

United States
Department of
Agriculture

Natural
Resources
Conservation
Service

Wyoming Basin Outlook Report

March 1, 2013



Blind Park SNOTEL (Black Hills)

Basin Outlook Reports

And

Federal - State - Private

Cooperative Snow Surveys

For more water supply and resource management information, contact:

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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. 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 above, and a 50% chance that the actual flow will be below, this 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 is among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. 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

The snow water equivalent (SWE) across Wyoming is below normal for March 1st at 85%. Monthly precipitation for the basins varied from 40-162% of average. Year-to-date precipitation for Wyoming basins varies from 62-97% of average. Forecasted runoff varies from 15-105% of average across the Wyoming basins for an overall average of 72%. Basin reservoir levels for Wyoming vary from 39-172% of average for an overall average of 97%.

Snowpack

Snow water equivalent (SWE), across Wyoming is below normal for this time of year at 85%. SWE in the NW portion of Wyoming is now about 88% of normal (76% of last year). NE Wyoming SWE is currently about 94% of normal (63% of last year). The SE Wyoming SWE is currently about 76% of normal (80% of last year). The SW Wyoming SWE is about 79% of normal (80% of last year).

Precipitation

Last month's precipitation was below average across Wyoming. The Lower North Platte Basin had the highest precipitation for the month at 162% of average. The Madison-Gallatin Basin had the lowest precipitation amount at 40% 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	-53%	Upper North Platte River	-10%
Madison-Gallatin	-60%	Sweetwater River	-55%
Yellowstone	-42%	Lower North Platte	+62%
Wind River	-32%	Laramie River	-12%
Bighorn	-11%	South Platte	0%
Shoshone	-35%	Little Snake River	-23%
Powder River	-02%	Upper Green River	-57%
Tongue River	+18%	Lower Green River	-45%
Belle Fourche	-04%	Upper Bear River	-54%
Cheyenne	+24%		

Streams

Stream flow yield for April to September is expected to be below average across Wyoming. Most probable yield for the entire State of Wyoming is forecast to be about 72% (varying from 15-105% of average). The Snake River and Madison River Basins are expected to yield about 77% and 92% of average, respectively; 72-92% of average for the various forecast points in the basins. Yields from the Yellowstone and Clark's Fork are expected to be 90% and 90% respectively. Yields from the Wind and Bighorn River Basins are expected to be about 73 and 76% of average; varying from 53-94% of average in the basins. Yield from the Shoshone River Basin of Wyoming is expected to yield about 89%, varying from 85-91% of average. Yields from the Tongue & Powder River Basins are expected to be about 77% and 91% of average, respectively; varying from 77-105% of average. Yield for the Cheyenne River Basin is expected to be about 90% of average. Yields for the Upper, Lower North Platte, Sweetwater and Laramie Rivers of Wyoming are expected to be about 46%, 15%, 41, and 70% of average, respectively; varying from 15-71% of average. Yields for the Little Snake, Green River, and Little Bear of

Wyoming are expected to be 51%, 55%, and 68% of average respectively; yield estimates vary from 51-78% of average.

Reservoirs

Reservoir storage varies widely across the state however reservoir storage is at 97% of average for the entire state. Reservoirs in the Wind River Basin are near average at 98%. Reservoirs on the Big Horn are above average at 104%. The Buffalo Bill Reservoir on the Shoshone is above average at 123%. Reservoirs in the northeast are average in storage at 100%. Reservoirs on the North Platte River are below average at 79%. Reservoirs above Flaming Gorge on the Green River are above average at 105%. See the following table for further information about reservoir storage.

Major Reservoirs in Wyoming March 1, 2013

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	85	101	100
ANGOSTURA	59	80	83	71	74
BELLE FOURCHE	60	73	63	95	82
BIG SANDY	19	59	46	40	31
BIGHORN LAKE	64	63	59	108	101
BOYSEN	80	102	83	97	79
BUFFALO BILL	67	68	54	123	97
BULL LAKE	51	62	50	103	83
DEERFIELD	99	98	87	114	101
ENNIS LAKE	68	72	73	93	94
FLAMING GORGE	79	88	80	98	90
FONTENELLE	41	37	37	110	112
GLENDO	55	81	68	82	69
Grassy Lake	85	81	80	107	105
GUERNSEY	13	34	33	39	39
HEBGEN LAKE	76	78	73	105	98
Jackson Lake	73	76	51	143	97
KEYHOLE	77	88	47	165	88
PACTOLA	89	95	84	107	94
Palisades	44	87	66	67	51
PATHFINDER	42	79	57	73	53
PILOT BUTTE	78	79	74	106	99
SEMINOE	48	83	49	98	57
SHADEHILL	43	45	61	70	95
TONGUE RIVER	61	77	36	172	80
VIVA NAUGHTON RES	55	66	68	81	84
WHEATLAND #2		AVERAGE NOT ESTABLISHED (CO)			
WOODRUFF NARROWS	15	86	55	28	18
TOTAL 25 RESERV	58	77	60	97	76
Raw KAF Totals Current=5450 Last Year=7189 Average=5625 Capacity=9383					

**BASIN SUMMARY OF
SNOTEL and SNOW COURSE DATA**

MARCH 2013

SNOW SITE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	NORMAL 81-10

WYOMING Snow Course and SNOTEL Stations						
ALBANY	9400	2/26/13	31	6.7	11.7	10.6
ARAPAHO RIDGE SNTL	10960	3/01/13	52	13.4	15.2	--
ASTER CREEK	7750	2/27/13	59	19.3	25.1	21.6
BALD MOUNTAIN SNOTEL	9380	3/01/13	47	10.9	18.4	14.7
BASE CAMP	7030	3/01/13	48	13.0	20.1	15.0
BASE CAMP SNOTEL	7030	3/01/13	---	13.2	18.3	13.5
BATTLE MTN. SNOTEL	7440	3/01/13	29	6.9	10.7	9.9
BEARLODGE DIVIDE	4680	2/25/13	11	2.4	1.3	1.6
BEARTOOTH LK. SNOTEL	9280	3/01/13	49	12.8	20.9	16.7
BEAR RIVER RS SNOTEL	8780	3/01/13	29	6.4	6.1	--
BEAR TRAP SNOTEL	8200	3/01/13	31	6.7	7.9	4.4
BIG GOOSE SNOTEL	7760	3/01/13	27	5.2	9.2	6.2
BIG PARK	8620	2/22/13	42	10.6	13.2	14.0
BIG SANDY SNOTEL	9080	3/01/13	38	8.1	12.0	10.1
BLACK BEAR SNOTEL	7950	3/01/13	95	29.8	29.2	29.6
BLACK'S FORK JUNCTN	8930	2/25/13	28	5.2	5.9	6.7
BLACKS FORK JCT SNT	8870	3/01/13	28	5.1	4.9	--
BLACKHALL MTN SNOTEL	9820	3/01/13	69	18.1	--	--
BLACKWATER SNOTEL	9780	3/01/13	55	16.4	21.5	17.2
BLIND BULL SNOTEL	8900	3/01/13	54	14.3	19.9	17.9
BLIND PARK SNOTEL	6870	3/01/13	25	5.4	8.4	6.4
BLUE RIDGE	9620	2/25/13	28	5.6	8.8	7.9
BONE SPGS. SNOTEL	9350	3/01/13	44	10.8	18.0	12.0
BROOKLYN LK. SNOTEL	10220	3/01/13	---	12.5	16.6	15.0
BUCK PASTURE SNOTEL	9700	3/01/13	39	9.2	--	--
BUG LAKE SNOTEL	7950	3/01/13	39	11.6	12.7	14.8
BURGESS JCT. SNOTEL	7880	3/01/13	36	7.7	11.5	8.3
BURROUGHS CRK SNOTEL	8750	3/01/13	32	8.5	12.9	10.7
BUTTER HILL	7880	2/26/13	38	9.0	10.1	11.5
BURT'S-MILLER RANCH	7900	2/26/13	17	3.0	1.8	4.8
BURTS-MILLER RANCH S	7860	3/01/13	18	3.5	5.3	3.5
CAMERON PASS	10300	2/27/13	54	14.6	16.9	19.6
CANYON SNOTEL	8090	3/01/13	39	8.6	10.7	10.5
CASPER MTN. SNOTEL	7850	3/01/13	40	7.1	17.6	10.2
CASTLE CREEK SNOTEL	8400	3/01/13	24	5.0	7.1	--
CASTLE CREEK	8400	2/26/13	20	3.7	5.5	3.0
CCC CAMP	7000	2/27/13	37	8.7	9.9	9.7
CHALK CK #1 SNOTEL	9100	3/01/13	52	13.8	14.0	18.3
CHAMBERS LAKE	9000	2/27/13	21	4.0	5.2	5.8
CINNABAR PARK SNOTEL	9690	3/01/13	47	11.5	15.3	17.1
CLOUD PEAK SNOTEL	9850	3/01/13	41	9.0	15.2	10.4
COLE CANYON SNOTEL	5910	3/01/13	19	4.3	6.6	5.0
COLD SPRINGS SNOTEL	9630	3/01/13	28	6.1	7.5	5.5
COLUMBINE SNOTEL	9300	3/01/13	---	15.5	17.9	19.8
COTTONWOOD CR SNOTEL	7700	3/01/13	---	14.3	17.3	16.9
CROW CREEK SNOTEL	8830	3/01/13	18	3.9	7.7	6.7
DARBY CANYON	8250	2/27/13	57	15.0	16.3	19.0
DEADMAN HILL SNOTEL	10200	3/01/13	45	10.2	15.5	12.4
DEEP LAKE	10500	2/25/13	76	22.5	27.5	--
DEEP LAKE	10500	2/25/13	76	22.5	27.5	--
DEER PARK SNOTEL	9700	3/01/13	33	9.5	10.6	10.8
DIVIDE PEAK SNOTEL	8860	3/01/13	44	12.0	13.3	15.8

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	MEDIAN 81-10
DITCH CREEK	6870	2/26/13	10	2.1	3.7	3.1
DOMELAKE SNOTEL	8880	3/01/13	35	6.9	13.2	8.7
DU NOIR	8760	2/27/13	23	4.8	7.1	5.1
EF BLACKS FORK GS SN	9360	3/01/13	42	10.1	8.5	--
EAST RIM DIV SNOTEL	7930	3/01/13	33	7.9	10.2	8.1
ELKHART PARK SNOTEL	9400	3/01/13	---	7.7	11.6	9.4
ELK RIVER SNOTEL	8600	3/01/13	---	11.0	13.9	15.5
EVENING STAR SNOTEL	9200	3/01/13	65	19.5	24.4	19.1
FISHER CREEK SNOTEL	9100	3/01/13	78	25.8	28.5	25.8
FOUR MILE MEADOWS	7860	3/01/13	40	9.3	9.4	9.6
FOXPARK	9060	2/26/13	18	3.2	5.7	6.0
GEYSER CREEK	8500	2/27/13	17	3.5	7.9	4.2
GLADE CREEK	7040	2/28/13	54	14.7	22.4	18.6
GRAND TARGHEE SNOTEL	9260	3/01/13	108	29.8	30.1	30.2
GRANITE CRK SNOTEL	6770	3/01/13	44	10.1	15.0	13.8
GRANNIER MEADOWS	8860	2/25/13	27	6.2	9.6	9.4
GRASSY LAKE	7270	2/28/13	68	19.6	30.4	27.2
GRASSY LAKE SNOTEL	7270	3/01/13	75	21.4	27.6	26.2
GRAVE SPRINGS SNOTEL	8550	3/01/13	27	5.2	8.2	6.9
GROS VENTRE SNOTEL	8750	3/01/13	37	8.3	8.5	9.7
GROVER PARK DIVIDE	7000	2/27/13	30	6.9	9.2	8.4
GUNSIGHT PASS SNOTEL	9820	3/01/13	38	9.0	10.6	10.6
HAIRPIN TURN	9480	2/25/13	33	7.9	14.1	11.5
HANSEN S.M. SNOTEL	8360	3/01/13	23	4.4	5.9	4.7
HAMS FORK SNOTEL	7840	3/01/13	31	7.2	9.5	9.2
HASKINS CREEK	8980	2/26/13	70	19.4	19.4	24.4
HOBACK GS	6640	2/25/13	29	6.4	9.4	8.2
HOBBS PARK SNOTEL	10100	3/01/13	40	8.8	13.1	9.7
HUCKLEBERRY DIVIDE	7300	2/27/13	51	13.5	19.5	16.8
INDIAN CREEK SNOTEL	9430	3/01/13	---	14.6	17.8	19.0
JACKPINE CREEK	7350	2/27/13	52	13.8	18.3	17.8
JOE WRIGHT SNOTEL	10000	3/01/13	47	10.5	12.8	16.6
KELLEY R.S. SNOTEL	8180	3/01/13	39	9.3	11.7	12.1
KENDALL R.S. SNOTEL	7740	3/01/13	33	7.7	13.5	9.7
LAKE CAMP	7780	3/02/13	34	8.8	7.6	7.8
LA PRELE SNOTEL	8380	3/01/13	26	4.5	8.7	7.8
LARSEN CREEK	9020	2/25/13	25	5.0	7.7	8.2
LARSEN CREEK SNOTEL	9020	3/01/13	24	5.9	10.5	--
LEWIS LAKE SNOTEL	7850	3/01/13	71	21.6	26.0	25.2
LIBBY LODGE	8750	2/25/13	29	7.5	12.4	8.4
LITTLE BEAR RUN	6240	2/26/13	13	2.8	--	3.3
LITTLE GOOSE SNOTEL	8870	3/01/13	30	6.2	10.4	--
LITTLE SNAKE RIVER	8920	3/01/13	---	15.5	18.6	19.7
LITTLE WARM SNOTEL	9370	3/01/13	35	7.5	7.3	7.9
LOOMIS PARK SNOTEL	8240	3/01/13	---	8.9	12.9	11.7
MADISON PLT SNOTEL	7750	3/01/13	60	17.3	18.1	17.8
MALLO	6420	2/26/13	23	5.4	7.9	6.0
MARQUETTE SNOTEL	8760	3/01/13	22	4.3	8.4	--
MEDICINE LODGE LAKES	9340	2/27/13	34	7.5	11.2	7.6
MIDDLE FORK	7420	2/25/13	19	2.9	6.1	4.0
MIDDLE POWDER SNOTEL	7760	3/01/13	40	8.4	9.9	8.0
MORAN	6750	3/01/13	31	5.1	13.2	10.4
MOSS LAKE	9800	2/25/13	53	14.8	15.6	16.6
MOUNT TOM	5560	2/28/13	17	3.0	5.2	3.7
NEVER SUMMER SNOTEL	10280	3/01/13	51	10.8	12.1	--
NEW FORK SNOTEL	8340	3/01/13	28	6.3	10.4	8.2
NORRIS BASIN	7500	2/28/13	27	6.0	7.6	8.0

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	MEDIAN 81-10
N.E. ENTRANCE SNOTEL	7350	3/01/13	24	6.1	9.3	8.2
NORTH BARRETT CREEK	9400	2/26/13	56	13.4	14.4	17.0
NORTH FRENCH SNOTEL	10130	3/01/13	66	17.0	18.4	21.1
NORTH RAPID CK SNTL	6130	3/01/13	24	5.6	7.7	5.9
NORTH TONGUE	8450	2/27/13	37	7.7	13.4	9.0
OLD BATTLE SNOTEL	9920	3/01/13	65	19.0	20.8	23.9
OLD FAITHFUL	7400	2/27/13	35	9.0	9.7	11.0
ONION GULCH	8780	2/28/13	27	5.3	8.2	5.3
OWL CREEK SNOTEL	8980	3/01/13	22	4.3	4.5	3.9
PARKERS PEAK SNOTEL	9400	3/01/13	60	16.6	19.2	16.0
PHILLIPS BNCH SNOTEL	8200	3/01/13	58	16.3	20.7	19.7
POCKET CREEK	9350	2/25/13	33	8.8	9.2	9.0
POCKET CREEK SNOTEL	9350	3/01/13	39	7.0	9.2	--
POLE MOUNTAIN	8700	2/27/13	31	5.1	10.2	6.6
POWDER RVR.PASS SNTL	9480	3/01/13	37	8.6	11.4	8.0
PURGATORY GULCH	8970	2/26/13	36	8.2	10.4	8.8
RANGER CREEK	8120	2/27/13	29	6.4	9.6	5.8
RAWAH SNOTEL	9020	3/01/13	36	8.2	7.4	--
RENO HILL SNOTEL	8500	3/01/13	43	7.7	15.0	10.0
REUTER CANYON	6280	2/27/13	26	6.8	9.4	7.2
ROACH SNOTEL	9400	3/01/13	43	9.3	12.2	12.4
ROWDY CREEK	8300	2/25/13	40	10.2	16.5	13.8
RYAN PARK	8400	2/26/13	37	7.6	8.8	9.4
SAGE CK BASIN SNTL	7850	3/01/13	39	8.5	14.6	10.6
SALT RIVER SNOTEL	7600	3/01/13	35	8.2	9.9	10.6
SAND LAKE SNOTEL	10050	3/01/13	67	16.6	21.9	21.2
SANDSTONE RS SNOTEL	8150	3/01/13	38	8.9	10.3	10.4
SAWMILL DIVIDE	9260	2/25/13	43	8.6	14.4	9.6
SHELL CREEK SNOTEL	9580	3/01/13	41	10.2	16.3	11.6
SHERIDAN R.S.	7750	2/27/13	15	2.6	3.6	4.2
SNAKE RIVER STATION	6920	2/27/13	46	12.3	19.0	16.1
SNAKE RV STA SNOTEL	6920	3/01/13	43	11.3	16.8	14.2
SNIDER BASIN SNOTEL	8060	3/01/13	33	8.1	11.8	9.6
SNOW KING MTN	7660	2/26/13	33	8.2	10.2	11.2
SOLDIER PARK SNOTEL	8780	3/01/13	14	3.1	12.8	--
SOLDIER PARK	8780	2/26/13	17	3.0	4.9	3.2
SOUR DOUGH	8460	2/26/13	25	4.0	5.4	4.2
SOUTH BRUSH SNOTEL	8440	3/01/13	35	7.7	7.7	10.3
SOUTH PASS SNOTEL	9040	3/01/13	35	7.8	12.9	11.4
SPRING CRK. SNOTEL	9000	3/01/13	60	16.2	20.5	18.6
STILLWATER CAMP	8550	2/25/13	27	5.0	6.1	8.0
ST LAWRENCE ALT SNTL	8620	3/01/13	24	3.8	4.8	5.2
SUCKER CREEK SNOTEL	8880	3/01/13	42	9.3	13.6	8.9
SYLVAN LAKE SNOTEL	8420	3/01/13	52	13.9	15.7	15.9
SYLVAN ROAD SNOTEL	7120	3/01/13	30	7.6	12.1	9.4
T CROSS RANCH	7900	2/26/13	18	3.5	7.4	5.2
TETON PASS W.S.	7740	2/27/13	52	14.9	21.4	21.1
THUMB DIVIDE	7980	2/27/13	40	10.9	12.5	12.5
THUMB DIVIDE SNOTEL	7980	3/01/13	44	12.0	13.5	12.3
TIE CREEK SNOTEL	6870	3/01/13	20	4.3	6.9	4.3
TIMBER CREEK SNOTEL	7950	3/01/13	17	3.0	4.6	3.7
TOGWOTEE PASS SNOTEL	9580	3/01/13	60	16.0	18.8	17.7
TOWER SNOTEL	10000	3/01/13	82	23.7	27.3	36.3
TOWNSEND CRK SNOTEL	8700	3/01/13	24	4.2	8.1	6.5
TRIPLE PEAK SNOTEL	8500	3/01/13	54	14.2	20.4	16.8
TURPIN MEADOWS	6900	3/01/13	33	7.5	9.8	8.2
TWENTY-ONE MILE	7150	3/01/13	44	13.4	11.6	12.4

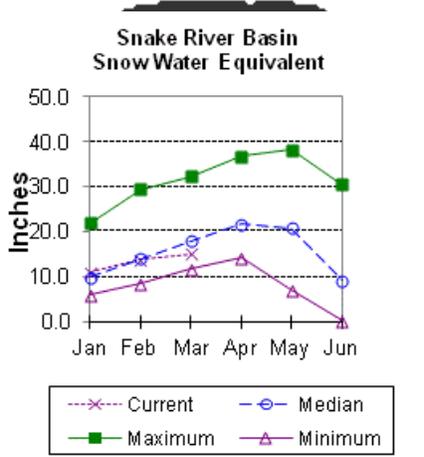
SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	MEDIAN 81-10
TWO OCEAN SNOTEL	9240	3/01/13	67	21.1	28.4	21.6
TYRELL RANGER STA.	8300	2/26/13	26	5.3	7.4	5.2
WEBBER SPRING SNOTEL	9250	3/01/13	53	14.9	16.0	18.7
WHISKEY PARK SNOTEL	8950	3/01/13	63	17.7	19.0	21.5
WHITE MILL SNOTEL	8700	3/01/13	55	17.1	18.7	18.3
WILLOW CREEK SNOTEL	8450	3/01/13	64	18.6	22.7	22.2
WINDY PEAK SNOTEL	7900	3/01/13	---	3.4	6.8	5.7
WOLVERINE SNOTEL	7650	3/01/13	25	7.9	11.9	8.5
WOOD ROCK G.S.	8440	2/25/13	31	5.8	9.8	6.8
YOUNTS PEAK SNOTEL	8350	3/01/13	38	9.8	14.8	11.7
ZIRKEL SNOTEL	9340	3/01/13	50	16.5	22.7	--

NOTE: Missing snow depth entries indicate the site has no snow depth sensor or the sensor is malfunctioning. Missing data under MEDIAN 81-10 indicates the site is relatively new.

Snake River Basin

Snow

The Snake River Basin snow water equivalent (SWE) is 84% of normal. SWE in the Snake River Basin above Jackson Lake is 84% of normal. Pacific Creek Basin SWE is 87% of normal. SWE in the Buffalo Fork basin is 90% of normal. Gros Ventre River Basin SWE is 88% of normal. SWE in the Hoback River drainage is 79% of normal. SWE in the Greys River drainage is 84% of normal. See the "Basin Summary of Snow Course Data" at the beginning of this report for a detailed listing of snow course information.



Precipitation

Precipitation across the basin was below average last month. Monthly precipitation for the basin was 47% of average (40% of last year). Last month's percentages range from 5-76% of average for the 26 reporting stations. Water-year-to-date precipitation is 6% of average for the Snake River Basin (82% of last year). Year-to-date percentages range from 70-106% of average.

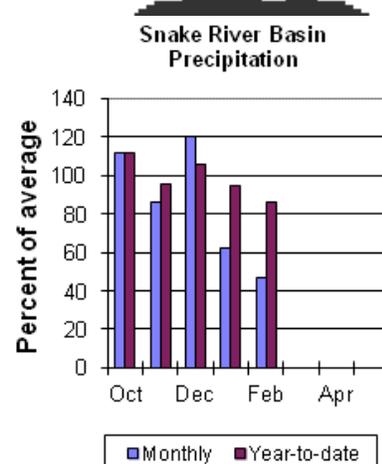
Reservoirs

Current reservoir storage is 91% of average for the 3 storage reservoirs in the basin.

Grassy Lake storage is about 107% of average (12,900 ac-ft compared to 12,300 last year). Jackson Lake storage is 143% of average (621,300 ac-ft compared to 434,000 ac-ft last year). Palisades Reservoir storage is 106% of average (1,254,500 ac-ft compared to 1,180,000 ac-ft last year). Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.

Streamflow

The 50% exceedance forecasts for April through September are below average for the basin. The Snake near Moran is 705,000 ac-ft (83% of average). Snake River above reservoir near Alpine is 1,960,000 ac-ft (78% of average). The Snake near Irwin is 2,710,000 ac-ft (77% of average). The Snake near Heise is 2,910,000 ac-ft (77% of average). Pacific Creek near Moran is 145,000 ac-ft (84% of average). Buffalo Fork above Lava near Moran is 275,000 ac-ft (86% of average). Greys River above Palisades Reservoir is 280,000 ac-ft (78% of average). Salt River near Etna is 265,000 ac-ft (72% of average). See the following page for detailed runoff volumes.



Snake River Basin

Streamflow Forecasts - March 1, 2013

Forecast Pt	<=== Drier ===		Future Conditions		=== Wetter ===>		
Forecast Period	90%	70%	50%	30%	10%	30 Yr Avg	
Period	(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)
Snake R nr Moran (1,2)							
APR-JUL	453	578	635	83	692	817	765
APR-SEP	496	640	705	83	770	914	845
Snake R nr Alpine (1,2)							
APR-JUL	1200	1544	1700	78	1856	2200	2170
APR-SEP	1369	1775	1960	78	2145	2551	2500
Snake R nr Irwin (1,2)							
APR-JUL	1678	2119	2320	77	2521	2962	3010
APR-SEP	1997	2487	2710	77	2933	3423	3500
Snake R nr Heise (2)							
APR-JUL	1934	2259	2480	77	2701	3026	3240
APR-SEP	2294	2661	2910	77	3159	3526	3780
Pacific Ck At Moran							
APR-JUL	92	119	137	84	155	182	164
APR-SEP	98	126	145	84	164	192	173
Buffalo Fork ab Lava nr Moran							
APR-JUL	188	222	245	88	268	302	280
APR-SEP	209	248	275	86	302	341	320
Greys R Nr Alpine							
APR-JUL	177	214	240	79	266	303	305
APR-SEP	204	249	280	78	311	356	360
Salt R Nr Etna							
APR-JUL	94	163	210	70	257	326	300
APR-SEP	125	208	265	72	322	405	370

* 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 1981-2010 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.

SNAKE RIVER BASIN

Reservoir Storage (1000AF) End of February

Reservoir	Usable Capacity	***** This Year	***** Usable Storage Last Year	***** Average
Grassy Lake	15.2	12.9	12.3	12.1
Jackson Lake	847.0	621.3	640.0	434.7
Palisades	1400.0	620.3	1223.5	925.7

SNAKE RIVER BASIN

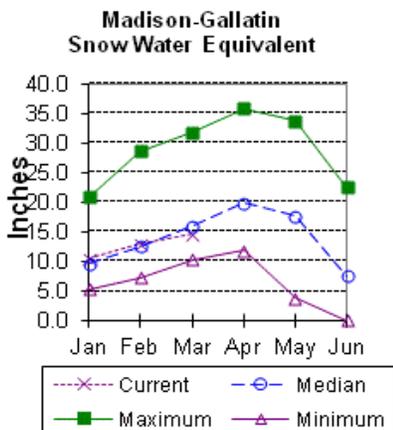
Watershed Snowpack Analysis - March 1, 2013

Watershed	Number of Data Sites	This Year as Percent of Last Year	Percent of Median
SNAKE above Jackson Lake	9	73	84
PACIFIC CREEK	3	66	87
BUFFALO FORK	4	81	90
GROS VENTRE RIVER	4	82	83
HOBACK RIVER	5	72	79
GREYS RIVER	5	77	84
SALT RIVER	5	82	84
SNAKE above Palisades	31	75	83

Madison-Gallatin Rivers Basin

Snow

Snow water equivalent (SWE) is at 91% of normal in the Madison-Gallatin Basin. For more information on the "Summary of Snow Course Data" at the front of this report for details.



Precipitation

First month precipitation in the Madison-Gallatin Basin was about 40% of average (34% of last year). The 6 reporting stations percentages range from 25-48% of average. Water-year-to-date precipitation is about 91% of average (90% of last year's amount). Year to date percentage ranges from 75-96%.

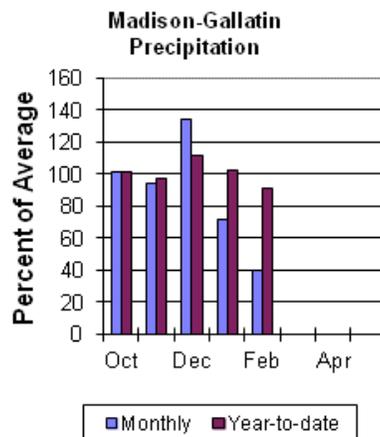
Reservoirs

Hebgen Reservoir is storing about 27,800 ac-ft of water (68% of capacity, 93% of average or 94% 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.

capacity, 105% of average or 98% of last year's volume). Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.

Streamflow

The 50% exceedance forecast for April through September is below average for the basin. Hebgen Reservoir inflow is 430,000 ac-ft (92% of average). See the following page for detailed runoff volumes.



Madison-Gallatin Rivers Basin

MADISON-GALLATIN RIVER BASINS
Streamflow Forecasts - March 1, 2013

Forecast Pt	<=== Drier ===		Future Conditions		=== Wetter ===>		
Forecast Period	90%	70%	50%	30%	10%	30 Yr Avg	
	(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)
Hebgen Reservoir Inflow (2)							
APR-JUL	265	305	330	89	355	395	370
APR-SEP	350	400	430	92	460	510	470

- * 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 1981-2010 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.

MADISON-GALLATIN RIVER BASINS
Reservoir Storage (1000AF) End of February

Reservoir	Usable Capacity	***** This Year	***** Usable Storage Last Year	***** Average
ENNIS LAKE	41.0	27.8	29.6	29.8
HEBGEN LAKE	377.5	287.8	293.5	274.6

MADISON-GALLATIN RIVER BASINS
Watershed Snowpack Analysis - March 1, 2013

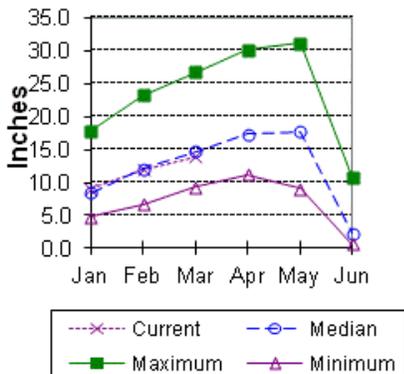
Watershed	Number of Data Sites	This Year as Percent of Last Year	Percent of Median
MADISON RIVER in WY	8	91	91

Yellowstone River Basin

Snow

SWE in the Yellowstone drainage is at 95% of normal. See the "Basin Summary of Snow Course Data" at the front of this report for details.

Yellowstone River Basin
Snow Water Equivalent



precipitation

Last month precipitation in the Yellowstone drainage was about 58% of average (49% of last year). The 15 reporting stations percentages range from 27-93% of average. Water-year-to-date precipitation is about 92% of average (82% of last year's amount). Year to date percentages range from 56-122%.

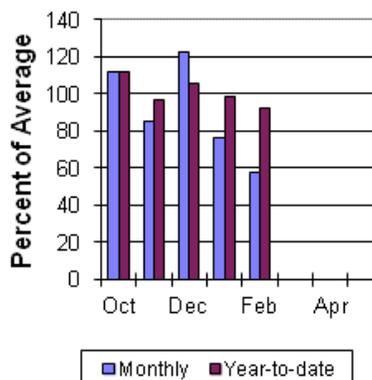
reservoirs

Reservoir data for the basin.

streamflow

The 50% exceedance forecasts for April through September are below average for the basin. Yellowstone at Lake Outlet is 660,000 ac-ft (86% of average). Yellowstone at Corwin Springs will yield around 1,680,000 ac-ft (89% of average). Yellowstone near Livingston will yield around 1,920,000 ac-ft (90% of average). The Clark's Fork of the Yellowstone River should yield around 495,000 ac-ft (90% of average). See the following page for detailed runoff volumes.

Yellowstone River Basin
Precipitation



Yellowstone River Basin

Streamflow Forecasts - March 1, 2013

```

=====
| <=== Drier === Future Conditions === Wetter ===> |
| | | | | | | | |
Forecast Pt | ===== Chance of Exceeding * ===== |
Forecast | 90% 70% | 50% | 30% 10% | 30 Yr Avg
Period | (1000AF) (1000AF) | (1000AF) (% AVG.) | (1000AF) (1000AF) | (1000AF)
=====
Yellowstone R at Yellowstone Lake
APR-JUL 385 455 500 87 545 615 575
APR-SEP 510 600 660 86 720 810 770

Yellowstone R at Corwin Springs
APR-JUL 1130 1320 1440 91 1560 1750 1590
APR-SEP 1310 1530 1680 89 1830 2050 1880

Yellowstone R at Livingston
APR-JUL 1250 1480 1640 91 1800 2030 1800
APR-SEP 1460 1730 1920 90 2110 2380 2140
=====

```

- ```

=====
* 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 1981-2010 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.
=====

```

YELLOWSTONE RIVER BASIN  
Watershed Snowpack Analysis - March 1, 2013

```

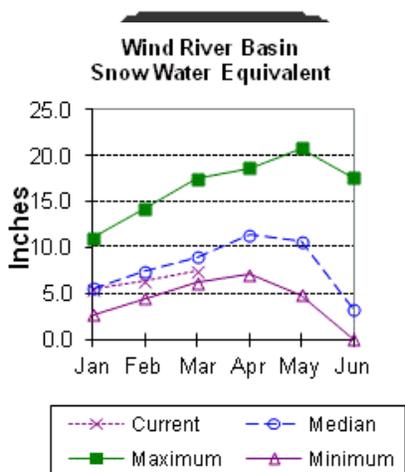
=====
Watershed Number of This Year as Percent of
 Data Sites Last Year Median
=====
YELLOWSTONE RIVER in WY 9 83 95
CLARKS FORK in WY 8 79 94
=====

```

# Wind River Basin

## Snow

The Wind River Basin above Boysen Reservoir is 83% of normal for snow water equivalent at this time of the year. SWE in the Wind River above Dubois is 84% of normal. The Little Wind SWE is 85% of normal, and the Popo Agie drainage SWE is about 75% of normal. See the "Basin Summary of Snow Course Data" at the front of this report for details.



## Precipitation

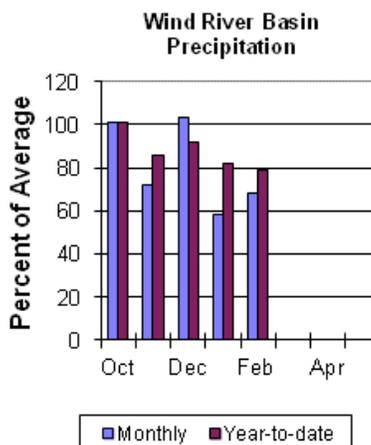
Last month's precipitation in the basin varied from 18-175% of average. Precipitation, for the basin, was about 68% of average from the 14 reporting stations; that is about 52% of last year's amount. Water year-to-date precipitation is 79% of average and about 72% of last year at this time. Year-to-date percentages range from 4-132% of average.

## Reservoirs

Current storage in Bull Lake is about 77,600 ac-ft (103% of average) - the reservoir is at 3% of last year. Boysen Reservoir is storing about 97% of average (478,900 ac-ft) - the reservoir is about 79% of last year. Pilot Butte is at 106% of average (24,800 ac-ft) - the reservoir is at 99% of last year. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.

## Streamflow

The 50% exceedance forecasts for the April through September runoff period are below average. Dinwoody Creek near Burris is 88,000 ac-ft (96% of average). The Wind River above Bull Lake Creek is 415,000 ac-ft (85% of average). Bull Lake Creek near Lenore is 154,000 ac-ft (91% of average). Wind River at Riverton will yield around 450,000 ac-ft (82% of average). Little Popo Agie River near Lander is around 27,000 ac-ft (55% of average). South Fork of Little Wind near Fort Washakie will yield around 67,000 ac-ft (82% of average). Little Wind River near Riverton will yield around 157,000 ac-ft (53% of average). Boysen Reservoir inflow will yield around 485,000 ac-ft (73% of average). See the following page for detailed runoff volumes.



## Wind River Basin

Streamflow Forecasts - March 1, 2013

| Forecast Pt                       | <=== Drier === Future Conditions === Wetter ===> |          |          |          |          |                                | 30 Yr Avg |
|-----------------------------------|--------------------------------------------------|----------|----------|----------|----------|--------------------------------|-----------|
| Forecast Period                   | 90%                                              | 70%      | 50%      | 30%      | 10%      | Chance of Exceeding * (1000AF) |           |
| Period                            | (1000AF)                                         | (1000AF) | (1000AF) | (% AVG.) | (1000AF) | (1000AF)                       | (1000AF)  |
| =====                             |                                                  |          |          |          |          |                                |           |
| Dinwoody Ck nr Burris             |                                                  |          |          |          |          |                                |           |
| APR-JUL                           | 49                                               | 57       | 62       | 94       | 67       | 75                             | 66        |
| APR-SEP                           | 71                                               | 81       | 88       | 96       | 95       | 105                            | 92        |
| Wind R ab Bull Lake Ck (2)        |                                                  |          |          |          |          |                                |           |
| APR-JUL                           | 225                                              | 290      | 335      | 84       | 380      | 445                            | 400       |
| APR-SEP                           | 285                                              | 365      | 415      | 85       | 465      | 545                            | 490       |
| Bull Lake Ck nr Lenore            |                                                  |          |          |          |          |                                |           |
| APR-JUL                           | 95                                               | 114      | 126      | 91       | 138      | 157                            | 139       |
| APR-SEP                           | 116                                              | 138      | 154      | 91       | 170      | 192                            | 169       |
| Wind R at Riverton (2)            |                                                  |          |          |          |          |                                |           |
| APR-JUL                           | 225                                              | 320      | 385      | 81       | 450      | 545                            | 475       |
| APR-SEP                           | 260                                              | 375      | 450      | 82       | 525      | 640                            | 550       |
| Little Popo Agie R nr Lander      |                                                  |          |          |          |          |                                |           |
| APR-JUL                           | 6.9                                              | 15.9     | 22       | 52       | 28       | 37                             | 42        |
| APR-SEP                           | 10.8                                             | 20       | 27       | 55       | 34       | 43                             | 49        |
| SF Little Wind R nr Fort Washakie |                                                  |          |          |          |          |                                |           |
| APR-JUL                           | 39                                               | 51       | 59       | 82       | 67       | 79                             | 72        |
| APR-SEP                           | 44                                               | 58       | 67       | 82       | 76       | 90                             | 82        |
| Little Wind R nr Riverton         |                                                  |          |          |          |          |                                |           |
| APR-JUL                           | 5.0                                              | 82       | 134      | 50       | 186      | 265                            | 270       |
| APR-SEP                           | 15.0                                             | 100      | 157      | 53       | 215      | 300                            | 295       |
| Boysen Reservoir Inflow (2)       |                                                  |          |          |          |          |                                |           |
| APR-JUL                           | 50                                               | 280      | 435      | 71       | 590      | 820                            | 610       |
| APR-SEP                           | 54                                               | 310      | 485      | 73       | 660      | 915                            | 665       |

\* 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 1981-2010 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.

### WIND RIVER BASIN Reservoir Storage (1000AF) End of February

| Reservoir   | Usable Capacity | ***** This Year | ***** Usable Storage Last Year | ***** Average |
|-------------|-----------------|-----------------|--------------------------------|---------------|
| BULL LAKE   | 151.8           | 77.6            | 93.6                           | 75.4          |
| BOYSEN      | 596.0           | 478.9           | 608.1                          | 495.8         |
| PILOT BUTTE | 31.6            | 24.8            | 25.1                           | 23.3          |

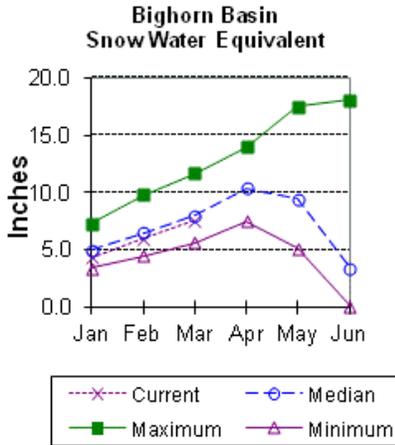
### WIND RIVER BASIN Watershed Snowpack Analysis - March 1, 2013

| Watershed               | Number of Data Sites | This Year as Percent of Last Year | Median |
|-------------------------|----------------------|-----------------------------------|--------|
| WIND RIVER above Dubois | 7                    | 71                                | 84     |
| LITTLE WIND             | 2                    | 70                                | 85     |
| POPO AGIE               | 7                    | 65                                | 75     |
| WIND above Boysen Resv  | 17                   | 70                                | 83     |

# Bighorn River Basin

## Snow

The Bighorn River Basin SWE above Bighorn Reservoir is at 95% of normal. The Nowood River is at 104% of normal. The Greybull River SWE is at 81% of normal. Shell Creek SWE is 87% of normal. See the "Basin Summary of Snow course Data" at the front of this report for details.



## Precipitation

Last month's precipitation was 89% of average (47% of last year). Sites ranged from 53-175% of average for the month. Year-to-date precipitation is 90% of average; that is 70% of last year at this time. Year-to-date percentages, from the 14 reporting stations, range from 58-132%.

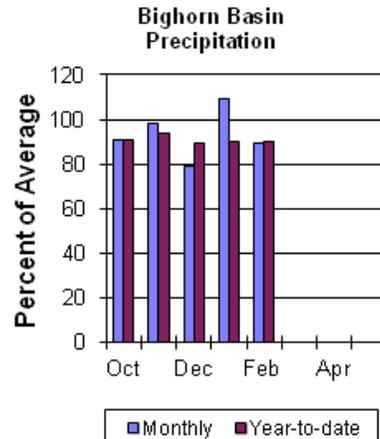
## Reservoirs

Boysen Reservoir is currently storing 478,900 ac-ft (97% of 63,900 ac-ft 108% of average).

Big Horn Lake is storing 101% of last year's volume at this time and Big Horn Lake is storing 101% 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 should yield 485,000 ac-ft (71% of average); the Greybull River near Meeteetse should yield around 164,000 ac-ft (93% of average); Shell Creek near Shell should yield around 62,000 ac-ft (94% of average) and the Bighorn River at Kane should yield around 685,000 ac-ft (76% of average). See the following page for detailed runoff volumes.



## Bighorn River Basin

Streamflow Forecasts - March 1, 2013

| Forecast Pt                 | <=== Drier === Future Conditions === Wetter ===> |          |          |          |          | 30 Yr Avg |
|-----------------------------|--------------------------------------------------|----------|----------|----------|----------|-----------|
| Forecast Period             | 90%                                              | 70%      | 50%      | 30%      | 10%      | (1000AF)  |
| (1000AF)                    | (1000AF)                                         | (1000AF) | (% AVG.) | (1000AF) | (1000AF) | (1000AF)  |
| Boysen Reservoir Inflow (2) |                                                  |          |          |          |          |           |
| APR-JUL                     | 50                                               | 280      | 435      | 71       | 590      | 820       |
| APR-SEP                     | 54                                               | 310      | 485      | 73       | 660      | 915       |
| Greybull R nr Meeteetse     |                                                  |          |          |          |          |           |
| APR-JUL                     | 84                                               | 106      | 121      | 92       | 136      | 158       |
| APR-SEP                     | 116                                              | 145      | 164      | 93       | 183      | 210       |
| Shell Ck nr Shell           |                                                  |          |          |          |          |           |
| APR-JUL                     | 35                                               | 44       | 50       | 91       | 56       | 65        |
| APR-SEP                     | 45                                               | 55       | 62       | 94       | 69       | 79        |
| Bighorn R at Kane (2)       |                                                  |          |          |          |          |           |
| APR-JUL                     | 115                                              | 425      | 635      | 76       | 845      | 1160      |
| APR-SEP                     | 119                                              | 455      | 685      | 76       | 915      | 1250      |

- \* 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 1981-2010 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.

### BIGHORN RIVER BASIN Reservoir Storage (1000AF) End of February

| Reservoir    | Usable Capacity | ***** This Year | ***** Usable Storage Last Year | ***** Average |
|--------------|-----------------|-----------------|--------------------------------|---------------|
| BOYSEN       | 596.0           | 478.9           | 608.1                          | 495.8         |
| BIGHORN LAKE | 1356.0          | 863.9           | 855.1                          | 797.1         |

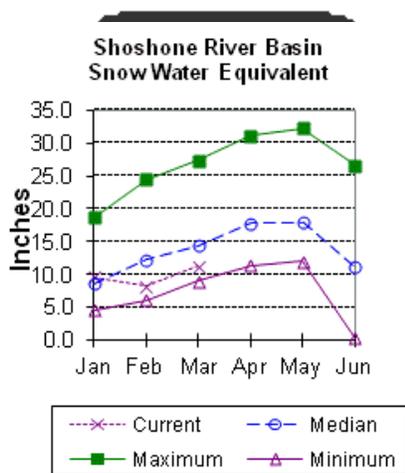
### BIGHORN RIVER BASIN Watershed Snowpack Analysis - March 1, 2013

| Watershed                | Number of Data Sites | This Year as Percent of Last Year | Median |
|--------------------------|----------------------|-----------------------------------|--------|
| NOWOOD RIVER             | 7                    | 73                                | 104    |
| GREYBULL RIVER           | 1                    | 56                                | 81     |
| SHELL CREEK              | 4                    | 61                                | 87     |
| BIGHORN (Boysen-Bighorn) | 12                   | 66                                | 95     |

# Shoshone River Basin

## Snow

Snowpack in this basin is above normal for this time of year. Snow Water Equivalent (SWE) is 92% of normal in the Shoshone River Basin. The Clark Fork River drainage SWE is 94% of normal. See the "Basin Summary of Snow Course Data" at the front of this report for details.



## Precipitation

Precipitation for last month was 65% of average (46% of last year). Monthly percentages range from 33-250% of average. The basin year-to-date precipitation is now 33% of average (74% of last year). Year-to-date percentages range from 53-117% of average or the 5 reporting stations.

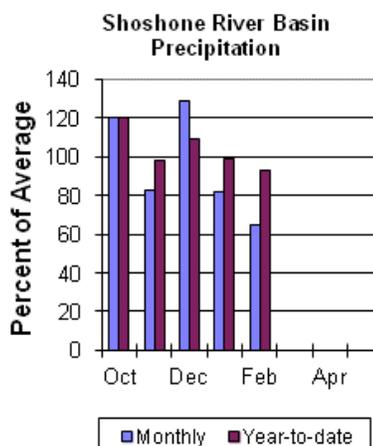
## Reservoirs

Current storage in Buffalo Bill Reservoir is about 123% of average (97% of last year's storage) - the reservoir is at about 67% of capacity. Current storage is 442,000

ac-ft last year. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.

## Streamflow

The 50% exceedance forecasts for the April through September period are expected to be below average for the basin. The North Fork Shoshone River at Wapiti is 470,000 ac-ft (91% of average). The South Fork of the Shoshone River near Valley is 220,000 ac-ft (90% of average), and the South Fork above Buffalo Bill Reservoir runoff is 169,000 ac-ft (85% of average). The Buffalo Bill Reservoir inflow is expected to yield around 665,000 ac-ft (89% of average). See the following page for detailed runoff volumes.



## Shoshone River Basin

Streamflow Forecasts - March 1, 2013

| Forecast Pt                       | <=== Drier === Future Conditions === Wetter ===> |          |          |          |          | 30 Yr Avg |
|-----------------------------------|--------------------------------------------------|----------|----------|----------|----------|-----------|
| Forecast Period                   | 90%                                              | 70%      | 50%      | 30%      | 10%      | (1000AF)  |
| (1000AF)                          | (1000AF)                                         | (1000AF) | (% AVG.) | (1000AF) | (1000AF) | (1000AF)  |
| =====                             |                                                  |          |          |          |          |           |
| NF Shoshone R at Wapiti           |                                                  |          |          |          |          |           |
| APR-JUL                           | 320                                              | 380      | 420      | 91       | 460      | 520       |
| APR-SEP                           | 360                                              | 425      | 470      | 91       | 515      | 580       |
| SF Shoshone R nr Valley           |                                                  |          |          |          |          |           |
| APR-JUL                           | 144                                              | 171      | 190      | 88       | 210      | 235       |
| APR-SEP                           | 166                                              | 197      | 220      | 90       | 240      | 270       |
| SF Shoshone R ab Buffalo Bill Res |                                                  |          |          |          |          |           |
| APR-JUL                           | 89                                               | 133      | 163      | 85       | 193      | 235       |
| APR-SEP                           | 91                                               | 137      | 169      | 85       | 200      | 245       |
| Buffalo Bill Reservoir Inflow (2) |                                                  |          |          |          |          |           |
| APR-JUL                           | 440                                              | 535      | 600      | 89       | 665      | 760       |
| APR-SEP                           | 490                                              | 595      | 665      | 89       | 735      | 840       |
| Clarks Fk Yellowstone R nr Belfry |                                                  |          |          |          |          |           |
| APR-JUL                           | 355                                              | 415      | 455      | 89       | 495      | 555       |
| APR-SEP                           | 385                                              | 450      | 495      | 90       | 540      | 605       |

\* 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 1981-2010 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.

SHOSHONE RIVER BASIN  
Reservoir Storage (1000AF) End of February

| Reservoir    | Usable Capacity | ***** This Year | ***** Usable Storage Last Year | ***** Average |
|--------------|-----------------|-----------------|--------------------------------|---------------|
| BUFFALO BILL | 646.6           | 430.0           | 442.0                          | 350.7         |

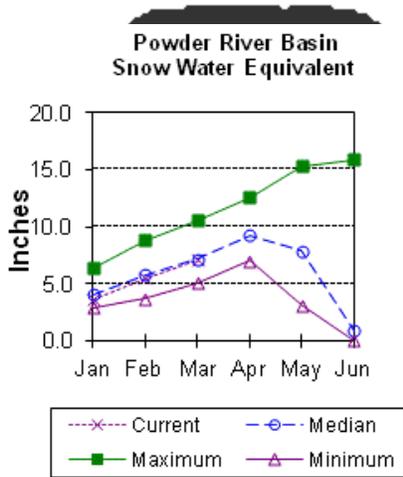
SHOSHONE RIVER BASIN  
Watershed Snowpack Analysis - March 1, 2013

| Watershed      | Number of Data Sites | This Year as Percent of Last Year | Percent of Median |
|----------------|----------------------|-----------------------------------|-------------------|
| SHOSHONE RIVER | 5                    | 74                                | 92                |

# Powder River Basin

## Snow

Snow water equivalent (SWE) in the Upper Powder River drainage is 105% of normal. SWE in the Clear Creek drainage is 91% of normal. Crazy Woman Creek drainage is 102% of normal. Powder River Basin SWE in Wyoming is 99% of normal. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



## Precipitation

Last month's precipitation was 98% of average for the 11 reporting stations (54% of last year). Monthly percentages range from 21-169% of average. Year-to-date precipitation is 97% of average in the basin; this is 75% of last year at this time. Precipitation for the year ranges from 61-132% of average.

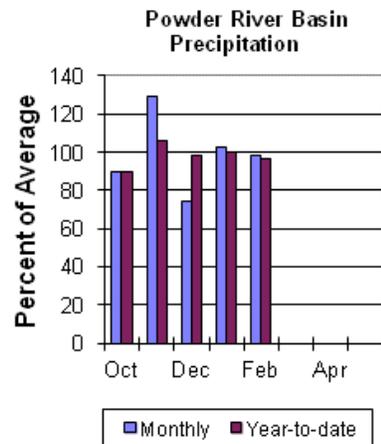
## Reservoirs

No reservoir

data for the basin.

## Streamflow

The 50% exceedance forecasts for the April through September period are expected to be below average for the basin. The Middle Fork of the Powder River near Barnum is 16,200 ac-ft (95% of average). The North Fork of the Powder River near Hazelton should yield around 10,400 ac-ft (105% of average). Rock Creek near Buffalo will yield about 19,500 ac-ft (89% of average), and Piney Creek at Kearny should yield about 39,000 ac-ft (83% of average). The Powder River at Moorhead is 178,000 ac-ft (91% of average). The Powder River near Locate is 200,000 ac-ft (91% of average). See the following pages for volumes.



## Powder River Basin

Streamflow Forecasts - March 1, 2013

```

=====
| <=== Drier === Future Conditions === Wetter ===> |
| | | | | | | | |
Forecast Pt | ===== Chance of Exceeding * ===== |
Forecast | 90% 70% | 50% | 30% 10% | 30 Yr Avg
Period | (1000AF) (1000AF) | (1000AF) (% AVG.) | (1000AF) (1000AF) | (1000AF)
=====
MF Powder R nr Barnum
APR-JUL 9.5 13.0 15.3 95 17.6 21 16.1
APR-SEP 10.2 13.8 16.2 95 18.6 22 17.0
NF Powder R nr Hazelton
APR-JUL 6.4 8.3 9.6 106 10.9 12.8 9.1
APR-SEP 7.0 9.0 10.4 105 11.8 13.8 9.9
Rock Ck nr Buffalo
APR-JUL 8.5 13.0 16.1 87 19.2 24 18.6
APR-SEP 11.3 16.2 19.5 89 23 28 22
Piney Ck at Kearny
APR-JUL 11.5 26 36 82 46 61 44
APR-SEP 14.1 29 39 83 49 64 47
Powder R at Moorhead
APR-JUL 43 111 157 89 205 270 177
APR-SEP 60 130 178 91 225 295 196
Powder R nr Locate
APR-JUL 42 122 177 89 230 310 199
APR-SEP 55 141 200 91 260 345 220
=====

```

\* 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 1981-2010 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.

POWDER RIVER BASIN  
Watershed Snowpack Analysis - March 1, 2013

```

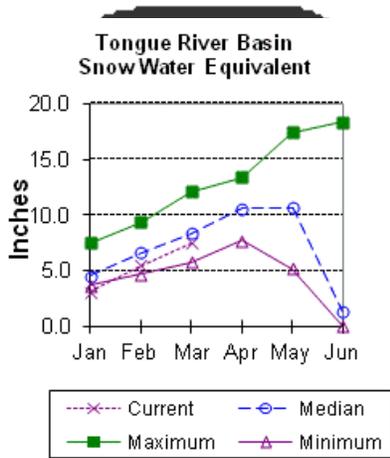
=====
Watershed Number of This Year as Percent of
 Data Sites Last Year Median
=====
UPPER POWDER RIVER 5 75 105
CLEAR CREEK 4 53 91
CRAZY WOMAN CREEK 3 72 102
POWDER RIVER in WY 9 64 99
=====

```

# Tongue River Basin

## Snow

Snow water equivalent (SWE) in the Tongue River drainage is 90% of normal.



of normal. For more information see "Basin ummary of Snow Course Data" at the beginning f this report.

## precipitation

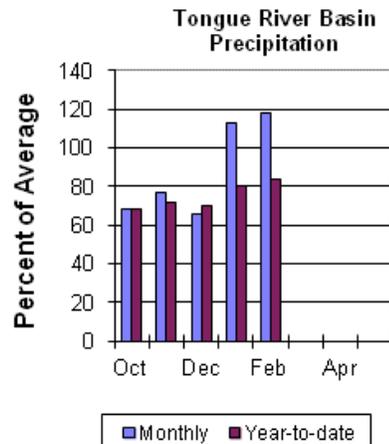
ast month's precipitation was 118% of average or the 9 reporting stations (71% of last ear). Monthly percentages range from 57-233% f average. Year-to-date precipitation is 84% f average in the basin; this is 59% of last ear at this time. Precipitation for the year anges from 74-148% of average.

## eservoirs

he Tongue River Reservoir currently is storing 72% of average (48,400 ac-ft) compared to 80% f last year's

## streamflow

The 50% exceedance forecasts for the April through September period are expected to be below average for the basin. The yield for Tongue River near Dayton is 84,000 ac-ft (86% of average). Big Goose Creek near Sheridan is 43,000 ac-ft (80% of average). Little Goose Creek near Bighorn is 32,000 ac-ft (82% of average). The Tongue River Reservoir Inflow is 165,000 ac-ft (77% of average). See the following page for detailed runoff volumes.



## Tongue River Basin

Streamflow Forecasts - March 1, 2013

```

=====
| <=== Drier === Future Conditions === Wetter ===> |
| | | | | | | | |
Forecast Pt | ===== Chance of Exceeding * ===== |
Forecast | 90% 70% | 50% | 30% 10% | 30 Yr Avg
Period | (1000AF) (1000AF) | (1000AF) (% AVG.) | (1000AF) (1000AF) | (1000AF)
=====
Tongue R nr Dayton (2)
APR-JUL 42 60 73 85 86 104 86
APR-SEP 50 70 84 86 98 118 98
Big Goose Ck nr Sheridan
APR-JUL 15.5 27 35 76 43 54 46
APR-SEP 23 35 43 80 51 63 54
Little Goose Ck nr Bighorn
APR-JUL 13.0 20 25 81 30 37 31
APR-SEP 18.9 27 32 82 37 45 39
Tongue River Reservoir Inflow (2)
APR-JUL 35 101 145 75 189 255 193
APR-SEP 49 118 165 77 210 280 215
=====

```

- \* 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 1981-2010 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.

TONGUE RIVER BASIN  
Reservoir Storage (1000AF) End of February

```

=====
Reservoir Usable ***** Usable Storage *****
 Capacity This Year Last Year Average
=====
TONGUE RIVER 79.1 48.4 60.6 28.2
=====

```

TONGUE RIVER BASIN  
Watershed Snowpack Analysis - March 1, 2013

```

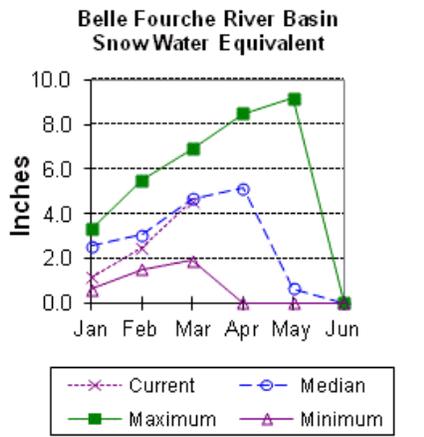
=====
Watershed Number of This Year as Percent of
 Data Sites Last Year Median
=====
GOOSE CREEK 3 57 84
TONGUE RIVER BASIN 9 60 90
=====

```

# Belle Fourche River Basin

## Snow

The Belle Fourche River Basin SWE is 97% of normal at this time of year. For a summary of Snow Course Data" at the beginning of this report.



## Precipitation

Precipitation for last month was 96% of average or 48% of last year in the Black Hills. There were 3 reporting stations. Year-to-date precipitation is 69% of average and 68% of last year's amount.

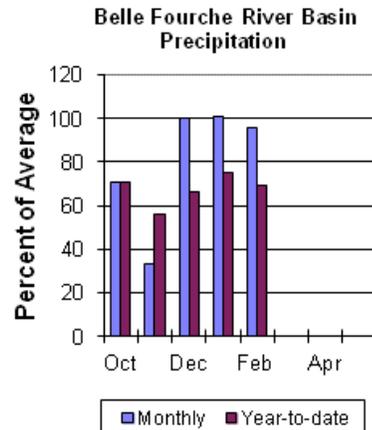
## Reservoirs

Belle Fourche reservoir is storing 95% of average (107,200 ac-ft), about 60% of capacity. Greyhole reservoir is storing 165% of average (149,200 ac-ft), hadehill reservoir is storing 70% of average (35,200

ac-ft), about 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

There are no streamflow forecast points for the basin.

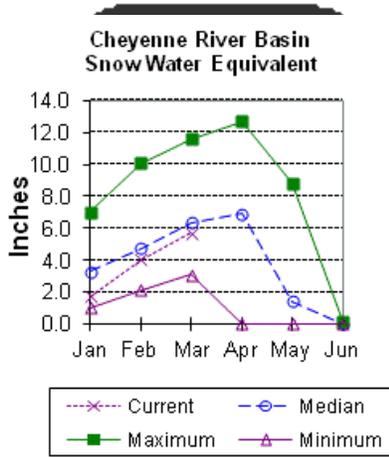




# Cheyenne River Basin

## Snow

The Cheyenne River Basin SWE is 90% of normal at this time of year. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



## Precipitation

Precipitation for last month was 124% of average or 86% of last year in the Black Hills. There were 4 reporting stations. Monthly percentages range from 25-219%. Year-to-date precipitation is 91% of average and 66% of last year's amount. Yearly percentages range from 6-109% of average.

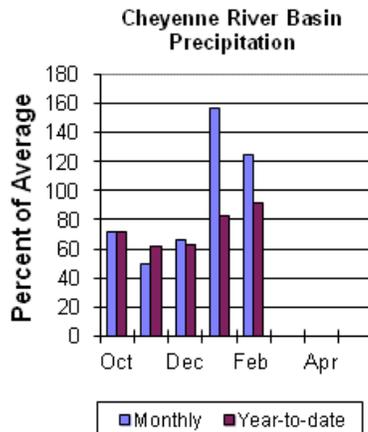
## Reservoirs

Angostura is currently storing 71% of average (72,200 ac-ft), about 59% of capacity. Deerfield Reservoir is storing 114% of average (15,100 ac-ft), about 99% of capacity. Pactola Reservoir is storing 107% of average (49,100 ac-ft), about 89% of capacity. Detailed Reservoir data is shown on the following page

and on the Reservoir Storage Summary at beginning of this report.

## Streamflow

The following runoff values are the 50% exceedance forecasts for the Apr through July period. The Deerfield Reservoir Inflow is expected to be 4,700 ac-ft (90% average). Pactola Reservoir Inflow is expected to yield around 19,500 ac-ft (89% of average). See the following page detailed runoff volumes.



## Cheyenne River Basin

Streamflow Forecasts - March 1, 2013

| Forecast Pt                    | <=== Drier === Future Conditions === Wetter ===> |          |          |          |          | 30 Yr Avg |
|--------------------------------|--------------------------------------------------|----------|----------|----------|----------|-----------|
| Forecast Period                | 90%                                              | 70%      | 50%      | 30%      | 10%      | (1000AF)  |
| (1000AF)                       | (1000AF)                                         | (1000AF) | (% AVG.) | (1000AF) | (1000AF) | (1000AF)  |
| Deerfield Reservoir Inflow (2) |                                                  |          |          |          |          |           |
| MAR-JUL                        | 1.8                                              | 4.0      | 5.6      | 90       | 7.2      | 9.4       |
| APR-JUL                        | 2.4                                              | 3.7      | 4.7      | 90       | 5.8      | 7.7       |
| Pactola Reservoir Inflow (2)   |                                                  |          |          |          |          |           |
| MAR-JUL                        | 5.2                                              | 15.8     | 23       | 92       | 30       | 41        |
| Pactola Reservoir Inflow       |                                                  |          |          |          |          |           |
| APR-JUL                        | 8.2                                              | 14.3     | 19.5     | 89       | 25       | 36        |

- \* 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 1981-2010 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.

CHEYENNE RIVER BASIN  
 Reservoir Storage (1000AF) End of February

| Reservoir | Usable Capacity | ***** This Year | ***** Usable Storage Last Year | ***** Average |
|-----------|-----------------|-----------------|--------------------------------|---------------|
| ANGOSTURA | 122.1           | 72.2            | 98.2                           | 101.7         |
| DEERFIELD | 15.2            | 15.1            | 14.9                           | 13.2          |
| PACTOLA   | 55.0            | 49.1            | 52.2                           | 46.0          |

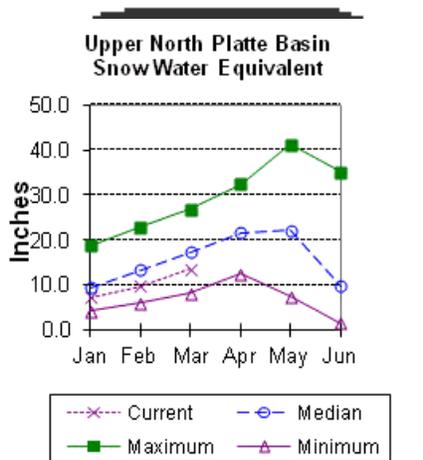
CHEYENNE RIVER BASIN  
 Watershed Snowpack Analysis - March 1, 2013

| Watershed      | Number of Data Sites | This Year as Percent of Last Year | Percent of Median |
|----------------|----------------------|-----------------------------------|-------------------|
| CHEYENNE BASIN | 7                    | 68                                | 90                |

# Upper North Platte River Basin

## Snow

The stations above Seminoe Reservoir are showing about 78% of normal (SWE) for this time of the year. SWE in the drainage area above Northgate is 73% of normal at this time. SWE in the Encampment River drainage is about 82% of normal. SWE in the Medicine Bow and Rock Creek drainages SWE are about 83% of normal. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



## Precipitation

Twelve reporting stations show last month's precipitation at 90% of average or 68% of last year's amount. Precipitation varied from 45-56% of average last month. Total water-year-to-date precipitation is about 79% of average or the basin, which is about 86% of last year's amount. Year to date percentage ranges from 70-101% of average.

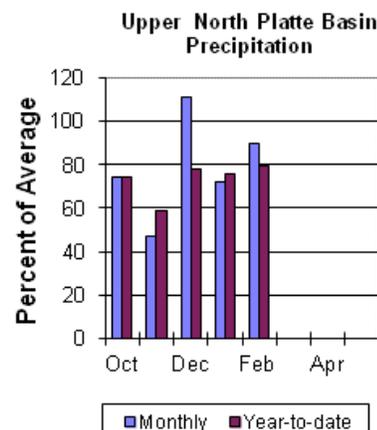
## Reservoirs

Seminoe Reservoir is estimated to be storing 185,600 ac-ft or 48% of capacity.

Reservoir is also storing about 98% of average for this time of the year and 57% of last year. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.

## Streamflow

The following yields are the 50% exceedance forecasts for the April through September period and are expected to be below average for the Upper North Platte River Basin. Yield for the North Platte River near Northgate will be around 95,000 ac-ft (38% of average). The Encampment River near Encampment is 90,000 ac-ft (65% of average). Rock Creek near Arlington is 37,000 ac-ft (71% of average). Seminoe Reservoir inflow should be around 355,000 ac-ft (46% of average). See the following table for more detailed information on projected runoff.



**Upper North Platte River Basin**  
**Streamflow Forecasts - March 1, 2013**

| Forecast Pt<br>Forecast Period | <=== Drier === Future Conditions === Wetter ===> |                 |                 |                 |                 |                                   | 30 Yr Avg<br>(1000AF) |
|--------------------------------|--------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------------------------|-----------------------|
|                                | 90%<br>(1000AF)                                  | 70%<br>(1000AF) | 50%<br>(1000AF) | 30%<br>(1000AF) | 10%<br>(1000AF) | Chance of Exceeding *<br>(% AVG.) |                       |
| North Platte R nr Northgate    |                                                  |                 |                 |                 |                 |                                   |                       |
| APR-JUL                        | 25                                               | 41              | 86              | 38              | 131             | 197                               | 225                   |
| APR-SEP                        | 30                                               | 45              | 95              | 38              | 145             | 220                               | 250                   |
| Encampment R nr Encampment     |                                                  |                 |                 |                 |                 |                                   |                       |
| APR-JUL                        | 42                                               | 67              | 84              | 65              | 101             | 126                               | 129                   |
| APR-SEP                        | 45                                               | 72              | 90              | 65              | 108             | 135                               | 138                   |
| Rock Ck nr Arlington           |                                                  |                 |                 |                 |                 |                                   |                       |
| APR-JUL                        | 19.1                                             | 29              | 35              | 71              | 41              | 51                                | 49                    |
| APR-SEP                        | 20                                               | 30              | 37              | 71              | 44              | 54                                | 52                    |
| Sweetwater R nr Alcova         |                                                  |                 |                 |                 |                 |                                   |                       |
| APR-JUL                        | 6.5                                              | 10.0            | 22              | 37              | 34              | 51                                | 59                    |
| APR-SEP                        | 7.5                                              | 12.8            | 26              | 41              | 39              | 58                                | 64                    |
| Seminole Reservoir Inflow (2)  |                                                  |                 |                 |                 |                 |                                   |                       |
| APR-JUL                        | 105                                              | 159             | 330             | 46              | 500             | 755                               | 715                   |
| APR-SEP                        | 110                                              | 168             | 355             | 46              | 540             | 820                               | 770                   |

\* 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 1981-2010 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.

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

| Reservoir | Usable Capacity | ***** This Year | Usable Storage Last Year | ***** Average |
|-----------|-----------------|-----------------|--------------------------|---------------|
| SEMINOE   | 1016.7          | 485.6           | 845.8                    | 493.1         |

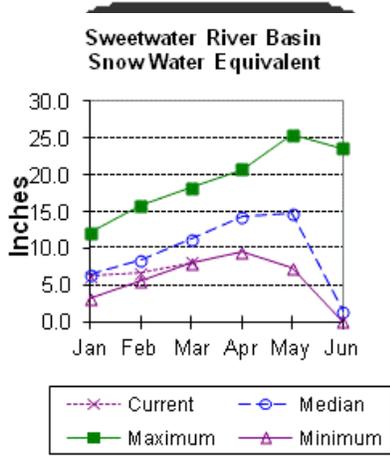
UPPER NORTH PLATTE RIVER BASIN  
Watershed Snowpack Analysis - March 1, 2013

| Watershed                  | Number of Data Sites | This Year as Percent of Last Year | Percent of Median |
|----------------------------|----------------------|-----------------------------------|-------------------|
| N PLATTE above Northgate   | 7                    | 87                                | 73                |
| ENCAMPMENT RIVER           | 4                    | 90                                | 82                |
| BRUSH CREEK                | 5                    | 93                                | 81                |
| MEDICINE BOW & ROCK CREEKS | 2                    | 83                                | 83                |
| N PLATTE above Seminole    | 18                   | 88                                | 78                |

# Sweetwater River Basin

## Snow

SWE for the Sweetwater River Basin is at 72% of normal. For more information see "Precipitation Data" at the beginning of this report.



## Precipitation

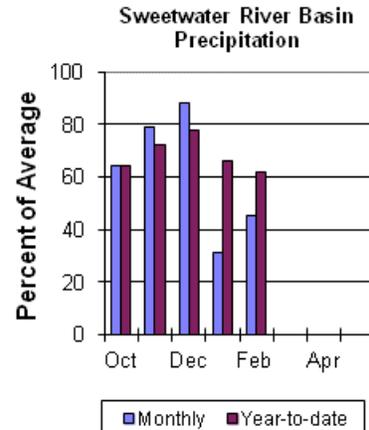
Last month's precipitation was 45% of average or 36% of last year's amount. The water year-to-date precipitation for the basin is currently 62% of average (63% of last year).

## Reservoirs

Reservoir storage is as follows: Pathfinder 27,500 ac-ft (73% of average). Last year at this time the reservoir was 99,500 ac-ft.

## Streamflow

...on the 50% exceedance forecasts for the April through September period. The Sweetwater River near Pathfinder is forecast to yield about 26,000 ac-ft (41% of average). See the following table for more detailed information on projected runoff.



## Sweetwater River Basin

Streamflow Forecasts - March 1, 2013

```

=====
| <=== Drier === Future Conditions === Wetter ===> |
| | | | | | | | |
Forecast Pt | ===== Chance of Exceeding * ===== |
Forecast | 90% 70% | 50% | 30% 10% | 30 Yr Avg
Period | (1000AF) (1000AF) | (1000AF) (% AVG.) | (1000AF) (1000AF) | (1000AF)
=====
Sweetwater R nr Alcova
APR-JUL 6.5 10.0 22 37 34 51 59
APR-SEP 7.5 12.8 26 41 39 58 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 1981-2010 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.

```

=====
SWEETWATER RIVER BASIN
Reservoir Storage (1000AF) End of February
=====

```

```

Reservoir Usable ***** Usable Storage *****
 Capacity This Year Last Year Average
=====
PATHFINDER 1016.5 427.5 799.4 582.4
=====

```

```

=====
SWEETWATER RIVER BASIN
Watershed Snowpack Analysis - March 1, 2013
=====

```

```

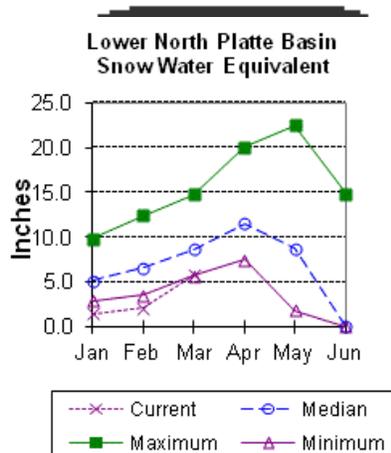
Watershed Number of This Year as Percent of
 Data Sites Last Year Median
=====
SWEETWATER 4 67 72
=====

```

# Lower North Platte River Basin

## Snow

SWE for the Lower North Platte River Basin (Laramie Range Mts.) is at 67% of normal. Deer and LaPrele Creek SWE are at 69% of normal. SWE for the North Platte (includes Upper North Platte, Sweetwater and Laramie River Basins) is 76% of normal. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



## Precipitation

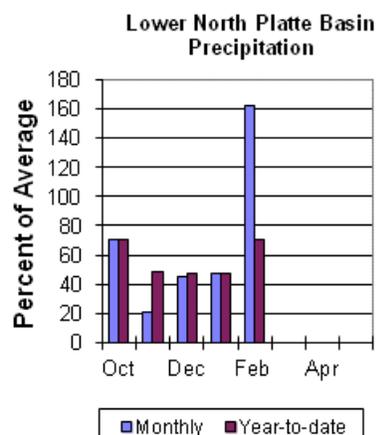
Last month's precipitation was 162% of average or 102% of last year's amount. Of the 5 reporting stations, percentages for the month range from 88-209%. The water year-to-date precipitation for the basin is currently 70% of average (51% of last year). Year-to-date percentages range from 58-80% of average.

## Reservoirs

Reservoir storage is as follows:  
 Alcova 157,100 ac-ft (101% of average);  
 Glendo 200,900 ac-ft (82% of average);  
 Guernsey 6,000 ac-ft (39% of average);  
 Pathfinder 427,500 ac-ft (73% of average).

## Streamflow

The following yields are based on the 50% exceedance forecasts for the April through September period. North Platte - Alcova to Orin Gain is forecast to yield 20,000 ac-ft (15% of normal). North Platte River below Glendo Reservoir is 295,000 ac-ft (35% of average), and below Guernsey Reservoir is anticipated to yield around 295,000 ac-ft (35% of average). See the following table for more detailed information on projected runoff.



## Lower North Platte River Basin

Streamflow Forecasts - March 1, 2013

| Forecast Pt                        | <=== Drier === Future Conditions === Wetter ===> |     |     |     |     |         | 30 Yr Avg |
|------------------------------------|--------------------------------------------------|-----|-----|-----|-----|---------|-----------|
| Forecast Period                    | Chance of Exceeding *                            |     |     |     |     |         | (1000AF)  |
| (1000AF)                           | 90%                                              | 70% | 50% | 30% | 10% | 1000AF) | (1000AF)  |
| =====                              |                                                  |     |     |     |     |         |           |
| North Platte R bl Glendo Res (2)   |                                                  |     |     |     |     |         |           |
| APR-JUL                            | 37                                               | 193 | 300 | 37  | 405 | 565     | 820       |
| APR-SEP                            | 17.0                                             | 183 | 295 | 35  | 405 | 575     | 850       |
| North Platte R bl Guernsey Res (2) |                                                  |     |     |     |     |         |           |
| APR-JUL                            | 110                                              | 198 | 290 | 35  | 425 | 620     | 820       |
| APR-SEP                            | 110                                              | 200 | 295 | 35  | 435 | 635     | 850       |

- \* 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 1981-2010 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.

=====

LOWER NORTH PLATTE RIVER BASIN  
 Reservoir Storage (1000AF) End of February

| Reservoir  | Usable Capacity | ***** This Year | ***** Usable Storage Last Year | ***** Average |
|------------|-----------------|-----------------|--------------------------------|---------------|
| ALCOVA     | 184.3           | 157.1           | 157.1                          | 155.8         |
| GLEND0     | 506.4           | 280.9           | 408.1                          | 342.9         |
| GUERNSEY   | 45.6            | 6.0             | 15.4                           | 15.2          |
| PATHFINDER | 1016.5          | 427.5           | 799.4                          | 582.4         |

=====

LOWER NORTH PLATTE RIVER BASIN  
 Watershed Snowpack Analysis - March 1, 2013

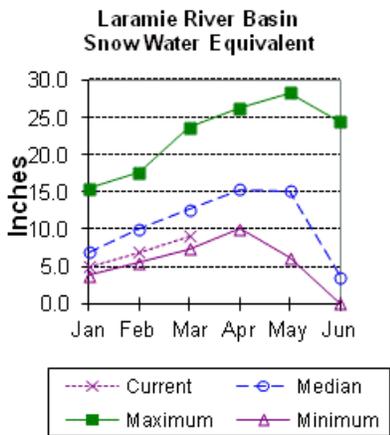
| Watershed                   | Number of Data Sites | This Year as Percent of Last Year | Percent of Median |
|-----------------------------|----------------------|-----------------------------------|-------------------|
| DEER & LaPRELE CREEKS       | 2                    | 51                                | 69                |
| N PLATTE Laramie Range Mts. | 4                    | 47                                | 67                |

=====

# Laramie River Basin

## Snow

SWE for the Laramie River Basin above mouth is at 72% of normal. SWE for the Little Laramie River is 74% of normal. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



## Precipitation

Last month's precipitation was 88% of average or 56% of last year's amount. Of the 5 reporting stations, percentages for the month range from 29-210%. The water year-to-date precipitation for the basin is currently 72% of average (68% of last year). Year-to-date percentages range from 66-78% of average.

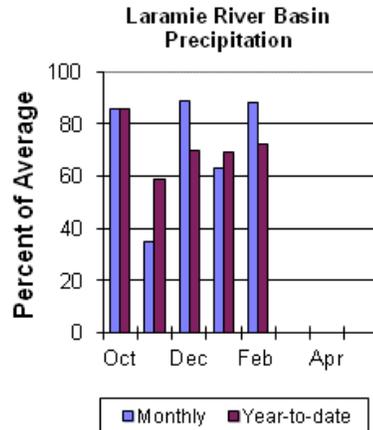
## Reservoirs

Reservoir storage is as follows:

... (at 75,100 ac-ft).

## Streamflow

The following yields are based on the 50% exceedance forecasts for the April through September period. Laramie River near Woods Landing should yield around 88,000 ac-ft (70% of average). The Little Laramie near Filmore should produce about 36,000 ac-ft (66% of average). See the following table for more detailed information on projected runoff.



## Laramie River Basin

Streamflow Forecasts - March 1, 2013

```

=====
| <=== Drier === Future Conditions === Wetter ===> |
| | | | | | | | |
Forecast Pt | ===== Chance of Exceeding * ===== |
Forecast | 90% 70% | 50% | 30% 10% | 30 Yr Avg
Period | (1000AF) (1000AF) | (1000AF) (% AVG.) | (1000AF) (1000AF) | (1000AF)
=====
Laramie R nr Woods
APR-JUL 45 66 80 70 94 115 115
APR-SEP 49 72 88 70 104 127 126
Little Laramie R nr Filmore
APR-JUL 14.3 26 34 67 42 54 51
APR-SEP 14.0 27 36 66 45 58 55
=====

```

- \* 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 1981-2010 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.

LARAMIE RIVER BASIN  
Reservoir Storage (1000AF) End of February

```

=====
Reservoir Usable ***** Usable Storage *****
Capacity This Year Last Year Average
=====
WHEATLAND #2 98.9 24.2 75.1 ----
=====

```

LARAMIE RIVER BASIN  
Watershed Snowpack Analysis - March 1, 2013

```

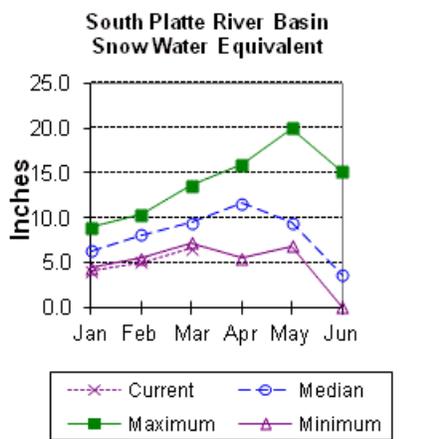
=====
Watershed Number of This Year as Percent of
Data Sites Last Year Median
=====
LARAMIE RIVER abv Laramie 6 69 72
LITTLE LARAMIE RIVER 5 66 74
LARAMIE RIVER above mouth 12 66 72
NORTH PLATTE TOTAL RIVER BAS 35 77 76
=====

```

# South Platte River Basin

## Snow

SWE for the South Platte River Basin is at 69% of normal. For more information, see the "Snow Course Data" at the beginning of this report.



## Precipitation

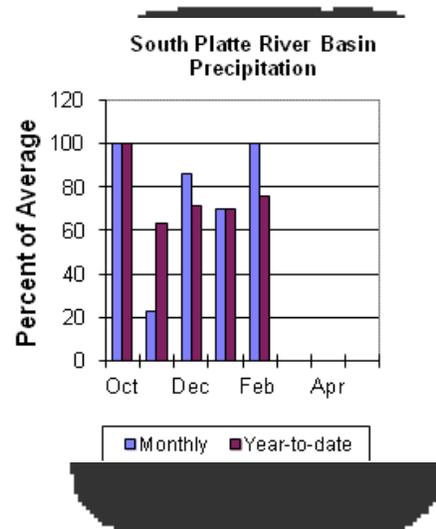
Last month's precipitation was 100% of average or 60% of last year's amount. The water year-to-date precipitation for the basin is currently 64% of average (64% of normal).

## Reservoirs

No reservoir data is available for the basin.

## Streamflow

There are no streamflow forecast points for the basin.

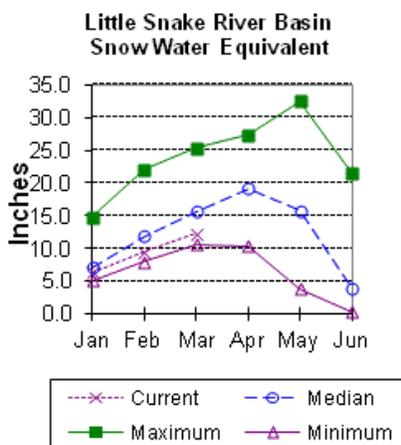




# Little Snake River Basin

## Snow

Currently, snow water equivalent (SWE) in the Little Snake River drainage is 73% of average. For more information on see "Basin Summary of Snow Course Data" at the beginning of this report.



## precipitation

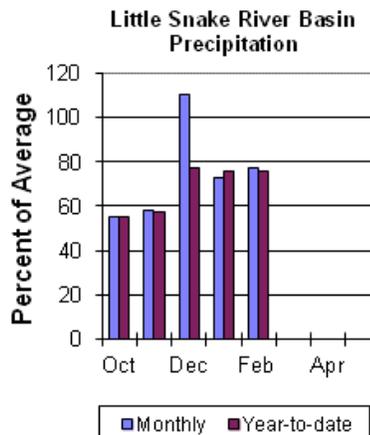
precipitation across the basin was 77% of average (57% of last year) for the 8 reporting stations. Last month's precipitation ranged from 65-123% of average. The Little Snake River basin water-year-to-date precipitation is currently 76% of average (85% of last year). Year-to-date percentages range from 65-85% of average.

## reservoirs

High Savery Dam - 7,400 ac-ft (average storage is 1

## streamflow

The 50% exceedance forecast for the April through July time frame on the Little Snake River drainage is expected to be below average this year. The Little Snake River near Slater should yield around 89,000 ac-ft (57% of average). The Little Snake River at Savery is estimated to yield around 175,000 ac-ft (51% of average). See the following table for more detailed information on projected runoff.



## Little Snake River Basin

Streamflow Forecasts - March 1, 2013

```

=====
| <=== Drier === Future Conditions === Wetter ===> |
| | | | | | | | |
Forecast Pt | ===== Chance of Exceeding * ===== |
Forecast | 90% 70% | 50% | 30% 10% | 30 Yr Avg
Period | (1000AF) (1000AF) | (1000AF) (% AVG.) | (1000AF) (1000AF) | (1000AF)
=====
Little Snake R nr Slater (2)
APR-JUL 55 74 89 57 105 131 156
Little Snake R nr Savery (2)
APR-JUL 79 132 175 51 224 308 345
=====

```

\* 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 1981-2010 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.

```

=====
LITTLE SNAKE RIVER BASIN
Reservoir Storage (1000AF) End of February
=====

```

```

Reservoir Usable ***** Usable Storage *****
 Capacity This Year Last Year Average
=====
HIGH SAVERY NO REPORT
=====

```

```

=====
LITTLE SNAKE RIVER BASIN
Watershed Snowpack Analysis - March 1, 2013
=====

```

```

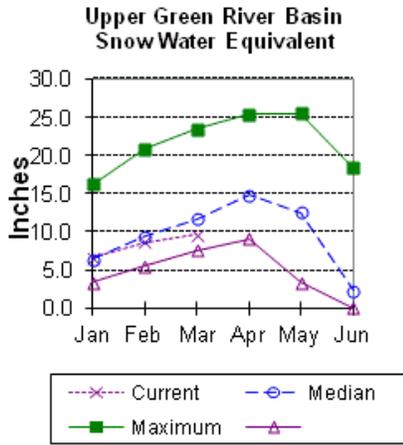
Watershed Number of This Year as Percent of
 Data Sites Last Year Median
=====
LITTLE SNAKE RIVER 10 85 78
=====

```

# Upper Green River Basin

## Snow

SWE in the Green River Basin above Warren Bridge is about 84% of normal. SWE for the West Side of Upper Green River Basin is about 82% of normal. Newfork Basin is about 75% of normal. Big Sandy-Eden Valley Basin is about 72% of normal. SWE in the Green River Basin above Fontenelle Reservoir is about 83% of normal. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



## Precipitation

The 12 reporting precipitation sites in the basin were 43% of average last month (37% of last year). Last month's precipitation varied from 13-78% of average. Water year-to-date precipitation is about 79% of average (73% of last year). Year to date percentage of average ranges from 64-89% for the reporting stations.

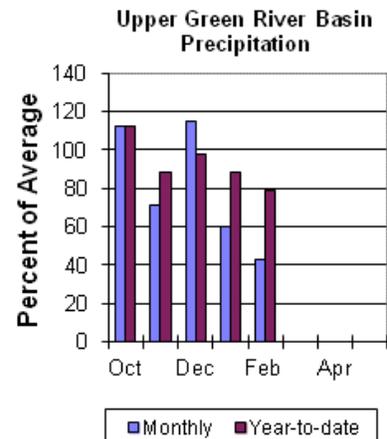
## Reservoir

Storage in Big Sandy Reservoir is 7,100 ac-ft or 19% of capacity.

Fontenelle Reservoir is 140,400 ac-ft or 41% of capacity; 110% of average. This is 102% of average for the Upper Green River basin. 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 below average. The yield on the Green River at Warren Bridge is 180,000 ac-ft (74% of average). Pine Creek above Fremont Lake is 76,000 ac-ft (78% of average). New Fork River near Big Piney is 235,000 ac-ft (66% of average). Fontenelle Reservoir Inflow is estimated to be 430,000 ac-ft (59% of average), and Big Sandy near Farson is expected to be around 34,000 ac-ft (65% of average). See the following table for more detailed information on projected runoff.



## Upper Green River Basin

Streamflow Forecasts - March 1, 2013

| Forecast Pt                     | <=== Drier === Future Conditions === Wetter ===> |          |          |          |          | 30 Yr Avg |
|---------------------------------|--------------------------------------------------|----------|----------|----------|----------|-----------|
| Forecast Period                 | 90%                                              | 70%      | 50%      | 30%      | 10%      | (1000AF)  |
| (1000AF)                        | (1000AF)                                         | (1000AF) | (% AVG.) | (1000AF) | (1000AF) | (1000AF)  |
| Green R at Warren Bridge        |                                                  |          |          |          |          |           |
| APR-JUL                         | 128                                              | 158      | 180      | 74       | 204      | 241       |
| Pine Ck ab Fremont Lake         |                                                  |          |          |          |          |           |
| APR-JUL                         | 60                                               | 69       | 76       | 78       | 83       | 94        |
| New Fork R nr Big Piney         |                                                  |          |          |          |          |           |
| APR-JUL                         | 136                                              | 192      | 235      | 66       | 282      | 360       |
| Fontenelle Reservoir Inflow (2) |                                                  |          |          |          |          |           |
| APR-JUL                         | 234                                              | 344      | 430      | 59       | 526      | 685       |
| Big Sandy R nr Farson           |                                                  |          |          |          |          |           |
| APR-JUL                         | 21                                               | 28       | 34       | 65       | 40       | 51        |

- \* 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 1981-2010 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.

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

| Reservoir  | Usable Capacity | ***** This Year | ***** Usable Storage Last Year | ***** Average |
|------------|-----------------|-----------------|--------------------------------|---------------|
| BIG SANDY  | 38.3            | 7.1             | 22.6                           | 17.7          |
| FONTENELLE | 344.8           | 140.4           | 125.9                          | 127.6         |

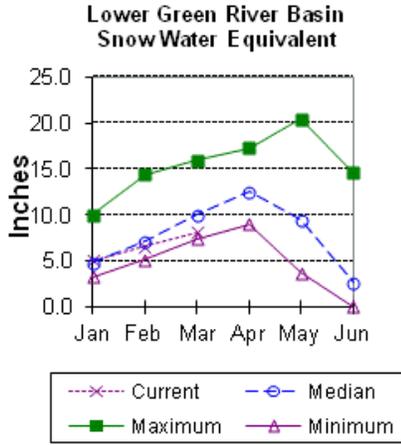
### UPPER GREEN RIVER BASIN Watershed Snowpack Analysis - March 1, 2013

| Watershed                 | Number of Data Sites | This Year as Percent of Last Year | Percent of Median |
|---------------------------|----------------------|-----------------------------------|-------------------|
| GREEN above Warren Bridge | 5                    | 75                                | 84                |
| UPPER GREEN (West Side)   | 5                    | 71                                | 82                |
| NEWFORK RIVER             | 3                    | 74                                | 86                |
| BIG SANDY/EDEN VALLEY     | 2                    | 63                                | 72                |
| GREEN above Fontenelle    | 14                   | 73                                | 83                |

# Lower Green River Basin

## Snow

SWE in the Green River Basin above Flaming Gorge is 81% of normal. SWE in the Hams Fork Basin is 77% of normal. Blacks Fork Basin SWE is currently 76% of normal. In the Hams Fork drainage SWE is 95%. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.

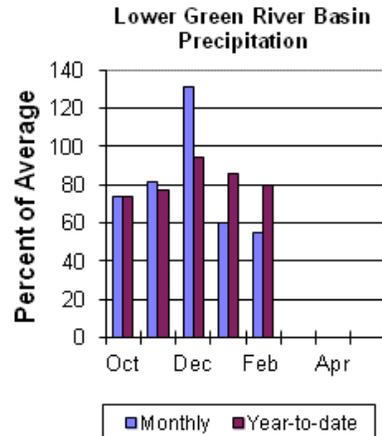


## Precipitation

Precipitation for the 11 reporting stations during last month was at 55% of average or 49% of last year. Precipitation ranged from 0-128% of average for the month. The basin year-to-date precipitation is currently 80% of average or 77% of last year. Year-to-date percentages range from 64-51% of average.

## Reservoirs

Montenelle Reservoir is currently storing 40,400 ac-ft; this is 110% of average (112% of last year). Flaming Gorge is currently storing 2,968,000 ac-ft; compared to 3,293,000 at this time last year. Viva Naughton is currently storing 23,400 ac-ft, 81% of average or 55% 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% exceedance forecasts for the April through July runoff period in the Lower Green River Basin are forecast to be below average. The Green River near Green River is forecast to yield about 395,000 ac-ft (54% of average). The Blacks Fork near Robertson is forecast to yield 60,000 ac-ft (67% of average). East Fork of Smiths Fork near Robertson is forecast to yield 18,000 ac-ft (69% of average). Hams Fork below Pole Creek near Frontier is forecast to be 30,000 ac-ft (56% of average). The Hams Fork Inflow to Viva Naughton Reservoir is forecast to be 38,000 ac-ft (51% of average). The Flaming Gorge Reservoir inflow will be about 535,000 ac-ft (55% of average). See the following table for more detailed information on projected runoff.

## Lower Green River Basin

Streamflow Forecasts - March 1, 2013

| Forecast Pt                        | <=== Drier === Future Conditions === Wetter ===> |          |          |          |          |          | 30 Yr Avg |
|------------------------------------|--------------------------------------------------|----------|----------|----------|----------|----------|-----------|
| Forecast Period                    | 90%                                              | 70%      | 50%      | 30%      | 10%      | 10%      | 30 Yr Avg |
| (1000AF)                           | (1000AF)                                         | (1000AF) | (% AVG.) | (1000AF) | (1000AF) | (1000AF) | (1000AF)  |
| =====                              |                                                  |          |          |          |          |          |           |
| Green R nr Green River, WY (2)     |                                                  |          |          |          |          |          |           |
| APR-JUL                            | 196                                              | 306      | 395      | 54       | 495      | 662      | 730       |
| Blacks Fk nr Robertson             |                                                  |          |          |          |          |          |           |
| APR-JUL                            | 36                                               | 50       | 60       | 67       | 71       | 90       | 89        |
| EF of Smiths Fork nr Robertson (2) |                                                  |          |          |          |          |          |           |
| APR-JUL                            | 9.1                                              | 14.1     | 18.0     | 69       | 22       | 30       | 26        |
| Hams Fk bl Pole Ck nr Frontier     |                                                  |          |          |          |          |          |           |
| APR-JUL                            | 16.4                                             | 24       | 30       | 56       | 37       | 48       | 54        |
| Viva Naughton Reservoir Inflow (2) |                                                  |          |          |          |          |          |           |
| APR-JUL                            | 17.6                                             | 29       | 38       | 51       | 49       | 66       | 74        |
| Flaming Gorge Reservoir Inflow (2) |                                                  |          |          |          |          |          |           |
| APR-JUL                            | 235                                              | 400      | 535      | 55       | 690      | 960      | 980       |

- \* 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 1981-2010 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.

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

| Reservoir         | Usable Capacity | ***** This Year | ***** Usable Storage Last Year | ***** Average |
|-------------------|-----------------|-----------------|--------------------------------|---------------|
| FONTENELLE        | 344.8           | 140.4           | 125.9                          | 127.6         |
| FLAMING GORGE     | 3749.0          | 2968.0          | 3293.0                         | 3014.0        |
| VIVA NAUGHTON RES | 42.4            | 23.4            | 28.0                           | 28.8          |

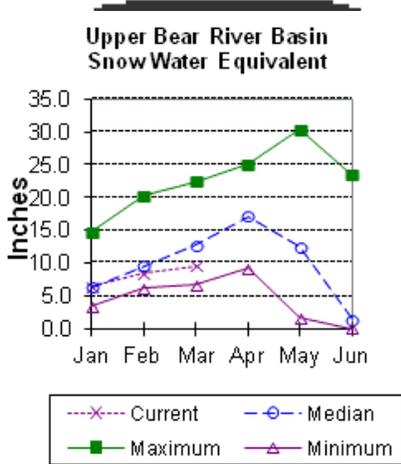
LOWER GREEN RIVER BASIN  
Watershed Snowpack Analysis - March 1, 2013

| Watershed                 | Number of Data Sites | This Year as Percent of Last Year | Median |
|---------------------------|----------------------|-----------------------------------|--------|
| HAMS FORK RIVER           | 4                    | 80                                | 77     |
| BLACKS FORK               | 4                    | 93                                | 76     |
| HENRYS FORK               | 3                    | 75                                | 95     |
| GREEN above Flaming Gorge | 26                   | 76                                | 81     |

# Upper Bear River Basin

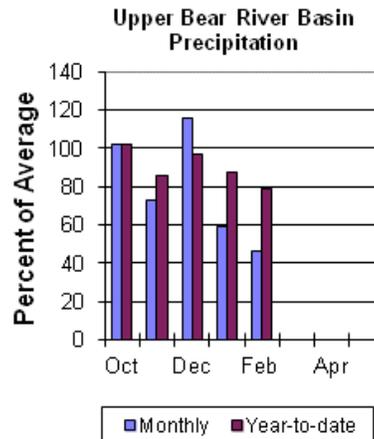
## Snow

Snow water equivalent (SWE) in the Upper Bear River Basin in Utah is estimated to be 74% of normal. SWE in the Wyoming portion of the Bear River Basin is at 77% of normal. Bear River Basin SWE, above the Idaho State line, is 75% of normal. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



## Precipitation

Precipitation for last month was 46% of average for the 8 reporting stations; this is 33% of the precipitation received last year. Precipitation ranged from 33-60% of average for the month. The year-to-date precipitation, for the basin, is 79% of average; this is 86% of last year's amount. Precipitation percentages range from 0-84% of average.



## Reservoirs

Storage in Woodruff Narrows reservoir is 8,700 ac-ft. Reservoir storage last year at this time was 49,000 ac-ft.

## Streamflow

The following 50% exceedance forecasts are for the April through September period. The Bear River near the Utah-Wyoming State Line is 74,000 ac-ft (60% of average). The Bear River above Reservoir near Woodruff is 68,000 ac-ft (53% of average). The Smiths Fork River near Border Jct. is 65,000 ac-ft (63% of average). See the following table for more detailed information on projected runoff.

## Upper Bear River Basin

Streamflow Forecasts - March 1, 2013

```

=====
| <=== Drier === Future Conditions === Wetter ===> |
| | | | | | | | |
Forecast Pt | ===== Chance of Exceeding * ===== |
Forecast | 90% 70% | 50% | 30% 10% | 30 Yr Avg
Period | (1000AF) (1000AF) | (1000AF) (% AVG.) | (1000AF) (1000AF) | (1000AF)
=====
Bear R nr UT-WY State Line
APR-JUL 35 54 67 60 80 99 112
APR-SEP 37 59 74 60 88 110 123
Bear R ab Res nr Woodruff
APR-JUL 23 51 70 58 89 117 121
APR-SEP 19.0 48 68 53 88 116 128
Smiths Fk nr Border
APR-JUL 26 42 53 60 64 81 89
APR-SEP 34 52 65 63 77 96 104
=====

```

- \* 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 1981-2010 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.

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

```

=====
Reservoir Usable Capacity ***** Usable Storage *****
 This Year Last Year Average
=====
WOODRUFF NARROWS 57.3 8.7 49.0 31.6
=====

```

UPPER BEAR RIVER BASIN  
Watershed Snowpack Analysis - March 1, 2013

```

=====
Watershed Number of Data Sites This Year as Percent of
 Last Year Median
=====
UPPER BEAR RIVER in Utah 6 92 74
SMITHS & THOMAS FORKS 3 81 77
BEAR RIVER abv ID line 11 89 75
=====
NORTHWEST 70 76 88
NORTHEAST 25 63 94
SOUTHEAST 33 80 76
SOUTHWEST 37 80 79
=====

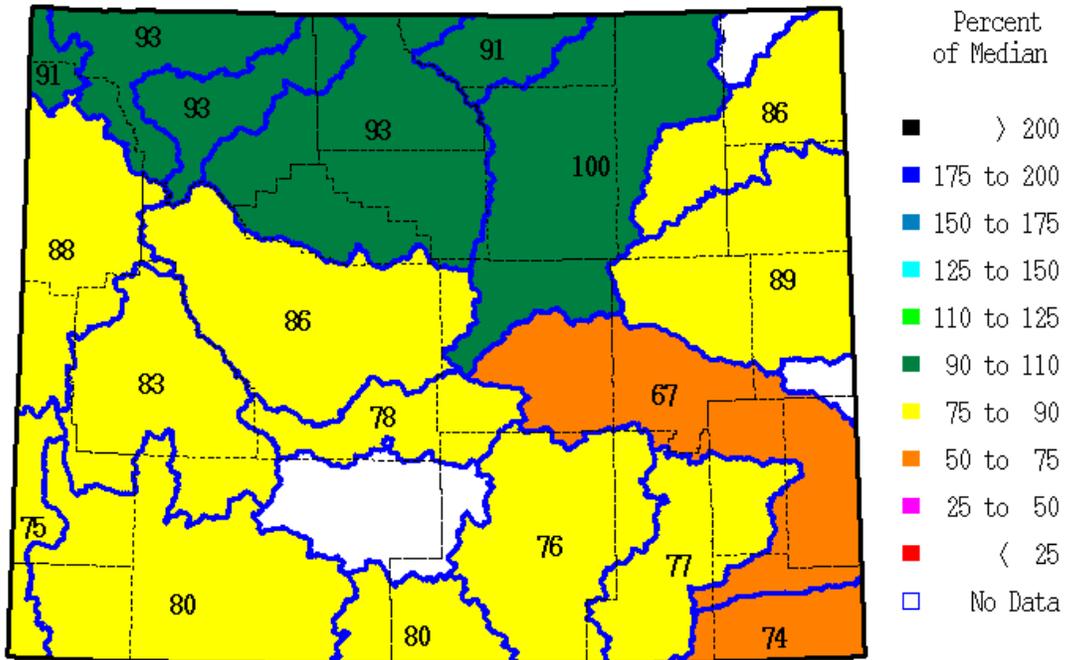
```

Issued by      Released by

Jason Weller (Acting Chief)  
U.S.D.A.  
Natural Resources Conservation Service  
Washington D.C.

Astrid Martinez  
State Con.  
N R C S  
Casper, Wyoming

SWE % of Median as of Friday, 01 March 2013



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

## **The Following Agencies and Organizations Cooperate with the Natural Resources Conservation Service on the Snow Survey Work.**

### **FEDERAL:**

United States Department of the Interior (National Park Service)

United States Department of Agriculture (Forest Service)

United States Department of the Interior (Bureau of Reclamation)

United States Department of Commerce NOAA (National Weather Service)

### **State:**

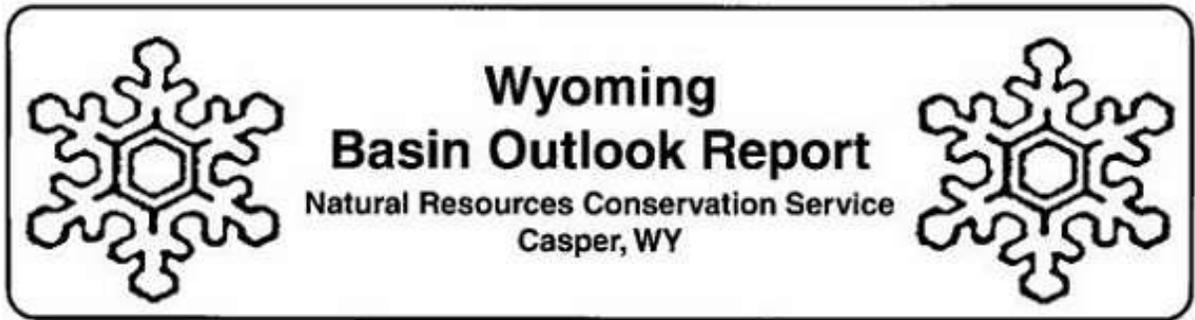
The Wyoming State Engineer's Office

The University of Wyoming

### **Local:**

The City of Cheyenne

The City of Rawlins



Natural Resources Conservation Service  
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Casper, WY 82601

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«Title»  
«Address1»  
«Address2»  
«City», «State» «PostalCode»

«MailingListID»