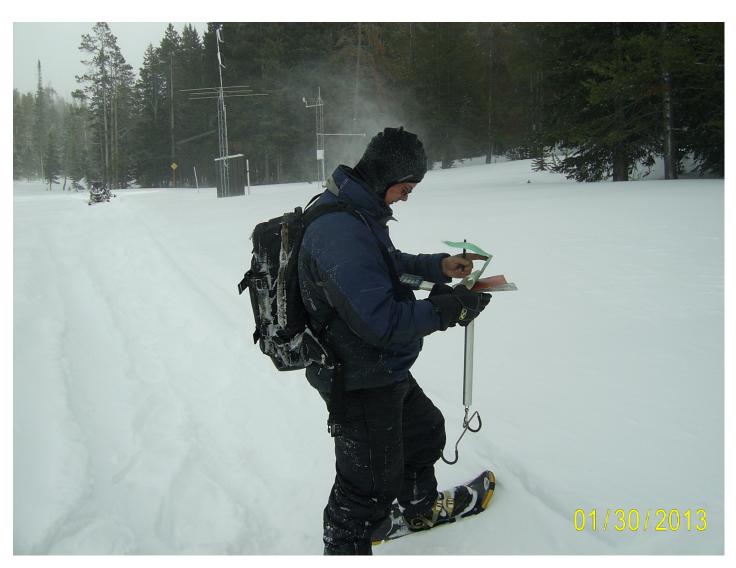


United States Department of Agriculture

Natural Resources Conservation Service

# Wyoming Basin Outlook Report February 1, 2013



Ed Boe of the Wyoming State Engineer's Office records snow sample data at Pocket Creek Snow Course (Pinedale area of the Wind River Mts). The Pocket Creek SNOTEL site is in the background. New SNOTELs must be correlated with manual measurements over a period of 5 years.

# **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 February  $1^{\rm st}$  at 82%. Monthly precipitation for the basins varied from 31-171% of average. Year-to-date precipitation for Wyoming basins varies from 48-102% of average. Forecasted runoff varies from 15-99% of average across the Wyoming basins for an overall average of 80%. Basin reservoir levels for Wyoming vary from 27-175% of average for an overall average of 96%.

### Snowpack

Snow water equivalent (SWE), across Wyoming is below normal for this time of year at 82%. SWE in the NW portion of Wyoming is now about 95% of normal (89% of last year). NE Wyoming SWE is currently about 83% of normal (64% of last year). The SE Wyoming SWE is currently about 67% of normal (82% of last year). The SW Wyoming SWE is about 87% of normal (93% of last year).

### **Precipitation**

Last month's precipitation was below average across Wyoming. The Cheyenne Basin had the highest precipitation for the month at 171% of average. The Sweetwater Basin had the lowest precipitation amount at 31% of average. The following table displays the major river basins and their departure from average for this month.

	Departure	Departure	_
Basin	from average	Basin from average	
Snake River	-38%	Upper North Platte River -28%	
Madison-Gallatin	-27%	Sweetwater River -69%	
Yellowstone	-24%	Lower North Platte -53%	
Wind River	-42%	Laramie River -37%	
Bighorn	+07%	South Platte -30%	
Shoshone	-18%	Little Snake River -27%	
Powder River	+03%	Upper Green River -40%	
Tongue River	+05%	Lower Green River -40%	
Belle Fourche	+28%	Upper Bear River -41%	
Cheyenne	+71%		

### **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 80% (varying from 15-99% of average). The Snake River and Madison River Basins are expected to yield about 88% and 98% of average, respectively; 85-98% of average for the various forecast points in the basins. Yields from the Yellowstone and Clark's Fork are expected to be 97% and 96% respectively. Yields from the Wind and Bighorn River Basins are expected to be about 81% of average; varying from 58-99% of average in the basins. Yield from the Shoshone River Basin of Wyoming is expected to yield about 94%, varying from 92-96% of average. Yields from the Tongue & Powder River Basins are expected to be about 66% and 89% of average, respectively; varying from 65-110% of average. Yield for the Cheyenne River Basin is expected to be about 78% of average. Yields for the Upper, Lower North Platte, Sweetwater and Laramie Rivers of Wyoming are expected to be about 55%,

46%, 56, and 70% of average, respectively; varying from 15-75% of average. Yields for the Little Snake, Green River, and Little Bear of Wyoming are expected to be 52%, 68%, and 78% of average respectively; yield estimates vary from 52-84% of average.

### Reservoirs

Reservoir storage varies widely across the state however reservoir storage is at 96% of average for the entire state. Reservoirs in the Wind River Basin are near average at 96%. Reservoirs on the Big Horn are above average at 102%. The Buffalo Bill Reservoir on the Shoshone is above average at 122%. Reservoirs in the northeast are above average in storage at 102%. Reservoirs on the North Platte River are below average at 81%. Reservoirs on the Green River are near average at 98%. See the following table for further information about reservoir storage.

### Major Reservoirs in Wyoming Feb 1, 2013

BASIN AREA CURR	ENT AS	LAST YR AS	AVERAGE AS	CURRENT AS	CURRENT AS
RESERVOIR % CA	PACITY	% CAPACITY	% CAPACITY	% AVERAGE	% LAST YR
WYOMING AND SURRO	UNDING	STATES			
ALCOVA	85	85	84	101	100
ANGOSTURA	57	78	80	71	74
BELLE FOURCHE	55	71	57	97	77
BIG SANDY	17	58	44	38	29
BIGHORN LAKE	65	66	61	106	98
BOYSEN	80	105	85	94	76
BUFFALO BILL	67	70	55	122	96
BULL LAKE	51	62	50	103	83
DEERFIELD	99	99	84	118	101
ENNIS LAKE	67	70	73	92	95
FLAMING GORGE	80	89	81	98	89
FONTENELLE	48	48	44	110	100
GLENDO	49	73	60	82	67
Grassy Lake	84	80	78	107	105
GUERNSEY	11	29	25	45	39
HEBGEN LAKE	80	82	74	108	98
Jackson Lake	73	75	51	143	97
KEYHOLE	77	86	45	169	90
PACTOLA	88	95	83	106	93
Palisades	40	88	65	61	45
PATHFINDER	41	75	55	75	55
PILOT BUTTE	78	80	73	107	98
SEMINOE	49	86	51	95	57
SHADEHILL	43	45	60	71	95
TONGUE RIVER	59	69	34	175	86
VIVA NAUGHTON RES	57	67	71	80	85
WHEATLAND #2		AVERA	GE NOT ESTA	BLISHED	
WOODRUFF NARROWS	13	79	51	27	17
TOTAL 27 RESERVOI	RS 64	81	66	96	79

Raw KAF Totals Current=8378 Last Year=10640 Average=8692 Capacity=13189

### BASIN SUMMARY OF SNOTEL and SNOW COURSE DATA

FEBRUARY 2013

SNOW SITE EI	EVATION		SNOW DEPTH	WATER CONTENT	LAST YEAR	NORMAL 81-10
WYOM	ING Snow	Course and	SNOTI	EL Stations		
ALBANY	9400	1/28/13	21	2.8	7.5	7.9
ASTER CREEK	7750	1/31/13	58	17.8	20.3	17.0
BALD MOUNTAIN SNOTEL	9380	2/01/13	44	8.4	11.9	10.8
BASE CAMP	7030	1/29/13	46	11.7	16.1	12.0
BASE CAMP SNOTEL	7030	2/01/13		11.9	14.4	10.8
BATTLE MTN. SNOTEL	7440	2/01/13	24	5.0	6.2	7.1
BEARLODGE DIVIDE	4680	1/30/13	9	1.5	.7	1.5
BEARTOOTH LK. SNOTEL	9280	2/01/13	53	11.4	16.5	13.9
BEAR TRAP SNOTEL	8200	2/01/13	27	5.3	4.4	3.4
BIG GOOSE SNOTEL	7760	2/01/13	23	3.7	7.1	4.9
BIG PARK	8620	2/01/13	44	10.3	10.1	10.0
BIG SANDY SNOTEL	9080	2/01/13	35	7.5	8.8	8.2
BLACKWATER SNOTEL	9780	2/01/13	52	14.5	17.0	14.8
BLIND BULL SNOTEL	8900	2/01/13	54	12.7	15.1	13.8
BLUE RIDGE	9620	1/28/13	17	3.6	6.2	5.5
BONE SPGS. SNOTEL	9350	2/01/13	44	8.9	12.9	9.8
BROOKLYN LK. SNOTEL	10220	2/01/13		9.2	10.1	12.0
BURGESS JCT. SNOTEL	7880	2/01/13	31	5.0	8.5	6.6
BURROUGHS CRK SNOTEL	8750	2/01/13	33	7.9	9.8	8.4
CANYON SNOTEL	8090	2/01/13	36	7.5	8.1	8.2
CASPER MTN. SNOTEL	7850	2/01/13	12	2.2	12.9	7.5
CASTLE CREEK SNOTEL	8400	2/01/13	23	4.6	5.3	
CASTLE CREEK	8400	1/30/13	18	3.4	4.4	2.6
CCC CAMP	7000	1/31/13	32	7.8	6.7	7.2
CHALK CK #1 SNOTEL	9100	2/01/13	46	11.6	9.3	13.4
CHALK CK #2 SNOTEL	8200	2/01/13	36	8.0	6.3	9.1
CINNABAR PARK SNOTEL	9690	2/01/13	46	9.3	9.8	13.2
CLOUD PEAK SNOTEL	9850	2/01/13	36	7.1	11.6	8.3
COLE CANYON SNOTEL	5910	2/01/13	13	2.6	3.9	3.2
COLD SPRINGS SNOTEL	9630	2/01/13	24	5.1	5.3	4.5
COTTONWOOD CR SNOTEL	7700	2/01/13		12.0	12.1	12.9
CROW CREEK SNOTEL	8830	2/01/13	9	2.0	5.2	5.7
DEER PARK SNOTEL	9700	2/01/13	24	7.9	7.5	9.4
DIVIDE PEAK SNOTEL	8860	2/01/13	36	9.0	8.7	12.3
DOME LAKE SNOTEL	8880	2/01/13	31	5.6	10.3	6.8
DU NOIR	8760	1/29/13	22	3.9	3.1	3.8
EAST RIM DIV SNOTEL	7930	2/01/13	34	6.8	8.1	6.8
ELBO RANCH	7100	2/05/13	27	6.7	7.1	7.2
ELKHART PARK SNOTEL	9400	2/01/13		6.8	8.6	7.5
EVENING STAR SNOTEL	9200	2/01/13	69	16.6	19.2	16.4
FOUR MILE MEADOWS	7860	1/29/13	34	7.4	6.9	7.5
FOXPARK	9060	1/28/13	14	1.1	3.1	4.6
GEYSER CREEK	8500	1/29/13	17	3.4	3.4	3.4
GLADE CREEK	7040	1/30/13	54	13.5	16.3	14.8
GRAND TARGHEE SNOTEL	9260	2/01/13	91	25.6	22.3	23.6
GRANITE CRK SNOTEL	6770	2/01/13	46	9.4	10.9	10.6
GRANNIER MEADOWS	8860	1/29/13	20	4.2	6.2	7.6
GRASSY LAKE	7270	1/30/13	75	16.5	22.3	21.1
GRASSY LAKE SNOTEL	7270	2/01/13	75	18.3	20.5	20.3
GRAVE SPRINGS SNOTEL	8550	2/01/13	20	3.4	5.7	4.9
GROS VENTRE SNOTEL	8750	2/01/13	35	7.7	7.1	8.4
GROVER PARK DIVIDE	7000	1/31/13	31	6.4	6.7	6.4
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SNOW SITE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	NORMAL 81-10
HAIRPIN TURN	9480	1/29/13	22	3.8	8.3	8.9
HANSEN S.M. SNOTEL	8360	2/01/13	20	3.8	3.9	4.0
HAMS FORK SNOTEL	7840	2/01/13	28	6.2	6.8	7.1
HASKINS CREEK	8980	1/27/13	46	12.0	12.8	18.2
HOBACK GS	6640	1/31/13	28	6.5	7.1	6.8
HOBBS PARK SNOTEL	10100	2/01/13	28	6.9	10.0	8.0
HUCKLEBERRY DIVIDE	7300	1/31/13	50	11.6	14.2	12.8
INDIAN CREEK SNOTE	L 9430	2/01/13		12.5	13.7	14.6
KELLEY R.S. SNOTEL	8180	2/01/13	37	8.2	9.5	9.0
KENDALL R.S. SNOTE	L 7740	2/01/13	32	7.2	10.6	7.8
LAKE CAMP	7780	2/01/13	33	6.4	5.6	6.0
LA PRELE SNOTEL	8380	2/01/13	12	1.8	6.2	5.4
LARSEN CREEK	9020	1/28/13	24	6.0	6.5	6.4
LARSEN CREEK SNOTE	L 9020	2/01/13	21	5.3	7.2	
LEWIS LAKE SNOTEL	7850	2/01/13	71	19.7	19.4	20.0
LIBBY LODGE	8750	1/29/13	19	3.0	6.5	6.3
LITTLE BEAR RUN	6240	1/28/13	13	1.6	2.4	2.6
LITTLE GOOSE SNOTE	L 8870	2/01/13	22	4.4	7.8	
LITTLE WARM SNOTEL	9370	2/01/13	32	6.6	5.2	6.4
LOOMIS PARK SNOTEL	8240	2/01/13		8.0	9.7	9.5
LUPINE CREEK	7380	1/31/13	25	6.0	4.5	4.8
MALLO	6420	1/28/13	19	3.0	4.5	4.6
MARQUETTE SNOTEL	8760	2/01/13	16	3.1	5.7	
MEDICINE LODGE LAKE		1/25/13	26	5.8	6.6	6.4
MIDDLE FORK	7420	1/28/13	5	.7	3.8	3.2
MIDDLE POWDER SNOTE		2/01/13	30	5.5	7.0	6.3
MORAN	6750	2/01/13	30	6.6	10.0	8.0
MOSS LAKE	9800	1/28/13	30	6.2	9.2	12.0
NEW FORK SNOTEL	8340	2/01/13	26	5.7	8.1	6.8
NORRIS BASIN	7500	1/30/13	27	5.4	6.8	6.5
NORTH BARRETT CREEK		1/28/13	36	8.2	8.2	12.1
NORTH FRENCH SNOTE		2/01/13	57	12.4	12.1	16.0
NORTH TONGUE	8450	1/25/13	21	4.6	9.8	7.2
OLD BATTLE SNOTEL	9920	2/01/13	60	15.6	14.3	19.1
OLD FAITHFUL	7400	1/31/13	35	9.5	7.4	8.8
ONION GULCH	8780	1/28/13	20	3.7	4.8	4.2
OWL CREEK SNOTEL				3.3		3.1
PARKERS PEAK SNOTE					15.0	
PHILLIPS BNCH SNOTE		2/01/13			16.2	16.0
POCKET CREEK	9350	1/30/13	34 35	8.5	7.0	7.1
POCKET CREEK SNOTE	8700	2/01/13 1/28/13	35 17	7.3 2.7	6.8 6.1	
POLE MOUNTAIN POWDER RVR.PASS SN	0 / U U	2/01/13	36	7.1	6.5	5.4 6.5
PURGATORY GULCH	1L 940U 0070	2/U1/13 1/27/12	24			7.2
RANGER CREEK		1/27/13			5.1	5.4
RENO HILL SNOTEL		2/01/13				7.7
REUTER CANYON						5.4
ROWDY CREEK	8300	1/30/13			10.7	11.4
RYAN PARK				5.0		6.8
SAGE CK BASIN SNTL		1/28/13		6.7	9.9	8.4
SALT RIVER SNOTEL	7850 7600	2/01/13 2/01/13	33	7.0		7.8
SALI RIVER SNOTEL SAND LAKE SNOTEL	10050	2/01/13	58	7.U 11 Q	14.8	16.5
SAND LAKE SNOTEL SANDSTONE RS SNOTEI	±0050 1. 8150	2/01/13	37		5.5	8.0
SAWMILL DIVIDE		1/29/13			11.4	
SHELL CREEK SNOTEL				9.0		9.1
	7750			2.2		3.5
SNAKE RIVER STATION		1/31/13			13.7	12.7

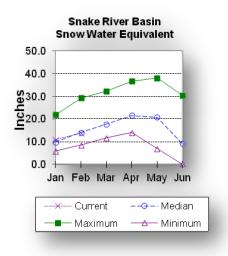
SNOW SITE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	NORMAL 81-10
SNAKE RV STA SNOTE	L 6920	2/01/13	42	9.6	12.6	10.9
SNIDER BASIN SNOTE	L 8060	2/01/13		6.3	8.2	7.5
SNOW KING MTN	7660	2/05/13	29	7.0		8.8
SOLDIER PARK SNOTE	L 8780	2/01/13	12	2.3	9.2	
SOLDIER PARK	8780	1/30/13	17	2.9	4.5	2.8
SOUR DOUGH	8460	1/30/13	20	3.3	3.5	3.4
SOUTH BRUSH SNOTEL	8440	2/01/13	25	5.2	4.3	7.3
SOUTH PASS SNOTEL	9040	2/01/13	28	6.5	9.2	8.9
SPRING CRK. SNOTEL	9000	2/01/13	62	13.6	14.6	14.4
ST LAWRENCE ALT SN	TL 8620	2/01/13	14	2.2	3.6	4.2
SUCKER CREEK SNOTE	L 8880	2/01/13	37	6.6	10.2	7.1
SYLVAN LAKE SNOTEL	8420	2/01/13	52	12.3	11.5	13.0
SYLVAN ROAD SNOTEL	7120	2/01/13	33	6.6	8.9	7.8
T CROSS RANCH	7900	1/30/13	16	2.8	5.7	4.0
TETON PASS W.S.	7740	2/01/13	47	11.9	14.8	16.5
THUMB DIVIDE	7980	1/31/13	40	10.3	9.8	10.2
THUMB DIVIDE SNOTE	L 7980	2/01/13	44	11.3	10.4	9.6
TIE CREEK SNOTEL	6870	2/01/13	17	2.4	5.1	3.4
TIMBER CREEK SNOTE	L 7950	2/01/13	15	2.2	3.6	2.9
TOGWOTEE PASS SNOT	EL 9580	2/01/13	54	13.6	14.1	15.0
TOWNSEND CRK SNOTE	L 8700	2/01/13	13	2.5	5.5	5.2
TRIPLE PEAK SNOTE	L 8500	2/01/13	53	11.7	15.0	13.3
TURPIN MEADOWS	6900	1/29/13	28	6.1	7.1	6.6
TWO OCEAN SNOTEL	9240	2/01/13	66	18.9	23.4	17.6
TYRELL RANGER STA.	8300	1/28/13	21	3.2	4.1	4.4
WEBBER SPRING SNOT	EL 9250	2/01/13	52	11.7	11.0	13.7
WHISKEY PARK SNOTE	L 8950	2/01/13	59	13.1	11.3	16.0
WILLOW CREEK SNOTE	L 8450	2/01/13	62	15.6	16.2	17.1
WINDY PEAK SNOTEL	7900	2/01/13		1.1	4.7	4.2
WOLVERINE SNOTEL	7650	2/01/13	27	6.8	8.9	7.1
WOOD ROCK G.S.	8440	1/29/13	22	3.4	7.5	5.4
YOUNTS PEAK SNOTEL	8350	2/01/13	36	9.0	11.6	9.6

NOTE: Missing snow depth entries indicate the site has no snow depth sensor or the sensor is malfunctioning. Missing data under NORMAL 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 97% of normal. Pacific Creek Basin SWE is 103% of normal. SWE in the Buffalo Fork basin is 93% of normal. Gros Ventre River Basin SWE is 93% of normal. SWE in the Hoback River drainage is 91% of normal. SWE in the Greys River drainage is 93% of normal. In the Salt River area SWE is 95% 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 62% of average (50% of last year). Last month's percentages range from 30-89% of average for the 27 reporting stations. Water-year-to-date precipitation is 95% of average for the Snake River Basin (94% of last year). Year-to-date percentages range from 77-128% of average.

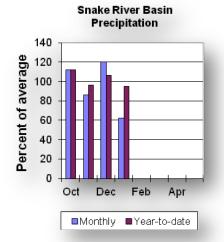
#### Reservoirs

Current reservoir storage is 88% of average for the 3 storage reservoirs in the basin. Grassy Lake storage is about 107% of average (12,700 ac-ft compared to 12,100 last

year). Jackson Lake storage is 143% of average (618,200 ac-ft compared to 638,800 ac-ft last year). Palisades Reservoir storage is about 61% of average (559,400 ac-ft compared to 1,236,500 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 790,000 ac-ft (94% of average). Snake River above reservoir near Alpine is 2,230,000 ac-ft (89% of average). The Snake near Irwin is 3,070,000 ac-ft (88%



of average). The Snake near Heise is 3,300,000 ac-ft (87% of average). Pacific Creek near Moran is 164,000 ac-ft (95% of average). Buffalo Fork above Lava near Moran is 300,000 ac-ft (94% of average). Greys River above Palisades Reservoir is 315,000 ac-ft (88% of average). Salt River near Etna is 315,000 ac-ft (85% of average). See the following page for detailed runoff volumes.

### **Snake River Basin**

Streamflow Forecasts - February 1, 2013

=========		======	========			=======	=======
	<=== Dr	ier ===	Future Co	onditions	=== Wett	er ===>	
Forecast Pt	======	======	Chance of	Exceeding	g * =====	======	
Forecast	90%	70%	50	) 응	30%	10%	30 Yr Avg
Period	(1000AF)	(1000AF	) (1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)
Snake R nr Mo	oran (1,2)						
APR-JUL	530	657	715	94	773	900	765
APR-SEP	582	725	790	94	855	998	845
Snake R nr Al	lpine (1,2	)					
APR-JUL	1403	1772	1940	89	2108	2477	2170
APR-SEP	1610	2036	2230	89	2424	2850	2500
Snake R nr Ir	rwin (1,2)						
APR-JUL	1866	2398	2640	88	2882	3414	3010
APR-SEP	2199	2798	3070	88	3342	3941	3500
Snake R nr He	eise (2)						
APR-JUL	2161	2553	2820	87	3087	3479	3240
APR-SEP	2549	2996	3300	87	3604	4051	3780
Pacific Ck At	. Moran						
APR-JUL	113	138	155	95	172	197	164
APR-SEP	120	146	164	95	182	210	173
Buffalo Fork	ab Lava n	r Moran					
APR-JUL	207	241	265	95	289	323	280
APR-SEP	234	273	300	94	327	366	320
Greys R Nr Al	lpine						
APR-JUL	182	234	270	89	306	358	305
APR-SEP	212	274	315	88	356	418	360
Salt R Nr Etr	na						
APR-JUL	109	193	250	83	307	391	300
APR-SEP	149	248	315	85	382	481	370

<sup>\* 90%, 70%, 50%, 30%,</sup> 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.

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### SNAKE RIVER BASIN

Reservoir Storage (1000AF) End of January

Reservoir	Usable	*******	Usable Storage	*******
	Capacity	This Year	Last Year	Average
Grassy Lake	15.2	12.7	12.1	11.9
Jackson Lake	847.0	618.2	638.8	431.2
Palisades	1400.0	559.4	1236.5	911.2
_======================================	=========	:========		=======

### SNAKE RIVER BASIN

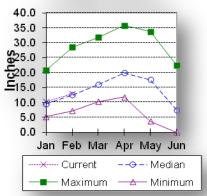
Watershed	Number of Data Sites	This Year as Last Year	
SNAKE above Jackson Lake	9	87	97
PACIFIC CREEK	3	78	103
BUFFALO FORK	3	96	93
GROS VENTRE RIVER	4	99	93
HOBACK RIVER	6	88	91
GREYS RIVER	4	93	93
SALT RIVER	5	99	95
SNAKE above Palisades	29	90	94

### **Madison-Gallatin Rivers Basin**

### Snow

Snow water equivalent (SWE) is at 105% of normal in the Madison-Gallatin drainage. See the "Basin Summary of Snow Course Data" at the front of this report for details.





### Precipitation

Last month precipitation in the Madison-Gallatin drainage was about 73% of average (75% of last year). The 6 reporting stations percentages range from 62-80% of average. Water-year-to-date precipitation is about 102% of average (105% of last year's amount). Year to date percentage ranges from 81-108%.

### Reservoirs

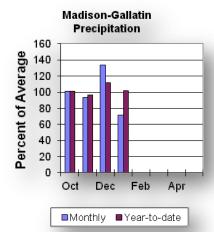
Ennis Lake is storing about 27,500 ac-ft of water (67% of capacity, 92% of average or 95% of last year's volume). Hebgen Lake is

storing about

302,200 ac-ft of water (80% of capacity, 108% 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 about average for the basin. Hebgen Reservoir inflow is 460,000 ac-ft (98% of average). See the following page for detailed runoff volumes.



### **Madison-Gallatin Rivers Basin**

Streamflow Forecasts - February 1, 2013

=========	=======	======	========		=======	=======	
	<=== Dr	ier ===	Future Co	onditions	=== Wett	er ===>	 
Forecast Pt	======	======	Chance of	Exceeding	* =====	======	
Forecast	90%	70%	50	)%	30%	10%	30 Yr Avg
Period	(1000AF)	(1000AF	) (1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)
=========	=======		=======		======	=======	
Hebgen Reser	voir Inflo	w (2)					
APR-JUL	290	330	360	97	390	430	370
APR-SEP	375	425	460	98	495	545	470

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.

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

	Usable	*****	Usable Storage	******
Reservoir	Capacity	This Year	Last Year	Average
=======================================		:=======		
ENNIS LAKE	41.0	27.5	28.9	29.8
HEBGEN LAKE	377.5	302.2	309.0	279.0
		.========		

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### MADISON-GALLATIN RIVER BASINS

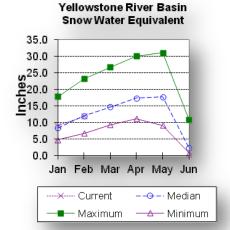
Watershed	Number of	This Year as	Percent of
	Data Sites	Last Year	Median
MADISON RIVER in WY	8	109	105

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

### Yellowstone River Basin

### Snow

SWE in the Yellowstone drainage is at 105% of normal. See the "Basin Summary of Snow Course Data" at the front



Summary of Snow Course Data" at the front of this report for details.

### Precipitation

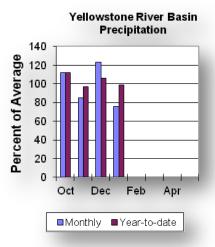
Last month precipitation in the Yellowstone drainage was about 76% of average (71% of last year). The 15 reporting stations percentages range from 55-144% of average. Water-year-to-date precipitation is about 99% of average (90% of last year's amount). Year to date percentage ranges from 61-133%.

### Reservoirs

No reservoir data for the basin.

### Streamflow

The 50% exceedance forecasts for April through September are about average for the basin. Yellowstone at Lake Outlet is 735,000 ac-ft (96% of average). Yellowstone at Corwin Springs will yield around 1,810,000 ac-ft (96% of average). Yellowstone near Livingston will yield around 2,070,000 ac-ft (97% of average). The Clark's Fork of the Yellowstone River should yield around 525,000 ac-ft (96% of average). See the following page for detailed runoff volumes.



### **Yellowstone River Basin**

Streamflow Forecasts - February 1, 2013

	<=== Dr	ier ===	Future Co	nditions	=== Wett	er ===>		
	90%	70%	Chance of   50	1%	30%	10%		
	(1000III ) ========		•	•		=======		
Yellowstone	R at Yello	wstone I	 ake					
APR-JUL APR-SEP	450	515 680		97 96	595 790	660 870	575 770	
Yellowstone	R at Corwi	n Spring	S					
APR-JUL	1280	1430	1540	97	1650	1800	1590	
APR-SEP	1500	1680	1810	96	1940	2120	1880	
Yellowstone	R at Livin	gston						
APR-JUL	1440	1630	1760	98	1890	2080	1800	
APR-SEP	1690	1920	2070	97	2220	2450	2140	
Clarks Fk Ye	llowstone	R nr Bel	fry					
APR-JUL	395	450	485	95	520	575	510	
APR-SEP	430	485	525	96	565	620	550	

\* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities

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.

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# YELLOWSTONE RIVER BASIN Watershed Snowpack Analysis - February 1, 2013

Number of This Year as Percent of Watershed Data Sites Last Year Median

YELLOWSTONE RIVER in WY 11 98 105

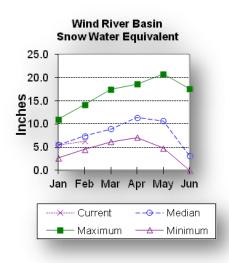
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<sup>\* 90%, 70%, 50%, 30%,</sup> and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

### Wind River Basin

### Snow

The Wind River Basin above Boysen Reservoir is 84% of normal for snow water equivalent at this time of the year. SWE in the Wind River above Dubois is 96% of normal. The Little Wind SWE is 75% of normal, and the Popo Agie drainage SWE is about 68% 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 24-346% of average. Precipitation, for the basin, was about 58% of average from the 14 reporting stations; that is about 59% of last year's amount. Water year-to-date precipitation is 82% of average and about 78% of last year at this time. Year-to-date percentages range from 56-141% of average.

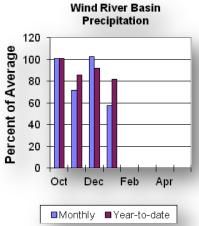
### Reservoirs

Current storage in Bull Lake is about 77,300 ac-ft (103% of average) - the reservoir is at 83% of last year. Boysen Reservoir is storing about 94% of average (477,400 ac-ft) - the

reservoir is about 76% of last year. Pilot Butte is at 107% of average (24,800 ac-ft) - the reservoir is at 98% 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 91,000 ac-ft (99% of average). The Wind River above Bull Lake Creek is 440,000 ac-ft (90% of average). Bull Lake Creek near Lenore is 155,000 ac-ft (92% of average). Wind River at Riverton will yield around 485,000 ac-ft (88% of average). Little Popo Agie River near Lander is around 29,000 ac-ft (59% of average). South Fork of Little Wind near Fort Washakie will yield around 69,000 ac-ft (84% of average). Little Wind River near Riverton will yield around 171,000 ac-ft (58% of



average). Boysen Reservoir inflow will yield around 540,000 ac-ft (81% of average). See the following page for detailed runoff volumes.

### **Wind River Basin**

Streamflow Forecasts - February 1, 2013

=========	========	=======	========	=======	=======	, ========	:=======
	<=== Dr	ier ===	Future Co	nditions	=== Wett	er ===>	
Forecast Pt	======	======	Chance of	Exceeding	* =====	======	
Forecast	90%	70%	50	%	30%	10%	30 Yr Avg
	•		') (1000AF)				
		======	========	=======	======	=======	=======
Dinwoody Ck r							
APR-JUL	51	59	65	99	71	79	66
APR-SEP	74	84	91	99	98	108	92
Wind R ab Bul		. ,					
APR-JUL	225	305	360	90	415	495	400
APR-SEP	300	385	440	90	495	580	490
Bull Lake Ck	nr Lenore						
APR-JUL	94	113	126	91	139	158	139
APR-SEP	114	139	155	92	171	196	169
Wind R at Riv	verton (2)						
APR-JUL	245	350	420	88	490	595	475
APR-SEP	290	405	485	88	565	680	550
Little Popo A	Agie R nr	Lander					
APR-JUL	2.2	15.2	24	57	33	46	42
APR-SEP	5.8	19.6	29	59	38	52	49
SF Little Wir	nd R nr Fo	rt Washa	kie				
APR-JUL	38	52	61	85	70	84	72
APR-SEP	43	58	69	84	80	95	82
Little Wind H	R nr River	ton					
APR-JUL	60	85	148	55	210	305	270
APR-SEP	65	102	171	58	240	340	295
Boysen Reserv	voir Inflo	w (2)					
APR-JUL	90	330	495	81	660	900	610
APR-SEP	103	365	540	81	715	975	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.

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### WIND RIVER BASIN

Reservoir Storage (1000AF) End of January

Reservoir	Usable Capacity	********* This Year	Usable Storage Last Year	******* Average
BULL LAKE	151.8	77.3	93.4	75.4
BOYSEN	596.0	477.4	624.3	506.0
PILOT BUTTE	31.6	24.8	25.2	23.2
=======================================	=========		==========	

### WIND RIVER BASIN

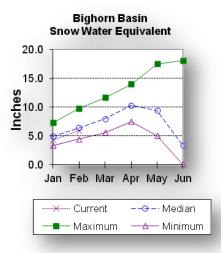
Watershed	Number of Data Sites	This Year as Last Year	Percent of Median				
=======================================	=======================================	===========	========				
WIND RIVER above Dubios	8	92	96				
LITTLE WIND	2	67	75				
POPO AGIE	7	67	68				
WIND above Boysen Resv	15	79	84				

### **Bighorn River Basin**

#### Snow

The Bighorn River Basin SWE above Bighorn Reservoir is at 89% of normal. The Nowood River is at 91% of normal. The Greybull River SWE is at 76% of normal. Shell Creek SWE is 94% of normal. See the "Basin

Summary of Snow Course Data" at the front of this report for details.



### Precipitation

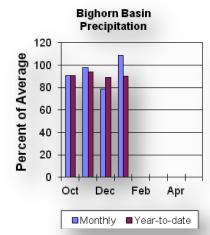
Last month's precipitation was 107% of average (182% of last year). Sites ranged from 54-265% of average for the month. Year-to-date precipitation is 90% of average; that is 78% of last year at this time. Year-to-date percentages, from the 14 reporting stations, range from 56-125%.

### Reservoirs

Boysen Reservoir is currently storing 477,400 ac-ft (94% of average). Bighorn

Lake is now at 875,800

ac-ft (106% of average). Boysen is currently storing 76% of last year volume at this time and Big Horn Lake is storing 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 forecasts for the April through September runoffs are anticipated to be below average. Boysen Reservoir inflow should yield 540,000 ac-ft (81% of average); the Greybull River near Meeteetse should yield around 167,000 ac-ft (94% of average); Shell Creek near Shell should yield around

60,000 ac-ft (91% of average) and the Bighorn River at Kane should yield around 735,000 ac-ft (81% of average). See the following page for detailed runoff volumes.

### **Bighorn River Basin**

Streamflow Forecasts - February 1, 2013

=========			=======	=======	 :=======	=======	
	<=== Dr:	ier ===	Future Co	nditions	=== Wett	er ===>	
Forecast Pt Forecast Period	   =======   90%  (1000AF)	70%	Chance of   50)   (1000AF)	%	30%	10%	  30 Yr Avg  (1000AF)
==========	=======================================	=======	,	========	======	=======	======
Boysen Reserv	voir Inflo	w (2)					
APR-JUL	90	330	495	81	660	900	610
APR-SEP	103	365	540	81	715	975	665
Greybull R n	r Meeteets	e					
APR-JUL	87	108	122	93	136	157	131
APR-SEP	124	150	167	94	184	210	177
Shell Ck nr S	Shell						
APR-JUL	33	42	48	87	54	63	55
APR-SEP	44	53	60	91	67	76	66
Bighorn R at	Kane (2)						
APR-JUL	167	475	685	82	895	1200	840
APR-SEP	179	510	735	81	960	1290	905

<sup>\* 90%, 70%, 50%, 30%,</sup> 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.

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### BIGHORN RIVER BASIN

Reservoir Storage (1000AF) End of January

Reservoir	Usable Capacity	********* This Year	Usable Storage Last Year	******* Average
BOYSEN	596.0	477.4	624.3	506.0
BIGHORN LAKE	1356.0	875.8	894.0	825.9

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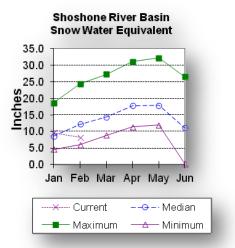
### BIGHORN RIVER BASIN

Watershed	Number of	This Year as	Percent of
	Data Sites	Last Year	Median
NOWOOD RIVER	5	87	91
GREYBULL RIVER	1	61	76
SHELL CREEK	4	77	89

### **Shoshone River Basin**

#### Snow

Snowpack in this basin is above normal for this time of year. Snow Water Equivalent (SWE) is 96% of normal in the Shoshone River Basin.



The Clarks Fork River drainage SWE is 100% of normal. See the "Basin Summary of Snow Course Data" at the front of this report for details.

### Precipitation

Precipitation for last month was 82% of average (71% of last year). Monthly percentages range from 64-263% of average. The basin year-to-date precipitation is now 99% of average (80% of last year). Year-to-date percentages range from 53-123% of average for the 5 reporting stations.

### Reservoirs

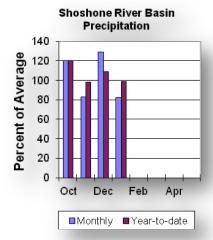
Current storage in Buffalo Bill Reservoir is about 122% of average (96%

of last year's storage) - the reservoir is at about 67% of capacity. Currently, about 430,200 ac-ft are stored in the reservoir compared to

449,400 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 495,000 ac-ft (96% of average). The South Fork of the Shoshone River near Valley is 230,000 ac-ft (94% of average), and the South Fork above Buffalo Bill Reservoir runoff is 183,000 ac-ft (92% of average). The Buffalo Bill Reservoir inflow is expected to yield around 700,000 ac-ft (94% of average). See the following page for detailed runoff volumes.



### **Shoshone River Basin**

Streamflow Forecasts - February 1, 2013

=========	========	=======	=========	========	, I, 2013	, ========	=======
	<=== Dri	ier ===	Future Cond	ditions	=== Wett	er ===>	
Forecast Pt	=======	=====	Chance of E	xceeding	* =====	======	
Forecast Period	90%  (1000AF)		50%  (1000AF) (			10% (1000AF)	30 Yr Avg (1000AF)
NF Shoshone	R at Wapiti	 L					
APR-JUL	360	410	445	97	480	530	460
APR-SEP	405	460	495	96	530	585	515
SF Shoshone	R nr Valley	7					
APR-JUL	158	183	200	93	215	240	215
APR-SEP	183	210	230	94	250	275	245
SF Shoshone	R ab Buffal	lo Bill R					
APR-JUL	110	150	178	92	205	245	193
APR-SEP	111	154	183	92	210	255	200
Buffalo Bill	Reservoir	Inflow (	2)				
APR-JUL	495	580	635	94	690	775	675
APR-SEP	550	640	700	94	760	850	745
========	========		========	=======		=======	=======

<sup>\* 90%, 70%, 50%, 30%,</sup> 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.

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### SHOSHONE RIVER BASIN

Reservoir Storage (1000AF) End of January

=======================================		========	==========	
	Usable	******	Usable Storage	******
Reservoir	Capacity	This Year	Last Year	Average
BUFFALO BILL	646.6	430.2	449.4	353.8
=======================================			==========	

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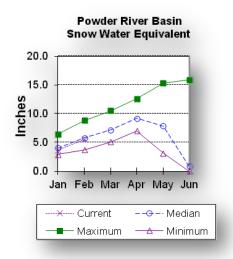
### SHOSHONE RIVER BASIN

Watershed	Number of	This Year as	Percent of
	Data Sites	Last Year	Median
SHOSHONE RIVER	5	84	96
CLARKS FORK in WY	7	90	100
	===========	=========	========

### **Powder River Basin**

#### Snow

Snow water equivalent (SWE) in the Powder River drainage is 99% of



normal. SWE in the Clear Creek drainage is 92% of normal. Crazy Woman Creek drainage is 100% of normal. Upper Powder River drainage SWE is 106% of normal. Powder River Basin SWE in Wyoming is 96% of normal. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.

### Precipitation

Last month's precipitation was 103% of average for the 11 reporting stations (122% of last year). Monthly percentages range from 19-192% of average. Year-to-date precipitation is 97% of average in the basin; this is 82% of last year at this time. Precipitation for the year ranges from

recipitation for the year

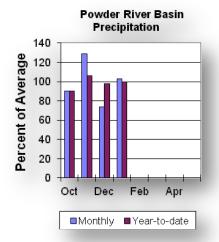
67-125% of average.

### 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 13,600 ac-ft (80% of average). The North Fork of the Powder River near Hazelton should yield around 10,900 ac-ft (110% of average). Rock Creek near Buffalo will yield about 20,000 ac-ft (91% of average), and Piney Creek at Kearny should yield about 38,000



ac-ft (81% of average). The Powder River at Moorhead is 174,000 ac-ft (89% of average). The Powder River near Locate is 195,000 ac-ft (89% of average). See the following page for detailed runoff volumes.

### **Powder River Basin**

Streamflow Forecasts - February 1, 2013

			========		.y 1, 201.		
			Future Co				   
Forecast Pt	======	======	Chance of	Exceeding	* =====	======	
	90%			)%			30 Yr Avg
	•		) (1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)
MF Powder R		======	=======	=======	======	=======	=======
	7.2	10 6	12.9	80	15 2	18.6	16.1
	7.7			80			
NF Powder R :	nr Hazelto	n					
	7.5		10.0	110	11.0	12.5	9.1
	8.3			110	12.0	13.5	
Rock Ck nr Bi	uffalo						
APR-JUL	10.5	14.1	16.5	89	18.9	22	18.6
APR-SEP	13.5	17.4	20	91	23	26	22
Piney Ck at I	Kearny						
APR-JUL	13.2	26	35	80	44	57	44
APR-SEP	16.1	29	38	81	47	60	47
Powder R at I	Moorhead						
APR-JUL	52	111	152	86	193	250	177
APR-SEP	71	132	174	89	215	275	196
Powder R nr 1	Locate						
APR-JUL	47	121	171	86	220	295	199
APR-SEP	62	141	195	89	250	330	220
========	=======	======	=======	=======	=======	=======	=======

<sup>\* 90%, 70%, 50%, 30%,</sup> 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.

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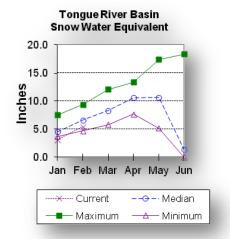
### POWDER RIVER BASIN

Watershed	Number of Data Sites	This Year as Last Year	Percent of Median
		=========	========
UPPER POWDER RIVER	4	95	106
POWDER RIVER in WY	8	74	99
CLEAR CREEK	4	59	92
CRAZY WOMAN CREEK	3	95	100

### **Tongue River Basin**

#### Snow

Snow water equivalent (SWE) in the Upper Tongue River drainage is 82% of normal. The Goose Creek drainage is 81% of normal. For more



information see "Basin Summary of Snow Course Data" at the beginning of this report.

### Precipitation

Last month's precipitation was 105% of average for the 8 reporting stations (145% of last year). Monthly percentages range from 44-245% of average. Year-to-date precipitation is 78% of average in the basin; this is 57% of last year at this time. Precipitation for the year ranges from 67-136% of average.

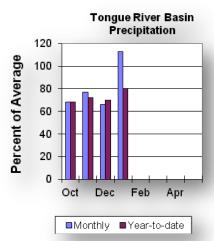
### Reservoirs

The Tongue River Reservoir currently is storing 175% of average (46,600 ac-ft)

compared to 86% of last year's storage.

### 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 74,000 ac-ft (76% of average). Big Goose Creek near Sheridan is 39,000 ac-ft (72% of average). Little Goose Creek near Bighorn is 30,000 ac-ft (77% of average). The Tongue River Reservoir Inflow is 141,000 ac-ft (66% of average). See the following page for detailed runoff volumes.



### **Tongue River Basin**

Streamflow Forecasts - February 1, 2013

	<=== Dr	ier ===	Future Con	ditions	=== Wett	er ===>	
Barrer Dt			Character of F				
Forecast Pt	!			~			
	I .		50%				_
Period	(1000AF)	(1000AF)	(1000AF) (	•			
========	=======	=======	:=======	=======	======	=======	=======
Tongue R nr 1	Dayton (2)						
APR-JUL	34	52	65	76	78	96	86
APR-SEP	41	61	74	76	87	107	98
Big Goose Ck	nr Sherida	an					
APR-JUL	12.8	24	32	70	40	51	46
APR-SEP	19.4	31	39	72	47	59	54
Little Goose	Ck nr Big	horn					
APR-JUL	10.6	18.0	23	74	28	35	31
APR-SEP	16.6	25	30	77	35	43	39
Tongue River	Reservoir	Inflow (	(2)				
APR-JUL	18.0	82	125	65	168	230	193
APR-SEP	29	96	141	66	186	255	215

<sup>\* 90%, 70%, 50%, 30%,</sup> 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 January

Reservoir	Usable	*********	Usable Storage	*******
	Capacity	This Year	Last Year	Average
TONGUE RIVER	79.1	46.6	54.4	26.7

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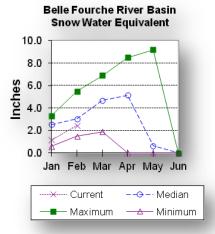
### TONGUE RIVER BASIN

Watershed	Number of	This Year as	Percent of
	Data Sites	Last Year	Median
TONGUE RIVER BASIN	10	60	82
GOOSE CREEK	3	56	81

### **Belle Fourche River Basin**

#### Snow

The Belle Fourche River Basin SWE is 61% of normal at this time of year. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



### Precipitation

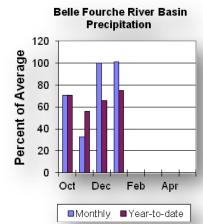
Precipitation for last month was 128% of average or 89% of last year in the Black Hills. There were 5 reporting stations. Year-to-date precipitation is 69% of average and 95% of last year's amount.

### Reservoirs

Belle Fourche reservoir is storing 97% of average (97,900 ac-ft), about 55% of capacity. Keyhole reservoir is storing 169% of average (148,800 ac-ft), about 77% of capacity.

Shadehill reservoir is storing 71% of

average (34,800 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.

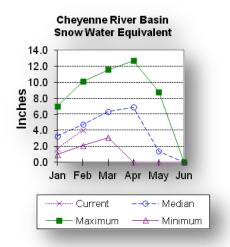
Belle Fourche River Basin
Reservoir Storage (1000AF) End of January

Reservoir	Usable Capacit		Usable Storage Last Year	******* Average			
BELLE FOURCHE KEYHOLE SHADEHILL	178.4 193.8 81.4	3 148.8	126.6 166.0 36.7	101.4 87.9 49.1			
BELLE FOURCHE RIVER BASIN Watershed Snowpack Analysis - February 1, 2013							
Watershed	Numbe Data	-	This Year as Last Year	Percent of Median			
BELLE FOURCHE	=======================================	4 	64 =======	61 ======			

### **Cheyenne River Basin**

#### Snow

The Cheyenne River Basin SWE is 77% 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 171% of average or 98% of last year in the Black Hills. There were 4 reporting stations. Monthly percentages range from 124-187%. Year-to-date precipitation is 85% of average and 77% of last year's amount. Yearly percentages range from 81-90% of average.

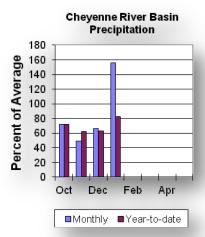
### Reservoirs

Angostura is currently storing 71% of average (69,700 ac-ft), about 57% of capacity. Deerfield reservoir is storing 118% of average (15,100 ac-ft), about 99% of capacity. Pactola reservoir is storing 106% of average (48,400 ac-ft),

about 88% of capacity. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.

### Streamflow

The following runoff values are the 50% exceedance forecasts for the Apr through July period. The Deerfield Reservoir Inflow is expected to be 4,300 ac-ft (83% of average). Pactola Reservoir Inflow is expected to yield around 17,100 ac-ft (78% of average). See the following page for detailed runoff volumes.



### **Cheyenne River Basin**

Streamflow Forecasts - February 1, 2013

==========		======		=======	======	=======	=======
	<=== Dr	ier ===	Future Co	onditions	=== Wett	er ===>	
	İ						
Forecast Pt	   =======	======	Chance of	Exceeding	* =====	======	
Forecast	90%	70%		)%	30%		30 Yr Avq
Period	(1000AF)	(1000AF	) (1000AF)	(% AVG.)	(1000AF)	(1000AF)	_
=========	========	=======	· =========	=======	=======	=======	
Deerfield Res	servoir In	flow (2)					
MAR-JUL	1.2	3.6	5.3	86	7.0	9.4	6.2
APR-JUL	1.9	3.2	4.3	83	5.5	7.6	5.2
Pactola Reser	rvoir Infl	ow (2)					
MAR-JUL	2.2	13.4	21	84	29	40	25
APR-JUL	5.5	11.6	17.1	78	24	35	22
=========		=======			======	=======	

<sup>\* 90%, 70%, 50%, 30%,</sup> 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.

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### CHEYENNE RIVER BASIN

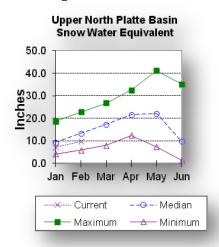
Reservoir Storage (1000AF) End of January

	Usable	******	Usable Storage	*****				
Reservoir	Capacity	This Year	Last Year	Average				
=======================================	:=======	========		=======				
ANGOSTURA	122.1	69.7	94.8	98.1				
DEERFIELD	15.2	15.1	15.0	12.8				
PACTOLA	55.0	48.4	52.2	45.8				
=======================================	:=======	========	==========	=======				

### **Upper North Platte River Basin**

### Snow

The stations above Seminoe Reservoir are showing about 72% of normal (SWE) for this time of the year. SWE in the drainage area above Northgate is 68% of normal at this time. SWE in the Encampment River drainage is about 82% of normal. Brush Creek SWE for the year is about



68% of normal. Medicine Bow and Rock Creek drainages SWE are about 67% 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 72% of average or 87% of last year's amount. Precipitation varied from 27-89% of average last month. Total water-year-to-date precipitation is about 76% of average for the basin, which is about 93% of last year's amount. Year to date percentage ranges from 49-99% of average.

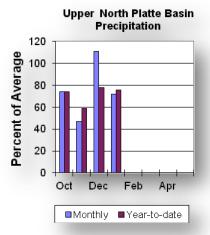
#### Reservoirs

Seminoe Reservoir is estimated to be storing 496,500 ac-ft or 49% of capacity. Seminoe Reservoir is also storing about 95% 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 123,000 ac-ft (49% of average). The Encampment River near Encampment is 103,000 ac-ft (75% of average). Rock Creek near Arlington is 37,000 ac-ft (71% of average). Seminoe



Reservoir inflow should be around 425,000 ac-ft (55% of average). See the following table for more detailed information on projected runoff.

### **Upper North Platte River Basin**

Streamflow Forecasts - February 1, 2013

=========		======	========	=======	=======	=======	
	<=== Dr	ier ===	Future Co	onditions	=== Wett	er ===>	
Forecast Pt	======	======	Chance of	Exceeding	* =====	======	
Forecast	90%	70%	1		30%		30 Yr Avg
Period	(1000AF)	(1000AF	) (1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)
North Platte	R nr Nort	====== haate	=======	=======	======	=======	=======
APR-JUL		65	112	50	159	230	225
APR-SEP	20	71	123	49	175	250	250
THE OH	20	, _	123	10	175	250	250
Encampment R	nr Encamp	ment					
APR-JUL	51	78	97	75	116	143	129
APR-SEP	55	84	103	75	122	151	138
Rock Ck nr Ai	rlington						
APR-JUL	_	28	35	71	42	52	49
APR-SEP		30	37	71	44	55	52
APR-SEP	10.9	30	37	/ 1	44	55	52
Sweetwater R	nr Alcova						
APR-JUL	2.5	16.3	31	53	46	67	59
APR-SEP	4.2	20	36	56	52	75	64
Seminoe Reser	rvoir Infl	ow (2)					
APR-JUL	158	230	395	55	560	805	715
APR-SEP	170	250	425	55	600	865	770
=========		======	========	========	=======	========	========

<sup>\* 90%, 70%, 50%, 30%,</sup> 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.

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

Usable \*\*\*\*\*\*\*\*\* Usable Storage \*\*\*\*\*\*\*\*

Reservoir Capacity This Year Last Year Average

SEMINOE 1016.7 496.5 870.8 520.8

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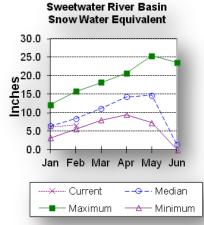
### UPPER NORTH PLATTE RIVER BASIN

	Number of	This Year as Percent o	f					
Watershed	Data Sites	Last Year Median						
=======================================	===========		:=					
N PLATTE above Northgate	7	93 68	}					
ENCAMPMENT RIVER	4	103 82						
BRUSH CREEK	5	96 68	;					
MEDICINE BOW & ROCK CREEKS	3	80 67	,					
N PLATTE above Seminoe	19	95 72	!					
			_					

### **Sweetwater River Basin**

### Snow

SWE for the Sweetwater River Basin is at 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 31% of average or 30% of last year's amount. The water year-to-date precipitation for the basin is currently 66% of average (71% of last year).

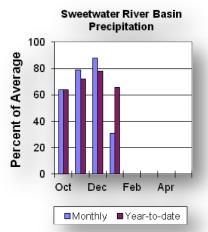
### Reservoirs

Reservoir storage is as follows:

Pathfinder 421,000 ac-ft (75% of average).

### Streamflow

The following yields are based on the 50% exceedance forecasts for the April through September period. The Sweetwater River near Pathfinder is forecast to yield about 36,000 ac-ft (56% of average). See the following table for more detailed information on projected runoff.



### **Sweetwater River Basin**

Streamflow Forecasts - February 1, 2013

=========									
	<=== Dr 	ier ===	Future Co	nditions	=== Wette	er ===>	 		
Forecast Pt	======	======	Chance of	Exceeding	* ======	======	j		
Forecast	90%	70%	50	%	30%	10%	30 Yr Avg		
Period	(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)		
=========	=======	=======	=======	=======	=======	=======	=======		
Sweetwater R	nr Alcova								
APR-JUL	2.5	16.3	31	53	46	67	59		
APR-SEP	4.2	20	36	56	52	75	64		
==========		=======	=======	=======	=======	=======	=======		

<sup>\* 90%, 70%, 50%, 30%,</sup> 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 January

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=======================================		========	==========	=======
	Usable	******	Usable Storage	*****
Reservoir	Capacity	This Year	Last Year	Average
		=========	===========	
PATHFINDER	1016.5	421.0	767.3	559.0
=======================================		========	==========	=======

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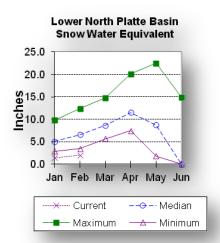
### SWEETWATER RIVER BASIN

=======================================	=======================================	=========	=======
	Number of	This Year as	Percent of
Watershed	Data Sites	Last Year	Median
=======================================	=======================================	==========	========
SWEETWATER	4	82	76
DEER & Laprele Creeks	2	26	34
=======================================	=======================================	==========	========

### **Lower North Platte River Basin**

### Snow

SWE for the Lower North Platte River Basin is at 31% of normal. Deer and LaPrele Creek SWE are at 34% of normal. SWE for the North Platte



(includes Upper North Platte, Sweetwater and Laramie River Basins) is 67% of normal. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.

### Precipitation

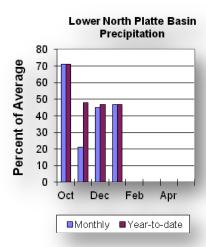
Last month's precipitation was 47% of average or 30% of last year's amount. Of the 5 reporting stations, percentages for the month range from 25-65%. The water year-to-date precipitation for the basin is currently 48% of average (37% of last year). Year-to-date percentages range from 37-60% of average.

### Reservoirs

Reservoir storage is as follows: Alcova 156,800 ac-ft (101% of average); Glendo 245,800 ac-ft (82% of average); Guernsey 5,100 ac-ft (45% of average); Pathfinder 421,000 ac-ft (75% 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 -1,000 ac-ft (15% of normal). North Platte River below Glendo Reservoir is 385,000 ac-ft (45% of average), and below Guernsey Reservoir is anticipated to yield around 390,000 ac-ft (46% of average). See the following table for more detailed information on projected runoff.



### **Lower North Platte River Basin**

Streamflow Forecasts - February 1, 2013

	========   <=== Dr 	:====== rier ===	Future Co	onditions	==== Wett	====== er ===>	=======   
	90% (1000AF)	70%	50  (1000AF)	Exceeding )%   (% AVG.) (	30%	10%	  30 Yr Avg   (1000AF)
North Platte							
APR-JUL		-23.0		-3 -1	52 57	134 142	136 144
North Platte	R bl Gler	ndo Res (2	)				
APR-JUL	150	280	385	47	490	650	820
APR-SEP	150	275	385	45	495	665	850
North Platte	R bl Guer	nsey Res	(2)				
APR-JUL	150	240	375	46	510	705	820
APR-SEP	150	250	390	46	530	730	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.

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

=======================================	========	:=======:		=======
	Usable	******	Usable Storage	*****
Reservoir	Capacity	This Year	Last Year	Average
	:========	:=======:		=======
ALCOVA	184.3	156.8	157.0	155.0
GLENDO	506.4	245.8	369.6	301.5
GUERNSEY	45.6	5.1	13.2	11.4
PATHFINDER	1016.5	421.0	767.3	559.0
		:=======		

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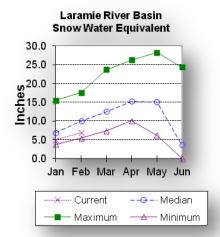
### LOWER NORTH PLATTE RIVER BASIN

Watershed	Number of	This Year	as Percent of
	Data Sites	Last Year	Median
N PLATTE abv Laramie R.	25	89	71

### **Laramie River Basin**

### Snow

SWE for the Laramie River Basin above mouth is at 58% of normal. SWE for the Laramie River above Laramie is 57% of normal. SWE for the



Little Laramie River is 58% of normal. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.

### Precipitation

Last month's precipitation was 63% of average or 70% of last year's amount. Of the 5 reporting stations, percentages for the month range from 57-78%. The water year-to-date precipitation for the basin is currently 69% of average (72% of last year). Year-to-date percentages range from 65-73% of average.

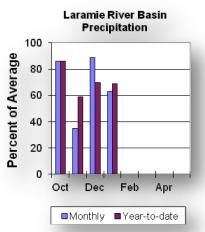
### Reservoirs

Reservoir

storage is as follows: Wheatland #2 22,200 ac-ft (last year it was at 72,500 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 - February 1, 2013

	<=== Dr 	ier ===	Future Co	nditions	=== Wett	er ===>	
Forecast Pt	======	======	Chance of 1	Exceeding	* =====	======	
Forecast	90%	70%	50	9	30%	10%	30 Yr Avg
Period	(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)
=========		======	=======	=======	=======	=======	
Laramie R nr	Woods						
APR-JUL	41	64	80	70	96	119	115
APR-SEP	46	71	88	70	105	130	126
Little Laram:	ie R nr Fi	lmore					
APR-JUL	14.3	25	33	65	41	52	51
APR-SEP	15.2	28	36	66	44	57	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.

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### LARAMIE RIVER BASIN

Reservoir Storage (1000AF) End of January

	Usable	******	Usable Storage	*****
Reservoir	Capacity	This Year	Last Year	Average
=======================================			==========	
=				
WHEATLAND #2	98.9	22.2	72.5	
		========	=========	=======

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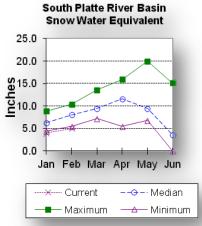
### LARAMIE RIVER BASIN

Watershed	Number of	This Year	as Percent of
	Data Sites	Last Year	Median
LARAMIE RIVER abv Laramie	10	67	57
LITTLE LARAMIE RIVER	5	67	58
LARAMIE RIVER above mouth	13	66	58
			=========

# South Platte River Basin

#### Snow

SWE for the South Platte River Basin is at 54% of normal. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



# Precipitation

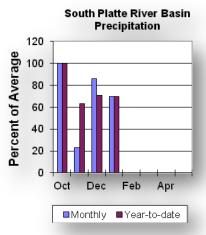
Last month's precipitation was 70% of average or 70% of last year's amount. Of the 3 reporting stations, percentages for the month range from 67-78%. The water year-to-date precipitation for the basin is currently 70% of average (66% of last year). Year-to-date percentages range from 67-73% of average.

# Reservoirs

No reservoir data for the basin.

## Streamflow

There are no streamflow forecast points for the basin.



# SOUTH PLATTE RIVER BASIN

# Watershed Snowpack Analysis - February 1, 2013

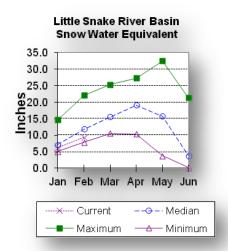
Number of	This Year as	Percent of
Data Sites	Last Year	Median
5	64	59 
	:======================================	

# Little Snake River Basin

#### Snow

Currently, snow water equivalent (SWE) in the Little Snake River drainage is 77% of normal. For more information see "Basin Summary of

Snow Course Data" at the beginning of this report.



## Precipitation

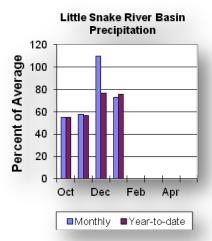
Precipitation across the basin was 73% of average (103% of last year) for the 8 reporting stations. Last month's precipitation ranged from 56-84% of average. The Little Snake River basin water-year-to-date precipitation is currently 76% of average (97% of last year). Year-to-date percentages range from 65-85% of average.

#### Reservoirs

High Savery Dam - 7,100 ac-ft (average storage is 12,900 ac-ft).

#### 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 95,000 ac-ft (61% of average). The Little Snake River at Savery is estimated to yield around 180,000 ac-ft (52% of average). See the following table for more detailed information on projected runoff.



# Little Snake River Basin

Streamflow Forecasts - February 1, 2013

=========		.======				=======	
	<=== Dri	er ===	Future Co	onditions	=== Wett	er ===>	
Forecast Pt	   =======	=====	Chance of	Exceeding	* =====	======	
Forecast	90%	70%	5	0%	30%	10%	30 Yr Avq
Period	(1000AF)	(1000AF	) (1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)
=========	=========	:======	=========		=======		=======
Little Snake	R nr Slate	er (2)					
APR-JUL	57	79	95	61	113	142	156
Little Snake	R nr Saver	ry (2)					
APR-JUL	83	136	180	52	230	315	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 January

	Usable	*****	IIdahla	Storage	*****
Reservoir	Capacity	This Year	Last	_	Average
	========	========	======	======	=======
HIGH SAVERY		7100	11,	800	12,900

------

LITTLE SNAKE RIVER BASIN

Watershed Snowpack Analysis - February 1, 2013

Number of This Year as Percent of Watershed Data Sites Last Year Median

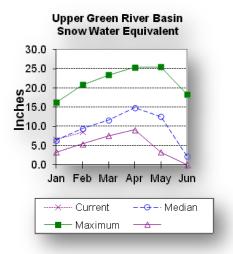
LITTLE SNAKE RIVER 8 104 77

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# **Upper Green River Basin**

#### Snow

SWE in the Green River Basin above Warren Bridge is about 93% of normal. SWE for the West Side of Upper Green River Basin is about 89% of normal. Newfork River Basin SWE is now about 98% of normal. Big



Sandy-Eden Valley Basin is 92% of normal. SWE in the Green River Basin above Fontenelle Reservoir is about 91% 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 60% of average last month (41% of last year). Last month's precipitation varied from 43-76% of average. Water year-to-date precipitation is about 88% of average (82% of last year). Year to date percentage of average ranges from 71-100% for the reporting stations.

#### Reservoir

Storage in Big Sandy Reservoir is 6,500 ac-ft or 17% of capacity. This is 38% of average. Fontenelle Reservoir is 164,400 ac-ft or 48% 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 200,000 ac-ft (82% of average). Pine Creek above Fremont Lake is 82,000 ac-ft (84% of average). New Fork River near Big Piney is 270,000 ac-ft (76% of average). Fontenelle Reservoir Inflow is estimated



to be 520,000 ac-ft (72% of average), and Big Sandy near Farson is expected to be around 39,000 ac-ft (75% of average). See the following table for more detailed information on projected runoff.

# **Upper Green River Basin**

Streamflow Forecasts - February 1, 2013

=========							
	<=== Dri	ler ===	Future Co	nditions	=== Wett	er ===>	
Forecast Pt Forecast Period	   =======   90%  (1000AF)	70%	50	Exceeding	30%	10%	30 Yr Avg (1000AF)
Green R at Wa	erren Bride						
APR-JUL	143	176	200	82	225	265	245
Pine Ck ab Fi	remont Lake	2					
APR-JUL	66	75	82	84	89	100	98
New Fork R ni	r Big Pines	7					
APR-JUL	148	215	270	76	330	430	355
Fontenelle Re	eservoir Ir	nflow (2)					
APR-JUL	270	410	520	72	645	855	725
Big Sandy R r APR-JUL	nr Farson 23	32	39	75	47	59	52

\* 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.

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#### UPPER GREEN RIVER BASIN

Reservoir Storage (1000AF) End of January

Reservoir	Usable	*******	Usable Storage	******
	Capacity	This Year	Last Year	Average
BIG SANDY	38.3	6.5	22.1	17.0
FONTENELLE	344.8	164.4	164.8	150.1
=======================================			==========	=======

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#### UPPER GREEN RIVER BASIN

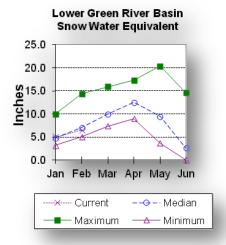
Watershed Snowpack Analysis - February 1, 2013

Watershed	Number of	This Year	as Percent of
	Data Sites	Last Year	Median
GREEN above Warren Bridge	5 7	86	93
UPPER GREEN (West Side)	3	86	89
NEWFORK RIVER		93	98
BIG SANDY/EDEN VALLEY GREEN above Fontenelle	2	88	92
	14	87	91
			=========

# Lower Green River Basin

#### Snow

SWE in the Green River Basin above Flaming Gorge is 91% of normal. SWE in the Hams Fork Basin is 91% of normal. Blacks Fork Basin SWE is currently 85% of normal. In the Henrys Fork drainage SWE is 114%. 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 60% of average or 65% of last year.

Precipitation ranged from 17-92% of average for the month. The basin year-to-date precipitation is currently 87% of average (85% of last year). Year-to-date percentages range from 60-156% of average.

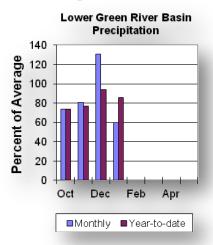
## Reservoirs

Fontenelle Reservoir is currently storing 164,400 ac-ft; this is 110% of average

(100% of last year). Flaming Gorge is currently storing 2,982,800 acft; this is 98% of average (89% of last year). Viva Naughton is currently storing 24,200 ac-ft, 80% of average or 57% 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 535,000 ac-ft (73% of average). The Blacks Fork near Robertson is forecast to yield 66,000 ac-ft (74% of average). East Fork of Smiths Fork near Robertson is forecast to yield 19,500 ac-ft (75% of average). Hams Fork below Pole Creek near Frontier is forecast to be 40,000 ac-ft (74% of average). The Hams Fork Inflow to Viva Naughton Reservoir is forecast to be 53,000 ac-ft (72% of average). The Flaming Gorge Reservoir



inflow will be about 670,000 ac-ft (68% of average). See the following table for more detailed information on projected runoff.

# **Lower Green River Basin**

Streamflow Forecasts - February 1, 2013

=========							
	<=== Dri	er ===	Future Co	onditions	=== Wett	er ===>	
Period	========   90%  (1000AF)	70% (1000AF)	5  (1000AF)	0%   (% AVG.) (	30% (1000AF)	10% (1000AF)	(1000AF)
Green R nr G							
APR-JUL	-		535	73	670	890	730
Blacks Fk nr	Robertson						
APR-JUL	39	54	66	74	79	99	89
EF of Smiths	Fork nr Rol	bertson	(2)				
APR-JUL	11.4	15.9	19.5	75	23	30	26
Hams Fk bl Po	ole Ck nr F	rontier					
APR-JUL	19.1	31	40	74	51	69	54
Viva Naughton	n Reservoir	Inflow	(2)				
APR-JUL		39	53	72	69	98	74
Flaming Gorge	e Reservoir	Inflow	(2)				
APR-JUL	295	500	670	68	865	1190	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 January

=======================================	.========	========		
	Usable	******	Usable Storage	*****
Reservoir	Capacity	This Year	Last Year	Average
=======================================	========	========	==========	=======
FONTENELLE	344.8	164.4	164.8	150.1
FLAMING GORGE	3749.0	2982.8	3344.0	3049.0
VIVA NAUGHTON RES	42.4	24.2	28.6	30.1
		=======		

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#### LOWER GREEN RIVER BASIN

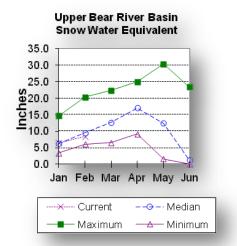
Watershed Snowpack Analysis - February 1, 2013

	Number of	This Year	
Watershed ====================================	Data Sites :===========	Last Year ===========	Median =======
HAMS FORK RIVER	4	93	91
BLACKS FORK	2	98	85
HENRYS FORK	2	86	114
GREEN above Flaming Gorge	22	87	91
		===========	=========

# **Upper Bear River Basin**

#### Snow

Snow water equivalent (SWE) in the Upper Bear River Basin in Utah is estimated to be 88% of normal. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is at 92% of normal. Bear



River Basin SWE, above the Idaho State line, is 92% of normal. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.

## Precipitation

Precipitation for last month was 59% of average for the 8 reporting stations; this is 56% of the precipitation received last year. The year-to-date precipitation, for the basin, is 87% of average; this is 99% of last year's amount.

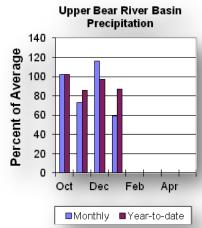
## Reservoirs

Storage in Woodruff Narrows reservoir is 7,700 ac-ft (27% of average). Current

reservoir storage is about 13% of capacity. Reservoir storage last year at this time was 45,000 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 90,000 ac-ft (73% of average). The Bear River above Reservoir near Woodruff is 96,000 ac-ft (75% of average). The Smiths Fork River near Border Jct. is 81,000 ac-ft (78% of average). See the following table for more detailed information on projected runoff.



# **Upper Bear River Basin**

Streamflow Forecasts - February 1, 2013

=========	=======	=======	=======	=======	=======	=======	
	<=== Dr	ier === F	uture Co	nditions	=== Wett	er ===>	
	İ						
Forecast Pt	======	======	Chance of 1	Exceeding	* =====	======	
Forecast	90%	70%	50	8	30%	10%	30 Yr Avg
Period	(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)
=========	========	=======	:======:	====== <u>:</u> :	======	=======	
Bear R nr UT-	-WY State	Line					
APR-JUL	42	66	82	73	99	123	112
APR-SEP	45	72	90	73	108	135	123
Bear R ab Res	s nr Woodr	uff					
APR-JUL	5.0	53	91	75	129	185	121
APR-SEP	4.0	48	96	75	144	216	128
Smiths Fk nr	Border						
APR-JUL	33	54	68	76	83	104	89
APR-SEP	41	65	81	78	97	121	104
			.=======				

<sup>\* 90%, 70%, 50%, 30%,</sup> 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.
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- (3) Median value used in place of average.

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

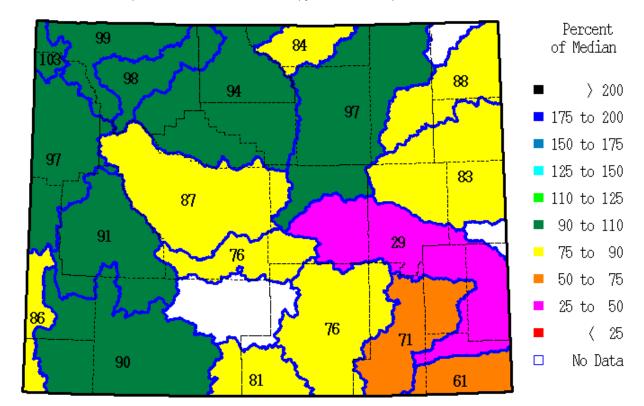
Usable \*\*\*\*\*\*\*\*\* Usable Storage \*\*\*\*\*\*\*\*\*
Reservoir Capacity This Year Last Year Average
WOODRUFF NARROWS 57.3 7.7 45.0 29.0

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 Monday, 04 February 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



# Wyoming Basin Outlook Report

Natural Resources Conservation Service Casper, WY





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