WY State Line							
APR-JUL	101	121	135	120	149	169	113
APR-SEP	110	133	149	119	165	188	125
Bear River ab Reservoir nr Woodruff							
APR-JUL	115	147	169	124	191	223	136
APR-SEP	121	154	177	125	200	231	142
Smiths Fork nr Border							
APR-JUL	111	129	141	137	153	171	103
APR-SEP	128	148	162	134	176	196	121

\* 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 January

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
WOODRUFF NARROWS	57.3	34.0	14.0	25.2

UPPER BEAR RIVER BASIN  
Watershed Snowpack Analysis - February 1, 2006

Watershed	Number of Data Sites	This Year as Percent of Last Year	Percent of Average
UPPER BEAR RIVER in Utah	5	100	130
SMITHS & THOMAS FORKS	4	127	130
BEAR RIVER abv ID line	7	118	132
NORTHWEST	75	148	108
NORTHEAST	23	128	84
SOUTHEAST	35	134	122
SOUTHWEST	31	123	122

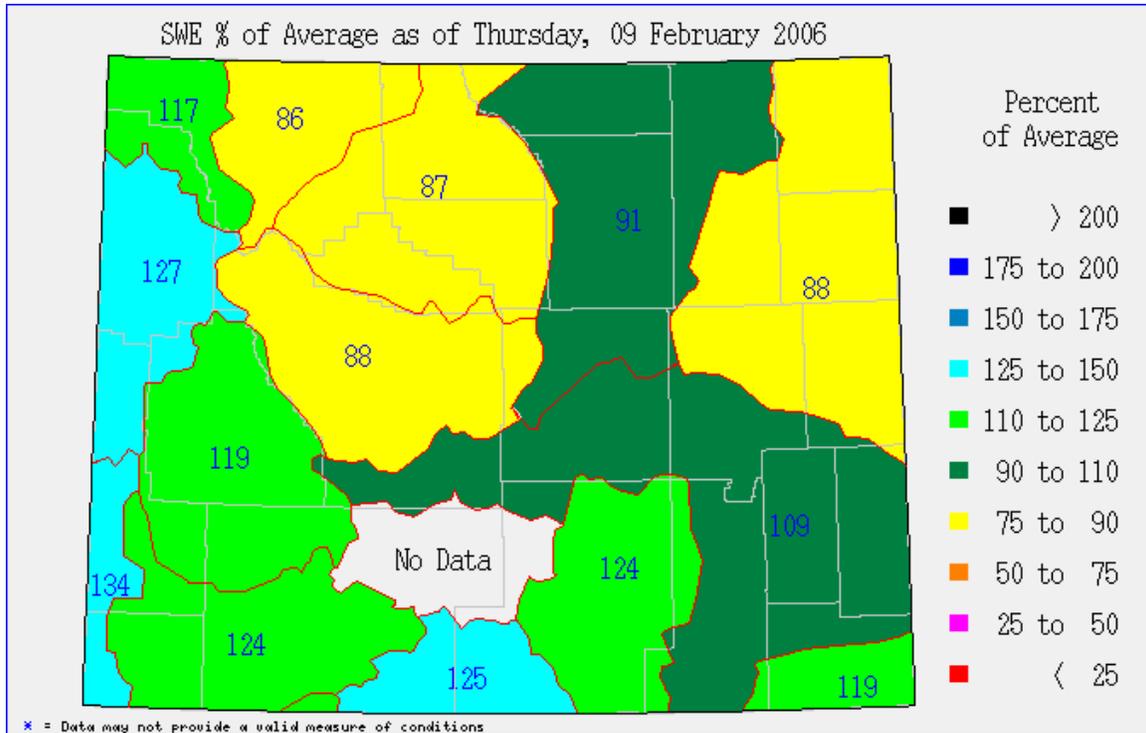


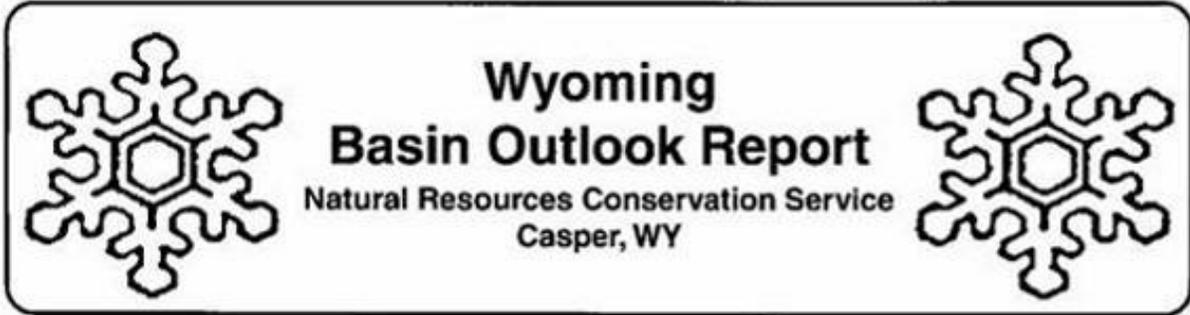
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