

United States  
Department of  
Agriculture

Natural  
Resources  
Conservation  
Service

# Wyoming

## Basin Outlook Report

### March 1, 2005



# 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 well below average for this time of the year. Early storms covered Wyoming with snow, but very little snow has fallen since late November. SWE for the State of Wyoming as a whole is about 80% of average for this time of the year. SWE in the Northwest portion of Wyoming is 70% of average. SWE in Northeast Wyoming is 65% of average, and in the Southeast part of Wyoming is 88% of average. SWE in Southwestern Wyoming is 96% of average for this time of the year.

Precipitation for last month varied from 13-63% below average for the State. Year-to-date precipitation is also well below average for the year and varies from 64-105% of average. Basin reservoir levels vary from 51-171% of average. Reservoirs on the North Platte River are well below average. Reservoirs in the northeast are below average in storage. Reservoirs in the Wind River Basin are average or above. Reservoirs on the Big Horn are slightly below average. Reservoirs across the north are average or above. Reservoirs on the Green River are slightly below average. Forecast runoff varies from 49-115% of average across Wyoming.

## Snowpack

Snow water equivalent (SWE), across Wyoming is below average for this time of year. SWE in the NW portion of Wyoming is now about 70% of average (77% of last year). NE Wyoming SWE is currently about 65% of average (72% of last year). The SE portion of Wyoming SWE is currently about 88% of average (106% of last year). The SW portion of Wyoming SWE is about 96% of average (106% of last year).

## Precipitation

Last month's precipitation was well below average across all of Wyoming. The Belle Fourche & Cheyenne River Basin was the lowest percentage basin for the month at 37% of average. The Little Snake River was 87% of average for the highest percentage basin for the month. 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	-37%	Upper North Platte River	-15%
Yellowstone & Madison	-47%	Lower North Platte	-40%
Wind River	-46%	Little Snake River	-13%
Big Horn	-39%	Upper Green River	-34%
Shoshone & Clarks Fork	-44%	Lower Green River	-27%
Powder & Tongue River	-32%	Upper Bear River	-31%
Belle Fourche & Cheyenne	-63%		

## Streams

Stream flow yield is expected to be well below average across Wyoming. Most probable yield for the entire State of Wyoming is forecast to be about 75% of average (varying from 60-113% of average). The northwest part of Wyoming is expected to yield about 74% of average -- yield estimates vary from 60-87% of average. Yield from the northeast portion of Wyoming is expected to yield about 60% of average -- yield estimates vary from 30-79% of average for the various forecast points. Yield in the southeast portion of Wyoming will be about 83% of average -- yield estimates range from 81-92% of average. Yield in the southwest portion of Wyoming varies from 80-113% of average -- mean estimated yield for the forecast points in southwest Wyoming is about 86% of average.

## Reservoirs

The only reservoir not reporting is Eden. Reservoir storage, for those reporting, varies widely across the state for this time of the year; however reservoir storage is improved from last year. 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	85	85	84	100	99
ANGOSTURA	46	69	83	55	67
BELLE FOURCHE	43	58	63	68	74
BIG SANDY	60	14	50	120	424
BIGHORN LAKE	48	50	61	80	96
BOYSEN	80	60	71	101	162
BUFFALO BILL	73	66	63	116	110
BULL LAKE	68	38	56	121	181
DEERFIELD	86	99	87	99	87
EDEN			NO REPORT		
ENNIS LAKE	72	71	77	94	101
FLAMING GORGE	74	69	78	95	107
FONTENELLE	43	45	45	94	95
GLENDO	57	49	75	75	117
GRASSY LAKE	59	65	79	74	90
GUERNSEY	43	40	31	137	107
HEBGEN LAKE	79	75	70	113	105
JACKSON LAKE	17	20	58	29	84
KEYHOLE	49	59	55	89	83
PACTOLA	75	87	84	89	86
PALISADES	45	37	74	61	123
PATHFINDER	24	30	70	35	83
PILOT BUTTE	70	76	63	111	92
SEMINOE	26	23	52	51	115
SHADEHILL	58	48	61	94	120
TONGUE RIVER	53	59	31	171	90
VIVA NAUGHTON RES	75	69	69	110	109
WHEATLAND #2	33	23	48	69	146
WOODRUFF NARROWS	33	13	48	69	253
TOTAL OF 28 RESERVOIRS	55	51	69	80	108

Raw KAF Totals Current=7331 Last Year=6782 Average=9189 Capacity=13288

# Basin Summary of Snow Course Data

MARCH 2005

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
-----						
WYOMING Snow Course and SNOTEL Stations						
ALBANY	9400	2/25/05	35	8.7	7.7	11.8
ASTER CREEK	7750	3/02/05	53	15.7	25.4	25.2
BALD MOUNTAIN SNOTEL	9380	3/01/05	47	11.7	14.4	16.0
BASE CAMP SNOTEL	7030	3/01/05	---	11.1	17.2	16.0
BATTLE MTN. SNOTEL	7440	3/01/05	33	11.9	13.3	9.7
BEARLODGE DIVIDE	4680	2/23/05	1	.2	1.7	1.8
BEARTOOTH LK. SNOTEL	9280	3/01/05	45	11.6	16.2	19.7
BEAR TRAP SNOTEL	8200	3/01/05	16	3.1	5.7	4.3
BIG GOOSE	7760	2/26/05	10	1.5	4.8	5.1
BIG GOOSE SNOTEL	7760	3/01/05	21	5.2	7.2	7.7
BIG PARK	8620	2/25/05	55	17.0	12.0	16.2
BIG SANDY SNOTEL	9080	3/01/05	52	13.4	11.4	12.1
BLACKWATER SNOTEL	9780	3/01/05	---	11.6	17.3	20.4
BLIND BULL SNOTEL	8900	3/01/05	58	16.0	18.7	23.1
BLIND PARK SNOTEL	6870	3/01/05	16	3.8	4.9	7.1
BLUE RIDGE	9620	2/23/05	40	11.5	9.7	9.8
BONE SPGS. SNOTEL	9350	3/01/05	43	10.5	12.4	13.2
BROOKLYN LK. SNOTEL	10220	3/01/05	51	14.1	12.8	19.0
BUCK CREEK	7960	2/28/05	20	4.8	7.6	8.2
BURGESS JCT. SNOTEL	7880	3/01/05	25	5.8	8.4	9.0
BURROUGHS CRK SNOTEL	8750	3/01/05	32	7.8	9.6	12.6
CANYON SNOTEL	8090	3/01/05	32	7.5	10.7	11.3
CARTER MOUNTAIN	7950	2/28/05	7	1.0	2.6	3.6
CASPER MTN. SNOTEL	7850	3/01/05	31	8.1	10.8	11.3
CCC CAMP	7000	2/24/05	38	9.8	9.6	11.0
CHALK CK #1 SNOTEL	9100	3/01/05	---	22.6	16.7	19.9
CHALK CK #2 SNOTEL	8200	3/01/05	47	14.4	11.7	12.9
CINNABAR PARK SNOTEL	9690	3/01/05	48	13.7	13.9	11.9
CLOUD PEAK SNOTEL	9850	3/01/05	37	9.9	11.4	10.0
COLE CANYON SNOTEL	5910	3/01/05	6	1.9	4.2	5.1
COLD SPRINGS SNOTEL	9630	3/01/05	26	6.2	5.6	7.2
COTTONWOOD CR SNOTEL	7700	3/01/05	---	14.2	17.5	18.5
CROW CREEK SNOTEL	8830	3/01/05	22	6.3	5.4	7.3
DARBY CANYON	8250	2/28/05	46	13.5	20.5	20.3
DEER PARK SNOTEL	9700	3/01/05	62	19.4	14.8	14.4
DITCH CREEK	6870	2/25/05	6	1.4	2.8	3.6
DIVIDE PEAK SNOTEL	8860	3/01/05	58	17.4	16.3	15.6
DOMELAKE SNOTEL	8880	3/01/05	33	7.6	9.1	9.5
DU NOIR	8760	2/22/05	22	4.5	4.4	6.8
EAST RIM DIV SNOTEL	7930	3/01/05	---	6.8	9.4	11.0
ELBO RANCH	7100	3/01/05	28	6.6	9.2	10.3
ELKHART PARK SNOTEL	9400	3/01/05	---	9.4	10.5	11.1
EVENING STAR SNOTEL	9200	3/01/05	50	13.8	18.1	25.0

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
FOUR MILE MEADOWS	7860	3/01/05	28	5.9	8.4	10.8
FOXPARK	9060	2/25/05	23	4.8	4.7	6.3
GEYSER CREEK	8500	2/22/05	16	2.7	3.7	6.0
GLADE CREEK	7040	3/02/05	49	13.3	21.6	20.9
GRANITE CRK SNOTEL	6770	3/01/05	---	11.0	15.5	16.1
GRANNIER MEADOWS	8860	2/23/05	48	13.7	10.5	11.7
GRASSY LAKE SNOTEL	7270	3/01/05	69	20.9	32.6	29.5
GRAVE SPRINGS SNOTEL	8550	3/01/05	20	4.5	8.5	7.3
GREYS BOUNDARY	5720	2/24/05	33	9.0	12.2	10.9
GROS VENTRE SNOTEL	8750	3/01/05	39	9.0	9.3	11.5
GROVER PARK DIVIDE	7000	2/24/05	31	7.8	8.3	10.0
HAIRPIN TURN	9480	2/25/05	38	10.6	8.6	13.9
HANSEN S.M. SNOTEL	8360	3/01/05	18	4.4	6.4	5.2
HAMS FORK SNOTEL	7840	3/01/05	---	10.1	9.4	11.0
HASKINS CREEK	8980	2/23/05	82	25.4	25.5	25.9
HOBACK GS	6640	2/23/05	29	6.4	8.2	--
HOBBS PARK SNOTEL	10100	3/01/05	44	12.2	11.0	11.9
HUCKLEBERRY DIVIDE	7300	3/01/05	45	11.4	18.5	18.5
INDIAN CREEK SNOTEL	9430	3/01/05	---	22.8	19.3	22.3
JACKPINE CREEK	7350	2/28/05	45	12.8	21.0	19.4
KELLEY R.S. SNOTEL	8180	3/01/05	---	14.0	12.6	14.0
KENDALL R.S. SNOTEL	7740	3/01/05	---	9.5	11.8	12.4
KIRWIN SNOTEL	9550	3/01/05	26	5.4	5.3	9.1
LAKE CAMP	7780	2/28/05	27	6.8	8.8	8.7
LA PRELE SNOTEL	8380	3/01/05	23	5.1	7.0	8.9
LARSEN CREEK	9020	2/22/05	46	11.5	8.8	11.0
LEWIS LAKE SNOTEL	7850	3/01/05	68	19.2	28.7	29.7
LIBBY LODGE	8750	2/25/05	31	7.6	6.2	9.6
LITTLE BEAR RUN	6240	2/28/05	5	1.2	3.2	3.4
LITTLE WARM SNOTEL	9370	3/01/05	28	6.6	6.7	9.5
LOOMIS PARK SNOTEL	8240	3/01/05	---	11.2	13.8	14.5
LUPINE CREEK	7380	2/24/05	20	4.3	7.8	8.5
MALLO	6420	2/28/05	17	3.1	5.0	6.6
MARQUETTE SNOTEL	8760	3/01/05	9	2.7	6.5	6.9
MEDICINE LODGE LAKES	9340	2/26/05	30	5.9	8.6	9.2
MIDDLE FORK	7420	2/23/05	18	4.5	5.7	4.8
MIDDLE POWDER SNOTEL	7760	3/01/05	18	4.6	9.2	9.0
MORAN	6750	3/01/05	31	7.3	9.8	11.8
MOSS LAKE	9800	2/24/05	55	14.7	14.0	19.9
NEW FORK SNOTEL	8340	3/01/05	---	8.3	9.0	9.6
NORRIS BASIN	7500	2/27/05	22	5.0	8.3	9.6
NORTH BARRETT CREEK	9400	2/24/05	56	14.5	13.2	17.5
NORTH FRENCH SNOTEL	10130	3/01/05	68	19.9	18.3	22.7
NORTH RAPID CK SNTL	6130	3/01/05	5	2.4	4.9	6.8
NORTH TONGUE	8450	2/27/05	29	6.5	7.8	10.3
OLD BATTLE SNOTEL	9920	3/01/05	85	29.0	24.9	26.3
OLD FAITHFUL	7400	3/01/05	33	8.6	13.6	12.9
ONION GULCH	8780	2/26/05	17	2.8	4.4	6.7
OWL CREEK SNOTEL	8980	3/01/05	15	2.8	3.7	4.1
PARKERS PEAK SNOTEL	9400	3/01/05	42	12.1	15.3	18.2

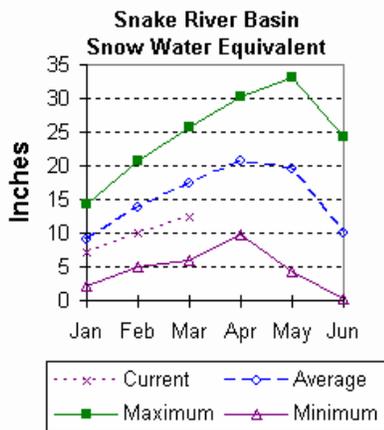
SNOW COURSE	ELEVATION	DATE	NOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
PHILLIPS BENCH SNTL	8200	3/01/05	59	18.7	22.0	23.9
POCKET CREEK	9350	2/22/05	50	11.6	8.9	10.9
POLE MOUNTAIN	8700	3/01/05	28	6.1	6.5	6.8
POWDER RVR.PASS SNTL	9480	3/01/05	35	8.6	9.0	8.7
PURGATORY GULCH	8970	2/23/05	35	8.7	3.4	9.5
RANGER CREEK	8120	2/27/05	22	4.5	6.4	7.3
RENO HILL SNOTEL	8500	3/01/05	29	6.6	10.7	10.4
REUTER CANYON	6280	2/25/05	7	2.0	4.9	8.4
ROWDY CREEK	8300	2/23/05	49	13.4	16.6	18.5
RYAN PARK	8400	2/24/05	34	7.3	7.0	9.7
SAGE CK BASIN SNTL	7850	3/01/05	47	12.6	12.5	9.0
SALT RIVER SNOTEL	7600	3/01/05	---	10.2	11.8	12.2
SAND LAKE SNOTEL	10050	3/01/05	63	18.3	18.2	25.2
SANDSTONE RS SNOTEL	8150	3/01/05	46	10.3	10.3	12.5
SAWMILL DIVIDE	9260	2/26/05	32	7.2	9.7	10.2
SHELL CREEK SNOTEL	9580	3/01/05	44	10.4	11.3	11.8
SHERIDAN R.S.	7750	2/22/05	15	2.1	4.0	5.2
SNAKE RIVER STATION	6920	3/02/05	41	11.0	19.1	18.3
SNAKE RV STA SNOTEL	6920	3/01/05	39	10.3	17.1	16.6
SNIDER BASIN SNOTEL	8060	3/01/05	44	11.7	10.7	12.4
SOLDIER PARK	8780	2/26/05	12	1.1	2.8	4.4
SOUR DOUGH	8460	2/26/05	18	3.4	4.3	5.4
SOUTH BRUSH SNOTEL	8440	3/01/05	34	8.7	9.2	10.0
SOUTH PASS SNOTEL	9040	3/01/05	57	16.9	14.5	14.0
SPRING CRK. SNOTEL	9000	3/01/05	67	19.7	18.5	22.2
ST LAWRENCE ALT SNTL	8620	3/01/05	25	5.7	5.8	5.9
SUCKER CREEK SNOTEL	8880	3/01/05	33	7.8	9.9	9.1
SYLVAN LAKE SNOTEL	8420	3/01/05	44	12.1	14.2	18.8
SYLVAN ROAD SNOTEL	7120	3/01/05	31	7.3	9.5	11.4
T CROSS RANCH	7900	2/22/05	16	2.2	5.1	6.8
TETON PASS W.S.	7740	3/01/05	54	16.8	21.1	23.4
THUMB DIVIDE SNOTEL	7980	3/01/05	41	11.0	16.4	15.4
THUMB DIVIDE	7980	3/02/05	36	9.4	14.8	15.8
TIE CREEK SNOTEL	6870	3/01/05	4	.6	7.0	4.9
TIMBER CREEK SNOTEL	7950	3/01/05	8	1.5	4.1	4.2
TOGWOTEE PASS SNOTEL	9580	3/01/05	50	13.2	16.7	20.7
TOWNSEND CRK SNOTEL	8700	3/01/05	35	8.4	9.0	6.9
TRIPLE PEAK SNOTEL	8500	3/01/05	---	15.1	17.6	20.9
TURPIN MEADOWS	6900	3/01/05	23	4.5	8.1	9.4
TWO OCEAN SNOTEL	9240	3/01/05	---	18.6	22.8	23.3
TYRELL RANGER STA.	8300	2/26/05	17	3.1	4.5	6.2
UPPER SPEARFISH	6500	2/24/05	8	1.6	4.7	5.9
WEBBER SPRING SNOTEL	9250	3/01/05	65	20.4	19.5	21.3
WHISKEY PARK SNOTEL	8950	3/01/05	65	21.5	22.0	23.8
WILLOW CREEK SNOTEL	8450	3/01/05	---	19.7	24.4	25.4
WINDY PEAK SNOTEL	7900	3/01/05	---	4.5	4.5	6.0
WOLVERINE SNOTEL	7650	3/01/05	22	6.2	7.6	10.6
WOOD ROCK G.S.	8440	2/26/05	24	5.7	6.4	7.8
YOUNTS PEAK SNOTEL	8350	3/01/05	33	8.5	6.3	14.6

(d) Denotes discontinued site.

# Snake River Basin

## Snow

The Snake River Basin snow water equivalent (SWE) is below average. SWE in the Snake River Basin above Jackson Lake is 67% of average (66% of last year at this time). Pacific Creek Basin SWE is 72% of average (74% of last year). Gros Ventre River Basin SWE is 68% of average (82% of last year). SWE in the Hoback River drainage is 71% of average (81% of last year). SWE in the Greys River drainage is 78% of average (86% of last year). In the Salt River area SWE is 80% of average (86% of last year). SWE in the Snake River Basin above Palisades is 71% of average (75% of last year). See the Basin Summary of Snow Courses at the beginning of this report for a detailed listing of snow course information.



Grassy Lake storage is about 74% of average (8,900 ac-ft compared to 9,900 last year). Jackson Lake storage is 29% of average (143,900 ac-ft compared to 171,600 ac-ft last year). Palisades Reservoir storage is about 61% of average (630,000 ac-ft compared to 514,000 ac-ft last year).

## Streamflow.

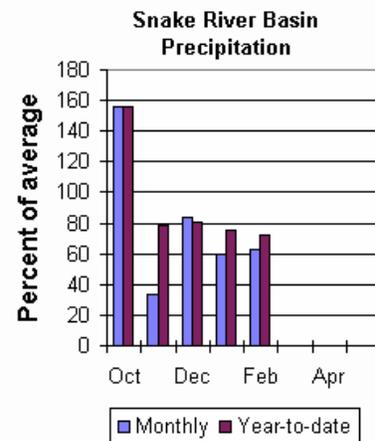
The most probable, a 50% chance, April through September runoff yield forecast is below average for the basin. The Snake near Moran is expected to yield 600,000 ac-ft (66% of average). Snake above reservoir near Alpine is estimated to yield about 1,740,000 ac-ft (64% of average). The Snake near Irwin is expected to yield about 2,410,000 ac-ft (62% of average). The Snake near Heise is expected to yield 2,570,000 ac-ft (62% of average). Pacific Creek at Moran is expected to yield about 109,000 ac-ft (61% of average). Greys River above Palisades Reservoir is estimated to yield 265,000 ac-ft (67% of average). Salt River near Etna is estimated to yield 235,000 ac-ft (56% of average). See the following page for detailed runoff volumes.

## Precipitation.

Precipitation across the basin was below average last month. Monthly precipitation for the basin was 63% of average (98% of last year). Last month's percentages range from 42-94% of average. Water-year-to-date precipitation is 72% of average for the Snake River Basin (82% of last year). Year-to-date percentages range from 61-86% of average.

## Reservoir.

Currently, usable reservoir storage, compared to average for the three storage reservoirs in the basin, is below average.



**SNAKE RIVER BASIN**  
Streamflow Forecasts - March 1, 2005

Forecast Point	Forecast Period	Future Conditions					Wetter		30-Yr Avg. (1000AF)
		Drier		Chance Of Exceeding *			30%	10%	
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)		(1000AF)	(1000AF)	
SNAKE nr Moran (1,2)	APR-JUL	345	455	505	62	555	665	815	
	APR-SEP	380	505	560	62	615	740	905	
SNAKE ab resv nr Alpine (1,2)	APR-JUL	1020	1300	1430	60	1560	1840	2370	
	APR-SEP	1180	1500	1650	60	1800	2120	2730	
SNAKE nr Irwin (1,2)	APR-JUL	1420	1860	2060	62	2260	2700	3330	
	APR-SEP	1680	2170	2390	62	2610	3100	3870	
SNAKE near Heise (2)	APR-JUL	1620	1950	2170	61	2390	2720	3560	
	APR-SEP	1920	2290	2540	61	2790	3160	4160	
PACIFIC CREEK at Moran	APR-JUL	58	77	91	53	105	124	171	
	APR-SEP	63	84	98	55	112	133	178	
GREYS above Palisades	APR-JUL	139	180	205	60	230	270	340	
	APR-SEP	160	205	235	60	265	310	395	
SALT near Etna	APR-JUL	109	163	200	59	235	290	340	
	APR-SEP	140	200	245	58	290	350	420	

SNAKE RIVER BASIN Reservoir Storage (1000 AF) - End of February					SNAKE RIVER BASIN Watershed Snowpack Analysis - March 1, 2005			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
GRASSY LAKE	15.2	8.9	9.9	12.0	SNAKE above Jackson Lake	9	66	67
JACKSON LAKE	847.0	143.9	171.6	494.0	PACIFIC CREEK	3	74	72
PALISADES	1400.0	630.0	514.0	1033.1	GROS VENTRE RIVER	3	81	68
					HOBACK RIVER	5	81	71
					GREYS RIVER	5	86	79
					SALT RIVER	5	86	80
					SNAKE above Palisades	28	75	71

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

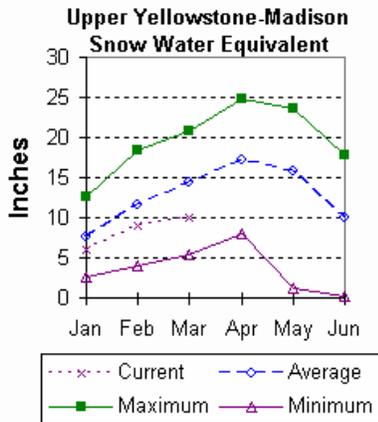
The average is computed for the 1971-2000 base period.

- (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 2005

# Yellowstone and Madison River Basins

## Snow

Snowfall in these basins has been mixed this year, however SWE in both basins is below average this month. Snow water equivalent (SWE) is about 72% of average (68% of last year) in the Madison drainage. SWE in the Yellowstone drainage is about 66% of average (77% of last year at this time). See the "Snow Course Basin Summary" at the beginning of this document for more details on specific sites.



298,400 ac-ft of water (79% of capacity, 113% of average or 105% of last year's volume).

## Streamflow

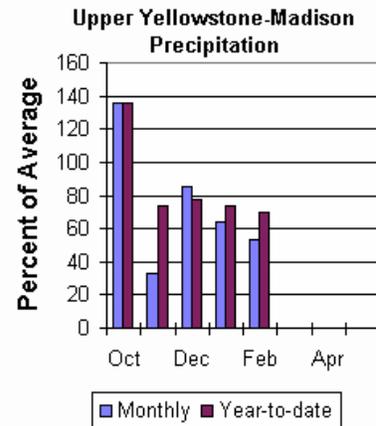
All the following forecasts are the 50% chance runoff for the April through September runoff period. Yellowstone at Lake Outlet is expected to yield about 530,000 ac-ft (66% of average). Yellowstone at Corwin Springs will yield about 1,430,000 ac-ft (73% of average). Yellowstone near Livingston will yield about 1,650,000 ac-ft (77% of average). Hebgen reservoir inflow is estimated to be 400,000 ac-ft (80% of average). See the following page for detailed runoff volumes.

## Precipitation

Last month precipitation in the Madison and Yellowstone drainage was about 53% of average (84% of last year) for the 5 reporting stations -- percentage range was from 42-68% of average. Water-year-to-date precipitation is about 70% of average (77% of last year's amount). Year to date percentage ranges from 66-77%.

## Reservoir

Ennis Lake is storing about 29,600 ac-ft of water (72% of capacity, 94% of average or 101% of last year's volume). Hebgen Lake is storing about



**UPPER YELLOWSTONE & MADISON RIVER BASINS**

Streamflow Forecasts - March 1, 2005

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>					30-Yr Avg. (1000AF)	
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)		10% (1000AF)
YELLOWSTONE at Lake Outlet	APR-JUL	245	330	385	65	440	525	590
	APR-SEP	345	455	530	66	605	715	805
YELLOWSTONE RIVER at Corwin Springs	APR-JUL	905	1070	1190	72	1310	1470	1650
	APR-SEP	1100	1300	1430	73	1560	1760	1970
YELLOWSTONE RIVER near Livingston	APR-JUL	1120	1260	1360	72	1460	1600	1900
	APR-SEP	1370	1540	1650	72	1760	1930	2280
HEBGEN Reservoir Inflow	APR-JUL	240	285	315	81	345	390	390
	APR-SEP	315	365	400	80	435	485	500

UPPER YELLOWSTONE & MADISON RIVER BASINS Reservoir Storage (1000 AF) - End of February					UPPER YELLOWSTONE & MADISON RIVER BASINS Watershed Snowpack Analysis - March 1, 2005			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
ENNIS LAKE	41.0	29.6	29.2	31.4	MADISON RIVER in WY	7	68	73
HEBGEN LAKE	377.5	298.4	283.9	265.2	YELLOWSTONE RIVER in WY	11	78	66

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

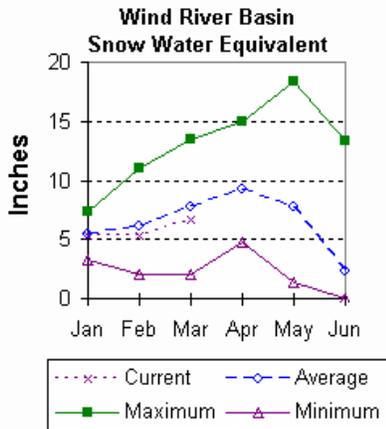
The average is computed for the 1971-2000 base period.

- (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 2005

# Wind River Basin

## Snow

The Wind River Basin has slightly below average snow water equivalent (SWE) for this time of the year. SWE in the Wind River above Dubois is 59% of average (80% of last year at this time). The Little Wind SWE is 101% of average water content (107% of last year), and the Popo Agie drainage SWE is about 118% of average (115% of last year). The Wind River Basin, above Boysen Reservoir SWE is about 86% of average (about 98% of last year). See the Basin Summary of Snow Course Data at the front of this report for details.



(68% of capacity). Boysen Reservoir is storing about 80% of capacity (579,000 ac-ft) – last year the reservoir was at 60% of capacity at this time. Pilot Butte is at 70% of capacity (22,000 ac-ft) – last year the reservoir was at 76% of capacity at this time.

## Streamflow

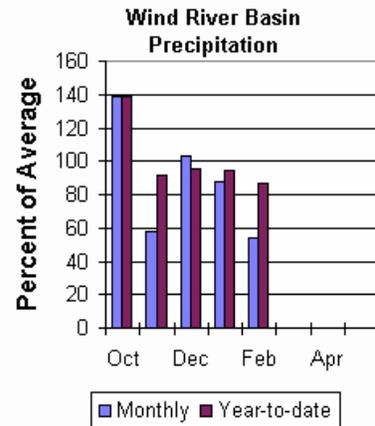
Water supply is estimated to be below average this year. The following values reflect the 50% chance yields for the April through September runoff period. Dinwoody Creek near Burris is estimated to yield 87,000 ac-ft (93% of average). The Wind River above Bull Lake Creek is expected to yield 410,000 ac-ft (77% of average). Bull Lake Creek near Lenore is expected to yield about 167,000 ac-ft (97% of average). Wind River at Riverton will yield about 520,000 ac-ft (81% of average). Little Popo Agie River near Lander is expected to yield about 59,000 ac-ft (111% of average). South Fork of Little Wind near Fort Washakie will yield about 78,000 ac-ft (93% of average). Little Wind River near Riverton will yield about 355,000 ac-ft (113% of average). Boysen Reservoir inflow will yield about 695,000 ac-ft (86% of average). See the following page for detailed runoff volumes.

## Precipitation

Last months precipitation in the basin varied from 31-82% of average. Precipitation, for the basin, was about 54% of average from the 8 reporting stations; that is about 45% of last year's amount. Water year-to-date precipitation is 87% of average and about 99% of last year at this time. Year-to-date percentages range from 64-129% of average.

## Reservoirs

Current storage varies from 68-97% of average. Usable storage in Bull Lake is currently about 103,700 ac-ft



WIND RIVER BASIN  
Streamflow Forecasts - March 1, 2005

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		===== Wetter =====>>				
		90% (1000AF)	70% (1000AF)	50% (1000AF)	30% (1000AF)	10% (1000AF)	Chance Of Exceeding * (% AVG.)	
DINWOODY CREEK nr Burris	APR-JUL	42	53	60	90	67	78	67
	APR-SEP	65	78	87	93	96	109	94
WIND RIVER abv Bull Lake Cr (2)	APR-JUL	220	285	330	76	375	440	435
	APR-SEP	290	360	410	77	460	530	535
BULL LAKE CR near Lenore (2)	APR-JUL	94	119	136	92	153	178	148
	APR-SEP	114	145	167	92	188	218	182
WIND RIVER at Riverton (2)	APR-JUL	230	355	440	81	525	650	545
	APR-SEP	300	430	520	81	610	740	640
LT POPO AGIE RIVER nr Lander	APR-JUL	33	44	51	111	58	69	46
	APR-SEP	40	51	59	111	67	78	53
SF LT WIND nr Fort Washakie	APR-JUL	44	59	69	95	79	94	73
	APR-SEP	50	67	78	93	89	106	84
LT WIND RIVER nr Riverton	APR-JUL	171	255	315	113	375	460	280
	APR-SEP	205	295	355	113	415	505	315
BOYSEN RESERVOIR Inflow (2)	APR-JUL	325	500	620	87	740	915	717
	APR-SEP	375	565	695	86	825	1020	809

WIND RIVER BASIN Reservoir Storage (1000 AF) - End of February					WIND RIVER BASIN Watershed Snowpack Analysis - March 1, 2005			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
BULL LAKE	151.8	103.7	57.4	85.4	WIND RIVER above Dubios	6	80	59
BOYSEN	596.0	579.0	356.6	571.4	LITTLE WIND	2	107	101
PILOT BUTTE	31.6	22.0	23.9	19.9	POPO AGIE	7	115	118
					WIND above Boysen Resv	13	97	86

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

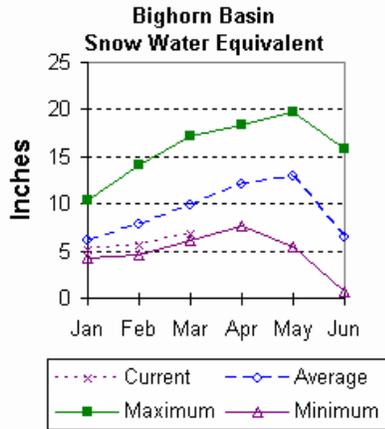
The average is computed for the 1971-2000 base period.

- (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 2005

# Bighorn River Basin

## Snow

Snowpack in this basin is well below average for this time of year. Nowood drainage SWE is 63% of average (70% of last year). Greybull River SWE is 52% of average (73% of last year). Shell Creek SWE is 77% of average (83% of last year). The Bighorn River Basin SWE, as a whole, is currently 68% of average (77% of last year). For more information see Basin Summary of Snow Courses at beginning of report.



now at 61% of average (657,300 ac-ft). Boysen is currently storing 162% of last year volume at this time and Big Horn Lake is storing 96% of last year's volume.

## Streamflow

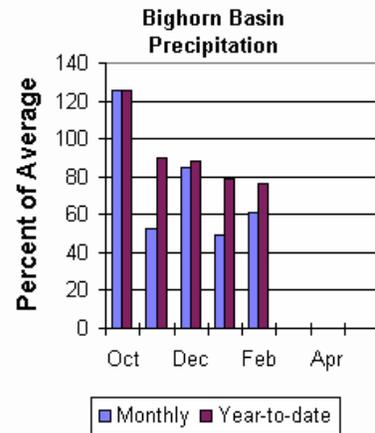
The 50% chance April through September runoff is anticipated to be well below average. The Boysen Reservoir inflow is forecast to yield 695,000 ac-ft (86% of average); the Greybull River near Meetetse should yield 109,000 ac-ft (55% of average); Shell Creek near Shell should yield 68,000 ac-ft (94% of average) and the Bighorn River at Kane should yield 970,000 ac-ft (87% of average). See the following page for detailed runoff volumes.

## Precipitation

Last month's precipitation was 61% of average (44% of last year). Sites ranged from 23-107% of average for the month. Year-to-date precipitation is 76% of average; that is 87% of last year at this time. Year-to-date percentages, from the 10 reporting stations, range from 43-95%.

## Reservoir

Boysen Reservoir is currently storing 579,000 ac-ft (101% of average). Bighorn Lake is



**BIGHORN RIVER BASIN**  
Streamflow Forecasts - March 1, 2005

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		===== Wetter =====>>				
		90% (1000AF)	70% (1000AF)	50% (1000AF)	30% (1000AF)	10% (1000AF)	Chance Of Exceeding * (% AVG.)	
BOYSEN RESERVOIR Inflow (2)	APR-JUL	325	500	620	87	740	915	717
	APR-SEP	375	565	695	86	825	1020	809
GREYBULL RIVER nr Meeteetse	APR-JUL	49	64	75	51	86	101	148
	APR-SEP	75	95	109	55	123	143	200
SHELL CREEK nr Shell	APR-JUL	46	53	57	95	61	68	60
	APR-SEP	57	64	68	94	72	79	72
BIGHORN RIVER at Kane (2)	APR-JUL	610	765	870	87	975	1130	1000
	APR-SEP	680	850	970	87	1090	1260	1110

BIGHORN RIVER BASIN Reservoir Storage (1000 AF) - End of February					BIGHORN RIVER BASIN Watershed Snowpack Analysis - March 1, 2005			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
BOYSEN	596.0	579.0	356.6	571.4	NOWOOD RIVER	5	70	63
BIGHORN LAKE	1356.0	657.3	683.4	826.3	GREYBULL RIVER	2	73	52
					SHELL CREEK	4	83	77
					BIGHORN (Boysen-Bighorn)	11	77	68

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

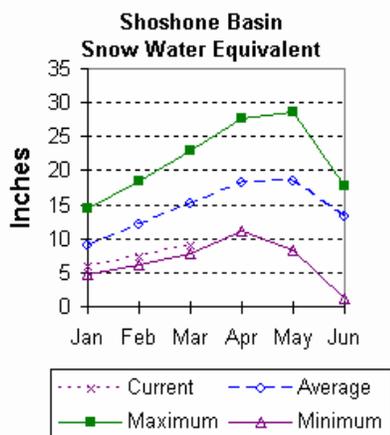
The average is computed for the 1971-2000 base period.

- (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 2005

# Shoshone and Clarks Fork River Basin

## Snow.

Snow Water Equivalent (SWE) is 57% of average (77% of last year) in the Shoshone River Basin. The Clarks Fork River Basin SWE is 61% of average (77% of last year). For more information see the Basin Summary of Snow Course Data at the beginning of this report.



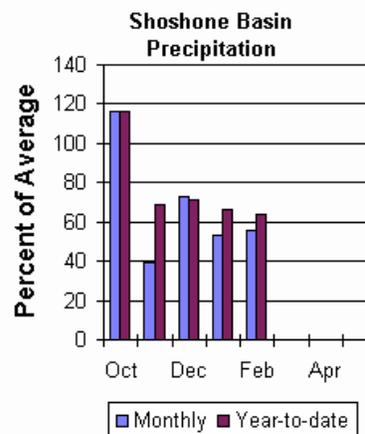
## Precipitation.

Precipitation for last month was 56% of average (95% of last year). Monthly percentages range from 31-87% of average. The basin year-to-date precipitation is now 64% of average (75% of last year). Year-to-date percentages range from 54-73% of average.

## Reservoir.

Current storage in Buffalo Bill Reservoir is about 116% of average (110% of last year's storage) – the reservoir is at about 73% of capacity.

Currently, about 470,600 ac-ft are stored in the reservoir compared to 426,900 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

The 50% yield for the April through September period for the North Fork Shoshone River at Wapiti is expected to be 390,000 ac-ft (75% of average). South Fork of the Shoshone River near Valley is estimated to yield about 160,000 ac-ft (60% of average), and South Fork above Buffalo Bill Reservoir is expected to be 110,000 ac-ft (49% of average). The Buffalo Bill Reservoir inflow is expected to be about 525,000 ac-ft (65% of average). The 50% chance yield for the Clarks Fork of the Yellowstone near Belfry, Montana is expected to be about 375,000 ac-ft (63% of average). See the following page for detailed runoff volumes.

**SHOSHONE & CLARKS FORK RIVER BASINS**  
Streamflow Forecasts - March 1, 2005

Forecast Point	Forecast Period	Future Conditions					Wetter		30-Yr Avg. (1000AF)	
		<<==== Drier ====		====		====		>>====		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)			
NF SHOSHONE RIVER at Wapiti	APR-JUL	285	325	350	76	375	415	460		
	APR-SEP	315	360	390	75	420	465	520		
SF SHOSHONE RIVER nr Valley	APR-JUL	95	122	141	63	160	187	225		
	APR-SEP	105	138	160	60	182	215	265		
SF SHOSHONE RIVER abv Buffalo Bill	APR-JUL	25	73	105	49	137	185	215		
	APR-SEP	22	74	110	49	146	198	225		
BUFFALO BILL DAM Inflow (2)	APR-JUL	325	410	465	65	520	605	720		
	APR-SEP	375	465	525	65	585	675	805		
CLARKS FORK RIVER nr Belfry	APR-JUL	260	315	350	65	385	440	540		
	APR-SEP	280	335	375	63	415	470	595		

SHOSHONE & CLARKS FORK RIVER BASINS Reservoir Storage (1000 AF) - End of February				SHOSHONE & CLARKS FORK RIVER BASINS Watershed Snowpack Analysis - March 1, 2005				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
BUFFALO BILL	646.6	470.6	426.9	405.8	SHOSHONE RIVER	7	77	57
					CLARKS FORK in WY	7	77	61

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

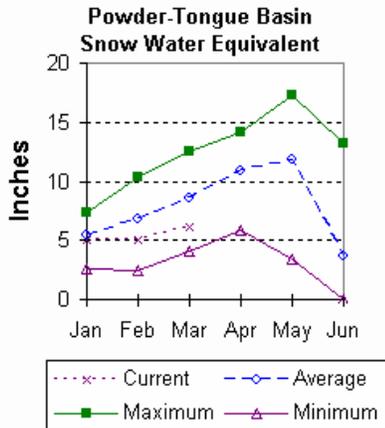
The average is computed for the 1971-2000 base period.

- (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 2005

# Powder and Tongue River Basins

## Snow

Snow water equivalent (SWE) in the Upper Tongue River drainage is 72% of average (75% of last year). The Goose Creek drainage SWE is 73% of average (77% of last year). SWE in the Clear Creek drainage is 75% of average (76% of last year). Crazy Woman Creek drainage SWE is 71% of average (84% of last year). Upper Powder River drainage SWE is 67% of average (67% of last year). Powder River basin SWE, in Wyoming, is about 71% of average (71% of last year). For more information see Basin Summary of Snow Courses at beginning of report.



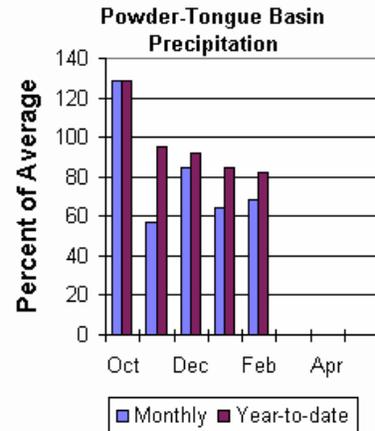
## Precipitation

Last month's precipitation was 68% of average for the 9 reporting stations (45% of last year). Monthly percentages range from 23-100% of average. Year-to-date precipitation is 82% of average in the basin; this is 89% of last year at this time. Precipitation for the year ranges from 57-95% of average at the reporting stations.

## Reservoir

Tongue River Reservoir is currently at 171% of average (90% of last year and 53% of capacity). Current storage is

42,100 ac-ft. Last year at this time the reservoir was storing about 46,800 ac-ft (average storage is about 24,600 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

The following runoff values are for the 50% probability during the April through September forecast period. The estimated yield for Tongue River near Dayton is 87,000 ac-ft (80% of average). Little Goose Creek near Bighorn is expected to yield about 34,000 ac-ft (81% of average). The Tongue River Inflow is expected to be 189,000 ac-ft (76% of average). Middle Fork of the Powder River near Barnum is estimated to yield 11,100 ac-ft (59% of average). The North Fork of the Powder near Hazelton should yield about 9,600 ac-ft (92% 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 40,000 ac-ft (77% of average). The Powder River at Moorehead is expected to yield 215,000 ac-ft (81% of average). The Powder River near Locate is expected to yield 265,000 ac-ft (79% of average). See the following page for detailed runoff volumes.

POWDER & TONGUE RIVER BASINS  
Streamflow Forecasts - March 1, 2005

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		Chance Of Exceeding *		===== Wetter =====>>		
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
TONGUE RIVER nr Dayton (2)	APR-JUL	47	64	75	78	86	103	96
	APR-SEP	57	75	87	80	99	117	109
LITTLE GOOSE CREEK nr Big Horn	APR-JUL	17.7	24	29	85	34	40	34
	APR-SEP	21	29	34	81	39	47	42
TONGUE RIVER RESERVOIR Inflow (2)	APR-JUL	76	132	170	77	209	264	220
	APR-SEP	89	148	189	76	229	289	250
MIDDLE FORK POWDER nr Barnum	APR-JUL	3.4	7.5	10.3	58	13.1	17.2	17.8
	APR-SEP	3.9	8.2	11.1	59	14.0	18.3	18.7
NORTH FORK POWDER nr Hazelton	APR-JUL	6.40	7.80	8.80	92	9.80	11.20	9.60
	APR-SEP	7.0	8.6	9.6	92	10.6	12.2	10.4
CLEAR CREEK nr Buffalo	APR-JUL	20	27	31	91	35	42	34
	APR-SEP	23	30	35	90	40	47	39
ROCK CREEK nr Buffalo	APR-JUL	10.8	14.0	16.2	81	18.4	22	19.9
	APR-SEP	14.1	17.4	19.7	82	22	25	24
PINEY CREEK at Kearny	APR-JUL	11.7	27	38	78	49	64	49
	APR-SEP	13.2	29	40	77	51	67	52
POWDER RIVER at Moorehead	MAR-JUL	85	154	200	83	245	315	240
	MAR-SEP	100	168	215	81	260	330	265
POWDER RIVER near Locate	MAR-JUL	164	210	245	79	280	325	310
	MAR-SEP	177	230	265	79	300	355	335

POWDER & TONGUE RIVER BASINS Reservoir Storage (1000 AF) - End of February					POWDER & TONGUE RIVER BASINS Watershed Snowpack Analysis - March 1, 2005			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
TONGUE RIVER	79.1	42.1	46.8	24.6	UPPER TONGUE RIVER	10	75	72
					GOOSE CREEK	3	77	73
					CLEAR CREEK	4	76	75
					CRAZY WOMAN CREEK	3	84	71
					UPPER POWDER RIVER	4	67	67
					POWDER RIVER in WY	8	71	71

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

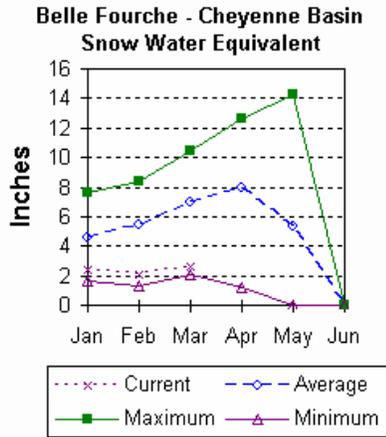
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- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level.  
The value listed 2005

# Belle Fourche and Cheyenne River Basins

## Snow.

The Belle Fourche River Basin is currently at 37% of average. This is 48% of what the Snowpack was last year at this time. See the Basin summary of Snow Course Data at the beginning of this report for a detailed listing.



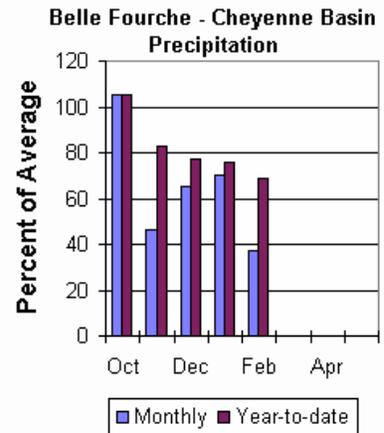
## Precipitation.

Precipitation for last month was 37% of average in the Black Hills. There are only 2 reporting stations. Monthly percentages range from 33-40%. Year-to-date precipitation is 69% of average and 80% of last year's amount.

## Reservoir.

Current reservoir storage is around 77% of average in the basin. Angostura is currently storing 55% of average (56,400 ac-ft), about 46% of

capacity. Belle Fourche reservoir is storing 68% of average (77,100 ac-ft), about 43% of capacity. Deerfield reservoir is storing 99% of average (13,100 ac-ft), about 86% of capacity. Keyhole reservoir is storing 89% of average (94,600 ac-ft), 49% of capacity. Pactola reservoir is storing 89% of average (41,100 ac-ft), 75% of capacity. Shadehill reservoir is storing 77% of average (47,200 ac-ft), 58% of capacity.



## Streamflow

There is no stream flow forecast for this basin this month. Not enough reporting stations.

BELLE FOURCHE & CHEYENNE RIVER BASINS  
Streamflow Forecasts - March 1, 2005

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>			===== Wetter =====>>			
		90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		

BELLE FOURCHE & CHEYENNE RIVER BASINS

BELLE FOURCHE & CHEYENNE RIVER BASINS Reservoir Storage (1000 AF) - End of February	BELLE FOURCHE & CHEYENNE RIVER BASINS Watershed Snowpack Analysis - March 1, 2005
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Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
ANGOSTURA	122.1	56.4	83.7	101.7	BELLE FOURCHE	7	48	37
BELLE FOURCHE	178.4	77.1	104.1	113.0				
DEERFIELD	15.2	13.1	15.0	13.2				
KEYHOLE	193.8	94.6	113.8	105.9				
PACTOLA	55.0	41.0	47.7	46.0				
SHADEHILL	81.4	47.2	39.4	50.0				

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

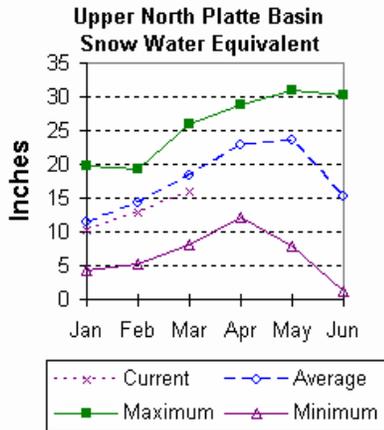
The average is computed for the 1971-2000 base period.

- (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 2005

# Upper North Platte River Basin

## Snow

The snow courses above Seminoe Reservoir have about 87% of average snow water equivalent (SWE) recorded for this time of the year (109% of last year). SWE in the drainage area above Northgate is about 85% of average and 109% of last year at this time. SWE in the Encampment River drainage is about 98% of average and 114% of last year. Brush Creek SWE for the year is about 82% of average and 106% of last year's SWE. Medicine Bow and Rock Creek drainage SWE is about 73% of average and 105% of last year at this time. For more information see Basin Summary of Snow Courses at the beginning of this report.



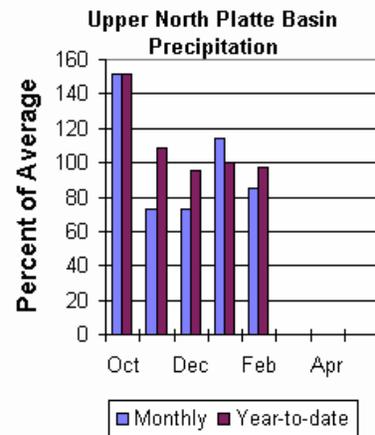
## Precipitation

Eight reporting stations indicate last month's precipitation was 85% of average and 108% of last year's amount. Precipitation varied from 55-121% of average last month. Total water-year-to-date precipitation is about 97% of average for the basin, which is about 108% of last year's amount. Year to date percentage ranges from 63-117% of average.

## Reservoirs

Seminoe Reservoir is estimated to be storing 266,800 ac-ft or 26% of

capacity. Seminoe Reservoir is also storing about 51% of average for this time of the year and 115% of last year.



## Streamflow

All the following yields are based on the 50% chance April through September yield. Yield for the North Platte River near Northgate is expected to be about 205,000 ac-ft (76% of average). Encampment River near Encampment is estimated to yield 157,000 ac-ft (95% of average). Rock Creek near Arlington is estimated to yield 44,000 ac-ft (77% of average). Sweetwater River near Alcova is estimated to yield 88,000 ac-ft (110% of average). Seminoe Reservoir inflow should be about 700,000 ac-ft (81% of average). See the following table for more detailed information on projected runoff.

UPPER NORTH PLATTE RIVER BASIN  
Streamflow Forecasts - March 1, 2005

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		===== Wetter =====>>				
		90% (1000AF)	70% (1000AF)	50% (1000AF)	30% (1000AF)	10% (1000AF)	Chance Of Exceeding * (% AVG.)	
NORTH PLATTE RIVER nr Northgate	APR-JUL	104	148	183	75	221	284	245
	APR-SEP	89	158	205	76	250	320	270
ENCAMPMENT RIVER nr Encampment	APR-JUL	106	131	148	95	165	188	156
	APR-SEP	113	139	157	95	174	199	165
ROCK CREEK nr Arlington	APR-JUL	27	35	42	79	49	61	53
	APR-SEP	28	37	44	77	51	63	57
SWEETWATER RIVER nr Alcova	APR-JUL	39	64	81	110	98	123	74
	APR-SEP	44	70	88	110	106	132	80
SEMINOE RESERVOIR Inflow	APR-JUL	350	530	650	81	770	950	800
	APR-SEP	385	575	700	81	825	1010	860

UPPER NORTH PLATTE RIVER BASIN Reservoir Storage (1000 AF) - End of February					UPPER NORTH PLATTE RIVER BASIN Watershed Snowpack Analysis - March 1, 2005			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
SEMINOE	1016.7	266.8	232.2	527.4	N PLATTE above Northgate	7	109	85
					ENCAMPMENT RIVER	4	114	98
					BRUSH CREEK	5	106	82
					MEDICINE BOW & ROCK CREEK	3	105	73
					N PLATTE above Seminoe	19	109	87

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

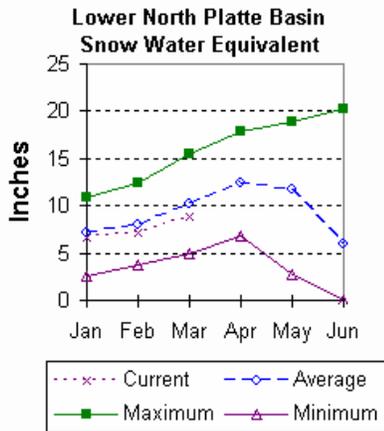
The average is computed for the 1971-2000 base period.

- (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 2005

# Lower North Platte River Basin

## Snow

SWE for the North Platte River Basin above Seminoe is at 87% of average (109% of last year). The Sweetwater drainage SWE is currently at 120% of average (127% of last year). Deer and LaPrele Creek SWE is 60% of average (65% of last year). SWE for the North Platte above the Laramie River drainage is 89% of average (108% of last year). SWE for the Laramie River above Laramie is 86% of average (111% of last year). SWE for the Little Laramie River is 83% of average (111% of last year). The Laramie River above mouth, SWE is 83% of average (113% of last year). For more information see Basin Summary of Snow Courses at beginning of report.



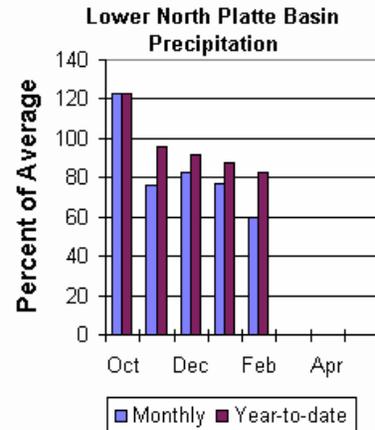
## Precipitation

Of the 7 reporting stations, percentages for the month range from 37-102%. Last month's precipitation for the basin was 60% of average (58% of last year). The water year-to-date precipitation for the basin is currently 83% of average (103% of last year). Year-to-date percentages range from 72-117%.

## Reservoir

The Lower North Platte River basin reservoir storage is well below average, except for Alcova and Guernsey

reservoirs. Reservoir storage is as follows: Alcova 155,800 ac-ft (100% of average); Glendo 287,600 ac-ft (75% of average); Guernsey 19,400 ac-ft (137% of average); Pathfinder 248,700 ac-ft (35% of average); Seminoe 266,800 ac-ft (51% of average); and Wheatland #2 33,000 ac-ft (69% of average).



## Streamflow

Yields from 54-110% are expected for the basin during the forecast period. The following yields are based on the 50% chance probability runoff for the April through September forecast period. The Sweetwater near Alcova is forecast to yield about 88,000 ac-ft (110% of average). Deer Creek at Glenrock is expected to yield about 24,000 ac-ft (59% of average). LaPrele Creek above the reservoir is estimated to yield 14,000 ac-ft (58% of average). North Platte River below Guernsey Reservoir is expected to yield about 835,000 ac-ft (83% of average), and below Glendo Reservoir is anticipated to yield about 810,000 ac-ft (82% of average). Laramie River near Woods Landing should yield about 110,000 ac-ft (82% of average). The Little Laramie near Filmore should produce about 47,000 ac-ft (73% of average). See the following table for more detailed information on projected runoff.

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**LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS**  
Streamflow Forecasts - March 1, 2005

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Forecast Point	Forecast Period	Future Conditions					Wetter		30-Yr Avg. (1000AF)
		<<===== Drier =====>>		Chance Of Exceeding *			30%	10%	
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)		(1000AF)	(1000AF)	
SWEETWATER RIVER nr Alcova	APR-JUL	39	64	81	110	98	123	74	
	APR-SEP	44	70	88	110	106	132	80	
DEER CREEK at Glenrock	APR-JUL	10.6	18.0	23	61	28	36	38	
	APR-SEP	11.3	18.9	24	59	29	37	41	
LaPRELE CREEK abv Reservoir	APR-JUL	1.7	6.7	13.0	54	19.3	29	24	
	APR-SEP	1.7	7.6	14.0	58	20	30	24	
NORTH PLATTE - Alcova to Orin Gain	APR-JUL	11.0	48	85	56	121	176	152	
	APR-SEP	11.0	50	87	54	124	179	161	
NORTH PLATTE RIVER blw Glendo Res	APR-JUL	520	680	785	82	890	1045	960	
	APR-SEP	530	700	810	82	925	1085	990	
NORTH PLATTE RIVER blw Guernsey Res	APR-JUL	475	670	805	83	935	1135	970	
	APR-SEP	495	695	835	83	970	1170	1010	
LARAMIE RIVER nr Woods	APR-JUL	41	77	101	82	125	161	123	
	APR-SEP	44	83	110	82	137	176	135	
LITTLE LARAMIE RIVER nr Filmore	APR-JUL	24	35	43	73	51	62	59	
	APR-SEP	26	39	47	73	55	68	64	

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

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LOWER NORTH PLATTE, SWEETWATER & LARAMIE RIVER BASINS  
Watershed Snowpack Analysis - March 1, 2005

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Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
ALCOVA	184.3	155.8	156.8	155.6	SWEETWATER	4	127	120
GLENDO	506.4	287.6	246.1	381.4	DEER & LaPRELE CREEKS	3	65	60
GUERNSEY	45.6	19.4	18.2	14.2	N PLATTE abv Laramie R.	26	108	89
PATHFINDER	1016.5	248.7	301.2	712.4	LARAMIE RIVER abv Laramie	10	111	86
SEMINOE	1016.7	266.8	232.2	527.4	LITTLE LARAMIE RIVER	5	111	83
WHEATLAND #2	98.9	33.0	22.6	47.7	LARAMIE RIVER above mouth	13	113	83
					NORTH PLATTE	32	108	87

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

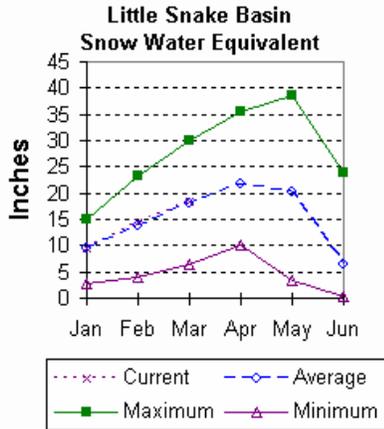
The average is computed for the 1971-2000 base period.

- (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 2005

# Little Snake River Basin

## Snow

Currently, snow water equivalent (SWE) in the Little Snake River drainage is 102% of average (106% of last year at this time). For more information see Basin Summary of Snow Courses at beginning of this report.



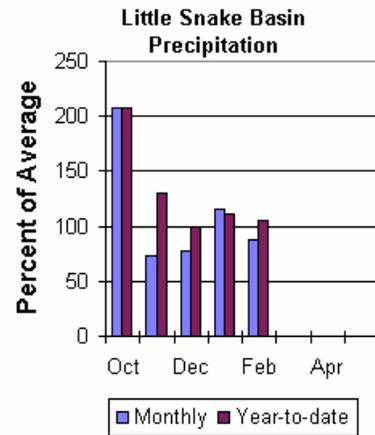
## Precipitation

Precipitation across the basin was well below average this past month. Last Month's precipitation was 87% of average (101% of last year) for the 5 reporting stations. Last month's precipitation ranged from 76-104% of average. The Little Snake River basin water-year-to-date precipitation is currently 105% of average (110% of last year). Year-to-date percentages range from 95-117% of average.

## Streamflow

Runoff yield in the Little Snake River drainage is

expected to be just below average this year. Stream yield is based on the 50% probability for the April through July forecast period. The Little Snake River near Slater should yield about 150,000 ac-ft (94% of average). Little Snake River near Dixon is estimated to yield 305,000 ac-ft (92% of average). See the following table for more detailed information on projected runoff.



LITTLE SNAKE RIVER BASIN  
Streamflow Forecasts - March 1, 2005

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>								
		90% (1000AF)		70% (1000AF)		Chance Of Exceeding * 50% (% AVG.)		30% (1000AF) 10% (1000AF)		30-Yr Avg. (1000AF)
Little Snake River nr Slater	APR-JUL	98	127	150	94	174	214	159		
LITTLE SNAKE R nr Dixon	APR-JUL	195	260	305	92	350	415	330		

LITTLE SNAKE RIVER BASIN Reservoir Storage (1000 AF) - End of February				LITTLE SNAKE RIVER BASIN Watershed Snowpack Analysis - March 1, 2005				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					LITTLE SNAKE RIVER	8	106	102

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

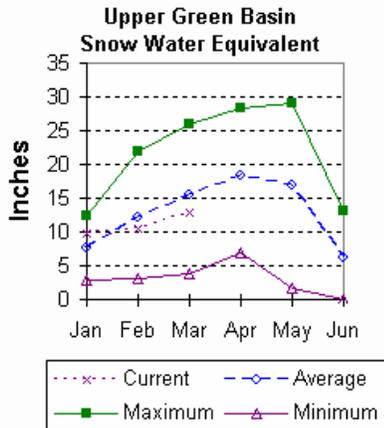
The average is computed for the 1971-2000 base period.

- (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 2005

# Upper Green River Basin

## Snow.

Snow water equivalent (SWE) is below average in the upper Green River drainage this year. The Green River Basin SWE above Warren Bridge is 74% of average (82% of last year). SWE on the west side of the Upper Green River Basin is about 85% of average (102% of last year). Newfork River Basin SWE is now about 93% of average (103% of last year). Big Sandy-Eden Valley Basin SWE is about 108% of average (123% of last year). SWE in the Green River Basin above Fontenelle Reservoir is about 84% of average (98% of last year). For more information see the Basin Summary of Snow Courses at the beginning of this report.



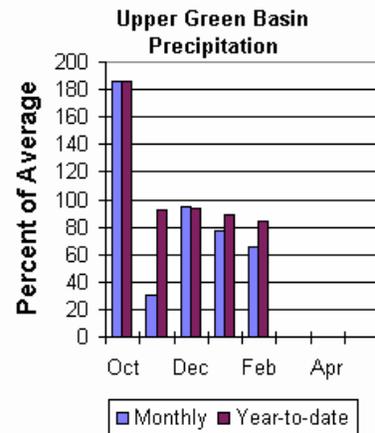
## Precipitation.

The 11 reporting precipitation sites in the basin were 66% of average last month (85% of last year). Last month's precipitation varied from 48-79% of average. Water year-to-date precipitation is about 84% of average (96% of last year). Year to date percentage of average ranges from 73-115% for the reporting stations.

## Reservoir.

Storage in Big Sandy Reservoir is 22,900 ac-ft or 60% of capacity. Eden Reservoir is still unavailable.

Fontenelle Reservoir is storing 147,200 acre-feet (94% of average and 43% 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 50% chance April through July runoff in the Upper Green River basin is forecast slightly below average. Green River at Warren Bridge is expected to yield about 220,000 ac-ft (83% of average). Pine Creek above Fremont Lake is expected to yield 90,000 ac-ft (87% of average). New Fork River near Big Piney is expected to yield about 325,000 ac-ft (82% of average). Fontenelle Reservoir Inflow is estimated to be 680,000 ac-ft (79% of average), and Big Sandy near Farson is expected to be about 58,000 ac-ft (100% of average). See the following table for more detailed information on projected runoff.

UPPER GREEN RIVER BASIN  
Streamflow Forecasts - March 1, 2005

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		===== Wetter =====>>				
		90% (1000AF)	70% (1000AF)	50% (1000AF)	30% (1000AF)	10% (1000AF)	Chance Of Exceeding * (% AVG.)	
Green River at Warren Bridge	APR-JUL	161	196	220	83	245	280	265
Pine Creek abv Fremont Lake	APR-JUL	74	83	90	87	97	106	104
New Fork River nr Big Piney	APR-JUL	220	280	325	82	370	430	395
Fontenelle Reservoir Inflow	APR-JUL	512	609	680	79	755	871	860
Big Sandy River nr Farson	APR-JUL	40	51	58	100	65	76	58

UPPER GREEN RIVER BASIN Reservoir Storage (1000 AF) - End of February					UPPER GREEN RIVER BASIN Watershed Snowpack Analysis - March 1, 2005			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
BIG SANDY	38.3	22.9	5.4	19.1	GREEN above Warren Bridge	4	82	74
EDEN		NO REPORT			UPPER GREEN (West Side)	7	102	85
FONTENELLE	344.8	147.2	155.6	156.1	NEWFORK RIVER	3	103	93
					BIG SANDY/EDEN VALLEY	2	123	108
					GREEN above Fontenelle	14	98	84

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

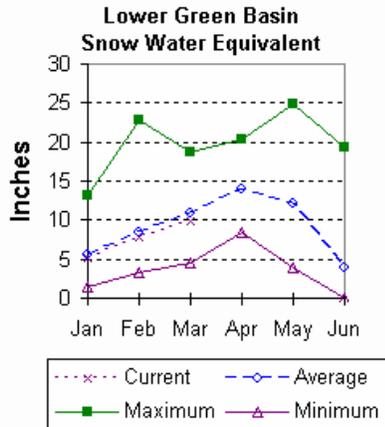
The average is computed for the 1971-2000 base period.

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- (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 2005

# Lower Green River Basin

## Snow

SWE in the Hams Fork Basin is 101% of average (120% of last year). Blacks Fork Basin SWE is currently 102% of average (113% of last year). The Henrys Fork drainage SWE is currently 109% of average (119% of last year). SWE in the Green River Basin above Flaming Gorge is 91% of average (104% of last year). For more information see Basin Summary of Snow Courses at beginning of this report.



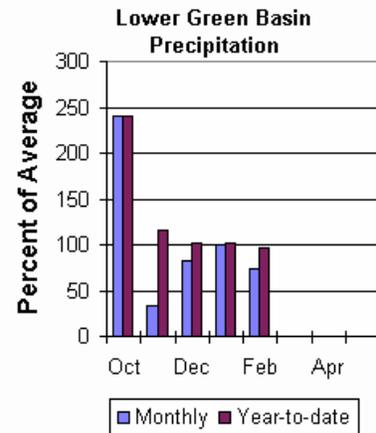
## Precipitation

Precipitation was above average for the 3 reporting stations during last month (73% of average). Precipitation ranged from 69-80% of average for the month. The basin year-to-date precipitation is currently 96% of average (121% of last year). Year-to-date percentages range from 91-106%.

## Reservoir

Fontenelle Reservoir is currently storing 147,200 ac-ft; this is 94% of average (95% of

last year). Flaming Gorge is currently storing 2,784,000 ac-ft; this is 95% of average (107% of last year). Viva Naughton is storing 32,000 ac-ft or 72% of capacity; this is 110% of average (109% of last year).



## Streamflow

Expected yields vary from 87-110% of average across the basin. The following forecast values are based on a 50% chance probability for the April through July forecast period. The Green River near Green River is forecast to yield about 710,000 ac-ft (81% of average). The Blacks Fork near Robertson is forecast to yield 95,000 ac-ft (100% of average). East Fork of Smiths Fork near Robertson is estimated to yield 30,000 ac-ft (97% of average). The estimated yield for Hams Fork near Frontier is 58,000 ac-ft (89% of average). The Hams Fork Inflow to Viva Naughton Reservoir is estimated to yield 76,000 ac-ft (85% of average). The Flaming Gorge Reservoir inflow will be about 1,000,000 ac-ft (84% of average). See the following table for more detailed information on projected runoff.

**LOWER GREEN RIVER BASIN**  
 Streamflow Forecasts - March 1, 2005

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		===== Wetter =====>>				
		90% (1000AF)	70% (1000AF)	50% (1000AF)	30% (1000AF)	10% (1000AF)	Chance Of Exceeding * (% AVG.)	
Green River nr Green River, WY	APR-JUL	475	615	710	81	805	945	875
Blacks Fork nr Robertson	APR-JUL	67	84	95	100	106	123	95
EF of Smiths Fork nr Robertson	APR-JUL	23	27	30	97	34	40	31
Hams Fk blw Pole Ck nr Frontier	APR-JUL	38	50	58	89	67	82	65
Hams Fk Inflow to Viva Naughton Res	APR-JUL	44	63	76	85	89	108	89
Flaming Gorge Reservoir Inflow	APR-JUL	670	870	1000	84	1130	1330	1190

LOWER GREEN RIVER BASIN Reservoir Storage (1000 AF) - End of February					LOWER GREEN RIVER BASIN Watershed Snowpack Analysis - March 1, 2005			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
FONTENELLE	344.8	147.2	155.6	156.1	HAMS FORK RIVER	4	120	101
FLAMING GORGE	3749.0	2784.0	2600.0	2919.0	BLACKS FORK	5	113	102
VIVA NAUGHTON RES		NO REPORT			HENRYS FORK	3	119	109
					GREEN above Flaming Gorge	26	104	91

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

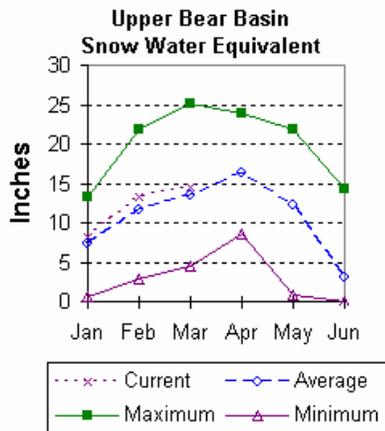
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 (2) - The value is natural volume - actual volume may be affected by upstream water management.  
 (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level.  
 The value listed 2005

# Upper Bear River Basin

## Snow

Snow water equivalent (SWE) in the upper Bear River Basin in Utah is estimated to be 118% of average; that is about 139% of last year at this time. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is estimated at 99% of average (115% of last year). Bear River Basin SWE, above the Idaho State line, is 108% of average (124% of last year). See the Basin Summary of Snow Course Data at the beginning of this report for more detailed information.



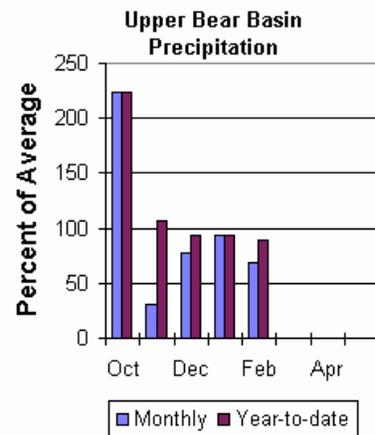
Reservoir storage last year at this time was 7,500 ac-ft at this time.

## Precipitation

Precipitation for last month was 69% of average for the 2 reporting stations; this is 90% of the precipitation received last year. The year-to-date precipitation, for the basin, is 89% of average; this is 113% of last year's amount.

## Reservoir

Usable storage, in Woodruff Narrows reservoir, is about 19,000 ac-ft (69% of average). Current reservoir storage is about 33% of capacity.



## Streamflow

The following 50% chance stream flow yields are for the April through September period. The Smiths Fork River near Border is estimated to yield 105,000 ac-ft (87% of average). The Bear River above the Utah-Wyoming State Line is expected to yield about 137,000 ac-ft (110% of average). The Bear River above Reservoir near Woodruff is estimated to yield 163,000 ac-ft (115% of average). See the following table for more detailed information on projected runoff.

UPPER BEAR RIVER BASIN  
Streamflow Forecasts - March 1, 2005

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>					30-Yr Avg. (1000AF)					
		90% (1000AF)		70% (1000AF)		50% (1000AF) (% AVG.)		30% (1000AF)		10% (1000AF)		
		Chance Of Exceeding *										
Bear River nr UT-WY State Line	APR-JUL	97	114	126	112	138	155	113				
	APR-SEP	104	123	137	110	151	170	125				
Bear River ab Reservoir nr Woodruff	APR-JUL	109	137	156	115	175	205	136				
	APR-SEP	115	143	163	115	181	211	142				
Smiths Fork nr Border	APR-JUL	68	82	91	88	100	114	103				
	APR-SEP	79	95	105	87	115	131	121				

UPPER BEAR RIVER BASIN Reservoir Storage (1000 AF) - End of February					UPPER BEAR RIVER BASIN Watershed Snowpack Analysis - March 1, 2005				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of		
		This Year	Last Year	Avg			Last Yr	Average	
WOODRUFF NARROWS	57.3	19.0	7.5	27.6	UPPER BEAR RIVER in Utah	7	139	118	
					SMITHS & THOMAS FORKS	4	115	99	
					BEAR RIVER abv ID line	9	124	108	
					NORTHWEST	74	77	70	
					NORTHEAST	22	73	66	
					SOUTHEAST	36	106	88	
					SOUTHWEST	35	105	96	

\* 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 2005

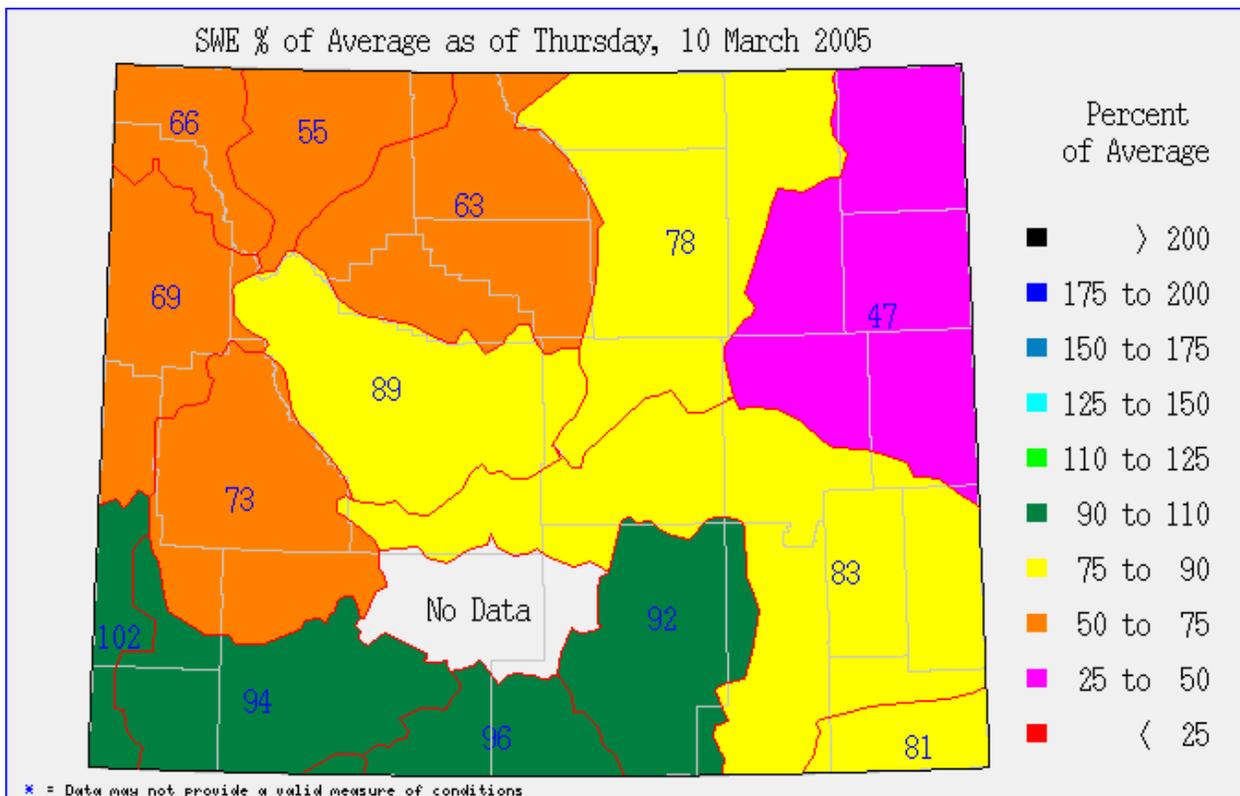


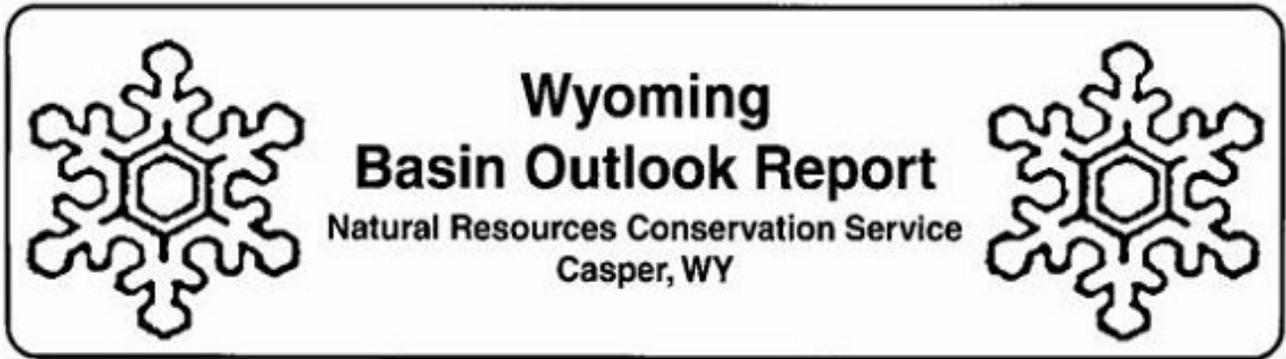
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