

Natural Resources Conservation Service

# Wyoming Basin Outlook Report March 1, 2014



Sandstone RS SNOTEL (Sierra Madre Range)

# **Basin Outlook Reports**

# And Federal - State - Private Cooperative Snow Surveys

For more water supply and resource management information, contact:

Lee Hackleman/Water Supply Specialist or Ken Von Buettner/Hydrologic Technician 100 East "B" Street Casper, WY 82601 (307) 233-6744/6743

#### 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 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 above median for March  $1^{\rm st}$  at 133%. Monthly precipitation for the basins varied from 88-304% of average. Year-to-date precipitation for Wyoming basins varies from 88-304% of average. Forecasted runoff varies from 81-161% of average across the Wyoming basins for an overall average of 126%. Basin reservoir levels for Wyoming vary from 51-197% of average for an overall average of 92%.

## **Snowpack**

Snow water equivalent (SWE), across Wyoming is above median for this time of year at 133%. SWE in the NW portion of Wyoming is now about 132% of median (148% of last year). NE Wyoming SWE is currently about 141% of median (151% of last year). The SE Wyoming SWE is currently about 125% of median (165% of last year). The SW Wyoming SWE is about 129% of median (163% of last year).

## **Precipitation**

Last month's precipitation varied considerably across Wyoming. The Upper Green River Basin had the highest precipitation for the month at 304% of average. The Belle Fourche Basin had the lowest precipitation amount at 88% of average. The following table displays the major river basins and their departure from average for last month.

	Departure	]	Departure
Basin	from average	Basin from	n average
Snake River	+134%	Upper North Platte River	+75%
Madison-Gallatin	+38%	Sweetwater River	+60%
Yellowstone	+111%	Lower North Platte	-03%
Wind River	+109%	Laramie River	+79%
Bighorn	+89%	South Platte	+111%
Shoshone	+173%	Little Snake River	+32%
Powder River	+59%	Upper Green River	+204%
Tongue River	+88%	Lower Green River	+95%
Belle Fourche	-12%	Upper Bear River	+89%
Cheyenne	-07%	İ	

#### **Streams**

Stream flow yield for April to September is expected to be overall near average across Wyoming. Most probable yield for the entire State of Wyoming is forecast to be about 126% (varying from 81-161% of average). The Snake River, Upper Yellowstone and Madison River Basins are expected to yield about 116%, 114% and 97% of average, respectively; 97-141% of average for the various forecast points in the basins. Yields from the Wind and Bighorn River Basins are expected to be about 145% and 156% of average, respectively; varying from 84-156% of average in the basins. Yields from the Shoshone and Clarks Fork River Basins of Wyoming are expected to yield about 130% and 131% of average, respectively. Yields from the Powder & Tongue River Basins are expected to be about 161% and 128% of average, respectively; varying from 119-161% of average. Yield for the Cheyenne River Basin is expected to be about 136% of average. Yields for the Upper North Platte, Sweetwater, Lower North Platte, and Laramie Rivers of Wyoming are expected to be about 118%, 81%, 122%, and 117% of average, respectively; varying from 81-127% of average. Yields for the

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Little Snake, Green River, and Little Bear of Wyoming are expected to be 116%, 134%, and 95% of average respectively.

### Reservoirs

Reservoir storage varies widely across the state however reservoir storage is at 92% of average for the entire state. Reservoirs in the Wind River Basin are above average at 115%. Reservoirs on the Big Horn are above average at 110%. The Buffalo Bill Reservoir on the Shoshone is above average at 130%. Reservoirs in the Belle Fourche and Cheyenne River Basins are above average in storage at 147 & 113% respectively. Reservoirs on the North Platte River are below average at 74%. Reservoirs on the Green River are below average at 96%. See the following table for further information about reservoir storage.

## Major Reservoirs in Wyoming Mar 1, 2014

BASIN AREA CURRENT	AS	LAST YR AS	AVERAGE AS	CURRENT AS	CURRENT AS
RESERVOIR % CAPAC	TTY	% CAPACITY	% CAPACITY	% AVERAGE	% LAST YR
WYOMING AND SURROUNI	ING	STATES			
ALCOVA	79	85	85	93	92
ANGOSTURA	83	59	83	100	141
BELLE FOURCHE	80	60	63	126	133
BIG SANDY	23	19	46	51	127
BIGHORN LAKE	64	64	59	109	100
BOYSEN	93	80	83	112	116
BUFFALO BILL	71	67	54	130	106
BULL LAKE	65	51	50	131	128
DEERFIELD	96	99	87	111	97
ENNIS LAKE	69	68	73	95	101
FLAMING GORGE	77	79	80	95	97
FONTENELLE	39	41	37	106	97
GLENDO	67	55	68	99	121
Grassy Lake	90	85	80	113	106
GUERNSEY	24	13	33	73	185
HEBGEN LAKE	81	76	73	111	106
Jackson Lake	26	73	51	51	36
KEYHOLE	84	77	47	181	110
PACTOLA	91	89	84	109	102
PALISADES	38	44	66	58	87
PATHFINDER	37	42	57	64	87
PILOT BUTTE	79	78	74	107	101
SEMINOE	31	48	49	63	64
SHADEHILL	85	43	61	138	196
TONGUE RIVER	70	61	36	195	114
VIVA NAUGHTON RES	59	55	68	88	108
WHEATLAND #2	50	24	44	113	205
WOODRUFF NARROWS	29	28	55	52	191
TOTAL 27 RESERVOIRS	60	64	66	92	94

Raw KAF Totals Current=7977 Last Year=8442 Average= 8683 Capacity=13231

# BASIN SUMMARY of SNOTEL and SNOW COURSE DATA

MARCH 2014

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT		MEDIAN 81-10
WYOMING Snow Course	and CNOTE	Stations				
ALBANY	9400	2/25/14	56	15.1	6.7	10.6
ARAPAHO RIDGE SNTL		3/01/14	80	22.5	13.4	
BALD MOUNTAIN SNOTE		3/01/14	75	19.8	10.9	
BASE CAMP SNOTEL	7030	3/01/14		18.2	13.2	13.5
BATTLE MTN. SNOTEL		3/01/14	32	9.4	6.9	9.9
BEARLODGE DIVIDE	4680	2/27/14	12	2.6		1.6
BEARTOOTH LK. SNOTH		3/01/14		24.0		
BEAR RIVER RS SNOTE		3/01/14			6.4	
BEAR TRAP SNOTEL	8200	3/01/14		8.2		4.4
BIG GOOSE SNOTEL	7760	3/01/14	41	8.3		6.2
BIG SANDY SNOTEL	9080	3/01/14	61	12.7	8.1	10.1
BLACK BEAR SNOTEL	7950	3/01/14		30.0	29.8	29.6
BLACK'S FORK JUNCTY		2/24/14	33	7.5	5.2	6.7
BLACKS FORK JCT SN		3/01/14	35	6.9	5.1	
BLACKHALL MTN SNOTE		3/01/14	99	30.1	18.1	
BLACKWATER SNOTEL	9780	3/01/14		25.8		
BLIND BULL SNOTEL	8900	3/01/14		29.3		17.9
BLIND PARK SNOTEL	6870	3/01/14	33	8.1	5.4	6.4
BLUE RIDGE	9620	2/24/14	24	6.1	5.6	7.9
BONE SPGS. SNOTEL	9350	3/01/14	74	17.1	10.8	
BROOKLYN LK. SNOTE		3/01/14	86	25.4	12.5	15.0
BUCK PASTURE SNOTE		3/01/14	48	11.5		
BUG LAKE SNOTEL	7950	3/01/14	63	18.3		14.8
BURGESS JCT. SNOTE		3/01/14	49	11.1	7.7	8.3
BUTTER HILL	7880	2/24/14		13.1		11.5
BURT'S-MILLER RANCE		2/24/14		4.4		4.8
BURTS-MILLER RANCH		3/01/14	19	5.7		3.5
CAMERON PASS	10300	2/28/14	81	26.0	14.6	19.6
CANYON SNOTEL	8090	3/01/14	52	11.3	8.6	10.5
CASPER MTN. SNOTEL		3/01/14		13.5	7.1	10.2
CASTLE CREEK SNOTE	L 8400	3/01/14	43	9.5	5.0	
CASTLE CREEK	8400	2/25/14	38	8.9		3.0
CHALK CK #1 SNOTEL	9100	3/01/14	67	17.9	13.8	18.3
CHAMBERS LAKE	9000	2/28/14	40	11.1	4.0	5.8
CINNABAR PARK SNOT	EL 9690	3/01/14	80	19.0	11.7	17.1
CLOUD PEAK SNOTEL	9850	3/01/14	59	15.5	9.0	10.4
COLE CANYON SNOTEL	5910	3/01/14	29	5.3	4.3	5.0
COLD SPRINGS SNOTE	L 9630	3/01/14	40	9.4	6.1	5.5
COLUMBINE SNOTEL	9300	3/01/14	92	29.9	15.5	19.8
COTTONWOOD CR SNOTI	EL 7700	3/01/14		25.8	14.3	16.9
CROW CREEK SNOTEL	8830	3/01/14	28	6.5	3.9	6.7
DARBY CANYON	8250	2/26/14	60	18.6	15.0	19.0
DEADMAN HILL SNOTE	L 10200	3/01/14	74	20.1	10.2	12.4
DEEP LAKE	10500	2/26/14	110	36.5	22.5	
DEEP LAKE	10500	2/26/14	110	36.5	22.5	
DEER PARK SNOTEL	9700	3/01/14	45	12.1	9.5	10.8
DIVIDE PEAK SNOTEL		3/01/14	49	14.8	12.0	15.8
DITCH CREEK	6870	2/24/14	18	3.7	2.1	3.1
DOME LAKE SNOTEL	8880	3/01/14	58	11.1	6.9	8.7
DU NOIR	8760	2/26/14	42	9.9	4.8	5.1
EF BLACKS FORK GS S	SN 9360	3/01/14	41	7.6	10.1	

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	MEDIAN 81-10
EAST RIM DIV SNOTEL	7930	3/01/14	54	14.1	7.9	8.1
ELBO RANCH	7100	2/27/14	43	11.6	7.0	8.6
ELKHART PARK SNOTEL	9400	3/01/14		14.6	7.7	9.4
ELK RIVER SNOTEL	8600	3/01/14		18.2	11.0	15.5
EVENING STAR SNOTEL	9200	3/01/14	117	31.4	19.5	19.1
FISHER CREEK SNOTEL	9100	3/01/14	122	33.7	25.8	25.8
FOXPARK	9060	2/25/14		5.3	3.2	6.0
GEYSER CREEK	8500	2/26/14		8.5	3.5	4.2
GRAND TARGHEE SNOTE		3/01/14		37.8	29.0	30.2
GRANITE CRK SNOTEL	6770	3/01/14		18.5	10.1	13.8
GRANNIER MEADOWS	8860	2/24/14		8.9	6.2	9.4
GRASSY LAKE SNOTEL	7270	3/01/14		29.9	21.4	26.2
GRAVE SPRINGS SNOTE		3/01/14		9.1	5.2	6.9
GROS VENTRE SNOTEL	8750	3/01/14		12.4	8.3	9.7
GUNSIGHT PASS SNOTE		3/01/14		15.9	9.0	10.6
HAIRPIN TURN	9480 8360	2/27/14		18.1	7.9	11.5
HANSEN S.M. SNOTEL HAMS FORK SNOTEL	7840	3/01/14 3/01/14		7.1 13.7	4.4 7.3	4.7 9.2
HASKINS CREEK	8980	2/25/14		25.4	19.4	24.4
HOBBS PARK SNOTEL	10100	3/01/14		11.3	8.8	9.7
INDIAN CREEK SNOTEL		3/01/14		26.4	14.6	19.0
JACKPINE CREEK	7350	2/26/14		18.4	13.8	17.8
JOE WRIGHT SNOTEL	10000	3/01/14		18.6	10.5	16.6
KELLEY R.S. SNOTEL	8180	3/01/14		15.8	9.4	12.1
KENDALL R.S. SNOTEL		3/01/14		17.5	7.7	9.7
KIRWIN SNOTEL	9550	3/01/14		15.7		7.0
LAKE CAMP	7780	3/02/14		8.7	8.8	7.8
LA PRELE SNOTEL	8380	3/01/14		6.4	4.5	7.8
LARSEN CREEK SNOTEL	9020	3/01/14	48	10.8	5.9	9.5
LEWIS LAKE SNOTEL	7850	3/01/14	98	28.2	21.7	25.2
LIBBY LODGE	8750	2/27/14	53	16.0	7.5	8.4
LITTLE BEAR RUN	6240	2/24/14		4.2	2.8	3.3
LITTLE GOOSE SNOTEL	8870	3/01/14	46	9.6	6.2	
LITTLE SNAKE RIVER	8920	3/01/14		25.5	15.5	19.7
LITTLE WARM SNOTEL	9370	3/01/14		11.9	7.5	7.9
LOOMIS PARK SNOTEL	8240	3/01/14		19.2	8.9	11.7
LUPINE CREEK	7380	2/27/14		7.0	5.9	6.4
MADISON PLT SNOTEL	7750	3/01/14		17.1	17.3	17.8
MALLO	6420	2/24/14		7.6	5.4	6.0
MARQUETTE SNOTEL	8760	3/01/14		9.1	4.3	7.6
MEDICINE LODGE LAKE MIDDLE FORK	S 9340 7420	2/26/14 2/24/14		11.0 1.6	7.5 2.9	7.6 4.0
MIDDLE POWDER SNOTE		3/01/14		12.3	8.4	8.0
MOSS LAKE	9800	2/26/14	67	22.0	14.8	16.6
MOUNT TOM	5560	2/26/14	20	3.8	3.0	3.7
NEVER SUMMER SNOTEL		3/01/14	70	19.9	10.8	
NEW FORK SNOTEL	8340	3/01/14	56	13.0	6.3	8.2
NORRIS BASIN	7500	2/28/14		8.8	6.0	8.0
N.E. ENTRANCE SNOTE		3/01/14		12.2	6.1	8.2
NORTH BARRETT CREEK		2/26/14		19.0	13.4	17.0
NORTH FRENCH SNOTEL		3/01/14		25.7	17.0	21.1
NORTH RAPID CK SNTL		3/01/14	34	7.7	5.6	5.9
NORTH TONGUE	8450	2/24/14	53	11.6	7.7	9.0
OLD BATTLE SNOTEL	9920	3/01/14	86	27.1	19.0	23.9
OLD FAITHFUL	7400	2/27/14	41	10.6	9.0	11.0
ONION GULCH	8780	2/27/14	34	7.3	5.3	5.3
OWL CREEK SNOTEL	8980	3/01/14	27	5.8	4.3	3.9

DEPTH CONTENT YE.	ST MEDIAN AR 81-10
PARKERS PEAK SNOTEL 9400 3/01/14 92 24.1 1	6.6 16.0
PHILLIPS BNCH SNOTEL 8200 3/01/14 93 26.8 1	6.3 19.7
	7.0
POLE MOUNTAIN 8700 2/27/14 36 8.3	5.1 6.6
POWDER RVR.PASS SNTL 9480 3/01/14 52 12.6	8.6 8.0
PURGATORY GULCH 8970 2/25/14 39 11.8	8.2 8.8
RANGER CREEK 8120 2/26/14 40 7.7	6.4 5.8
RAWAH SNOTEL 9020 3/01/14 40 11.2	8.2
RENO HILL SNOTEL 8500 3/01/14 49 12.6	7.7 10.0
REUTER CANYON 6280 2/26/14 36 10.0	6.8 7.2
ROACH SNOTEL 9400 3/01/14 15.8	9.3 12.4
RYAN PARK 8400 2/27/14 34 9.8	7.6 9.4
SAGE CK BASIN SNTL 7850 3/01/14 33 9.1	8.5 10.6
SALT RIVER SNOTEL 7600 3/01/14 55 15.1	8.2 10.6
SAND LAKE SNOTEL 10050 3/01/14 87 25.6 1	6.6 21.2
SANDSTONE RS SNOTEL 8150 3/01/14 39 10.1	8.9 10.4
SAWMILL DIVIDE 9260 2/24/14 53 12.4	8.6 9.6
SHELL CREEK SNOTEL 9580 3/01/14 70 15.5 1	0.2 11.6
SHERIDAN R.S. 7750 2/27/14 34 8.5	2.6 4.2
SNAKE RV STA SNOTEL 6920 3/01/14 68 16.3 1	1.3 14.2
SNIDER BASIN SNOTEL 8060 3/01/14 65 17.5	8.2 9.6
SNOW KING MTN 7660 2/27/14 48 11.5	8.2 11.2
SOLDIER PARK SNOTEL 8780 3/01/14 34 8.9	3.1
	3.0 3.2
	4.0 4.2
	7.7 10.3
	7.8 11.4
	6.2 18.6
	5.0 8.0
	3.8 5.2
	9.3 8.9
	3.9 15.9
	7.6 9.4
	3.5 5.2
	2.0 12.3
	4.3 4.3
	3.0 3.7
	6.0 17.7
	3.7 36.3
	4.2 6.5
	4.2 16.8
	3.4 12.4
	1.1 21.6
	5.3 5.2
	4.9 18.7 7.7 21.5
	7.1 18.3 8.6 22.2
	3.4 5.7
	7.9 8.5
	5.8 6.8
	6.5

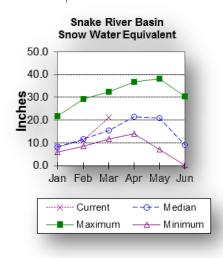
NOTE: Snow Depth, Water Content, Last Year, Median values in inches of snow/water. Missing snow depth entries indicate the site has no snow depth sensor or the sensor is malfunctioning. Missing data under Median 81-10 indicates the site is relatively new without an established Median.

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#### **Snake River Basin**

#### Snow

The Snake River Basin snow water equivalent (SWE) is 137% of median. SWE in the Snake River Basin above Jackson Lake is 119% of median. Pacific Creek Basin SWE is 139% of median. Buffalo Fork SWE is 149% of median Gros Ventre River Basin SWE is 142% of median. SWE in the Hoback River drainage is 144% of median. SWE in the Greys River drainage is 158% of median. In the Salt River area SWE is 146% of median. SWE in the Snake



River Basin above Palisades is 137% of median. 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 way above average last month. Monthly precipitation for the basin was 230% of average (497% of last year). Last month's percentages range from 114-363% of average for the 26 reporting stations. Wateryear-to-date precipitation is 114% of average for the Snake River Basin (132% of last year). Year-to-date percentages range from 85-144% of average.

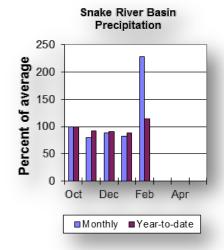
#### Reservoirs

Current reservoir storage is 56% of average for the 3 storage reservoirs in the basin. Grassy Lake storage is about 113% of average (13,700 ac-ft compared to 12,900 last year). Jackson Lake storage is 51% of average

(221,800 ac-ft compared to 621,300 ac-ft last year). Palisades Reservoir storage is about 58% of average (538,600 ac-ft compared to 620,300 ac-ft last year). Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.

#### Streamflow

The 50% exceedance forecasts for April through September are above average for the basin. The Snake near Moran is 935,000 ac-ft (111% of average). Snake River above reservoir near Alpine is 2,900,000 ac-ft (116% of average). The Snake near Irwin is 4,270,000 ac-ft (122% of average). The Snake near Heise is 4,570,000 ac-ft (121% of average).



Pacific Creek near Moran is 220,000 ac-ft (127% of average). Buffalo Fork above Lava near Moran is 380,000 ac-ft (119% of average). Greys River above Palisades Reservoir is 495,000 ac-ft (138% of average). Salt River near Etna is 520,000 ac-ft (141% of average). See the following page for detailed runoff volumes.

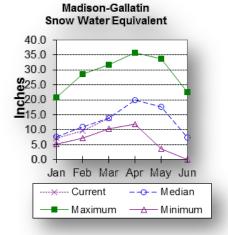
	Stream	flow Fore	ecasts - N	larch 1, 2	014			
		Fo	orecast Excee	edance Probab	oilities for Ri	sk Assessme	nt	
			Chance that	at actual volum	ne will excee	d forecast		
SNAKE RIVER BASIN	Forecast	90%	70%	50%	% Avg	30%	10%	30yr Av
Snake R nr Moran <sup>1,2</sup>	Period	(KAF)	(KAF)	(KAF)		(KAF)	(KAF)	(KAF)
Snake R nr Moran	A DD   11	005	700	0.45	4400/	000	4000	705
	APR-JUL APR-SEP	665 725	790 870	935	110% 111%	900	1030 1140	765 845
Snake R ab Reservoir nr Alpine <sup>1,2</sup>	AFR-SEF	725	670	933	11170	1000	1140	040
Shake K ab Keservon ni Alpine	APR-JUL	2030	2370	2530	117%	2690	3030	2170
	APR-SEP	2310	2720	2900	116%	3080	3490	2500
Snake R nr Irwin 1,2	AFK-SLF	2310	2120	2900	11070	3000	3430	2300
Onake IV III II WIII	APR-JUL	3060	3500	3700	123%	3900	4340	3010
	APR-SEP	3560	4050	4270	122%	4490	4980	3500
Snake R nr Heise <sup>2</sup>	74 IX OLI	3300	4000	4270	12270	4430	+300	0000
	APR-JUL	3400	3730	3950	122%	4170	4500	3240
	APR-SEP	3950	4320	4570	121%	4820	5190	3780
Pacific Ck at Moran	IX OLI	0000	1020	107 0	12170	1020	0.00	0.00
	APR-JUL	165	192	210	128%	230	255	164
	APR-SEP	173	200	220	127%	240	265	173
Buffalo Fk ab Lava Ck nr Moran								
	APR-JUL	280	310	335	120%	360	390	280
	APR-SEP	315	355	380	119%	405	445	320
Greys R ab Reservoir nr Alpine								
	APR-JUL	365	405	430	141%	455	495	305
	APR-SEP	420	465	495	138%	525	570	360
Salt R ab Reservoir nr Etna								
	APR-JUL	320	390	435	145%	480	550	300
	APR-SEP	380	465	520	141%	575	660	370
1) 90% and 10% exceedance probabilities								
2) Forecasts are for unimpaired flows. Act	ual flow will be	e dependent c	n managemei	nt of upstream	reservoirs a	and diversions	S	
Median value used in place of average								
B	0 1	1 11	•	0 ''				
Reservoir Storage	Current	Last Year	Average	Capacity				
End of February, 2014	(KAF)	(KAF)	(KAF)	(KAF)				
GRASSY LAKE JACKSON LAKE	13.7 221.8	12.9 621.3	12.1 434.7	15.2 847.0				
PALISADES RES NR IRWIN	538.6	620.3	925.7	1400.0				
Basin-wide Total	774.1	1254.4	1372.5	2262.2				
# of reservoirs	3	3	3	3				
# Of Teservoirs	3	3	3	3				
Watershed Snowpack Analysis			Last Year					
March 1, 2014	# of Sites	% Median	% Median					
SNAKE above Jackson Lake	9	114%	84%					
PACIFIC CREEK	3	136%	87%					
BUFFALO FORK	3	131%	93%					
GROS VENTRE RIVER	4	142%	86%					
HOBACK RIVER	5	145%	79%					
GREYS RIVER	5	158%	84%					
GREYS RIVER SALT RIVER	5 5	158% 146%	84% 84%					

8

#### Madison-Gallatin Rivers Basin

#### Snow

Snow water equivalent (SWE) is at 101% of median 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 138% of average. The 6 reporting stations percentages range from 135-167% of average. Water-year-to-date precipitation is about 91% of average, or about 101% of last year. Year to date percentage ranges from 82-100%.

#### Reservoirs

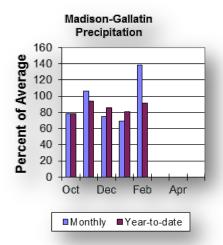
Ennis Lake is storing about 28,200 ac-ft of water (69% of capacity, 95% of average or 101% of last year's volume). Hebgen Lake is

storing about 305,500 ac-ft of water (81%

of capacity, 111% of average or 106% 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 near average for the basin. Hebgen Reservoir inflow is 455,000 ac-ft (97% of average). See the following page for detailed runoff volumes.

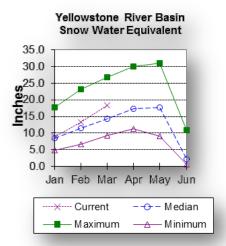


	Mad	lison-Gal	latin Riv	er Basins	5			
	Stream	flow Fore	ecasts - N	larch 1, 2	014			
		F	orecast Excee	dance Probal	bilities for Ri	sk Assessme	nt	
		Chance that actual volume will exceed forecast						
MADISON-GALLATIN RIVER BASINS	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Hebgen Reservoir Inflow				•				
	APR-JUL	295	335	360	97%	385	425	370
	APR-SEP	375	425	455	97%	485	535	470
3) Median value used in place of average								
December Of control	0	1+ 1/	A	0				
Reservoir Storage	Current	Last Year	Average	Capacity				
End of February, 2014	(KAF)	(KAF)	(KAF)	(KAF)				
End of February, 2014 ENNIS LAKE - LOWER MADISON RES	(KAF) 28.2	(KAF) 27.8	(KAF) 29.8	(KAF) 41.0				
End of February, 2014	(KAF) 28.2 305.5	(KAF) 27.8 287.8	(KAF) 29.8 274.6	(KAF)				
End of February, 2014 ENNIS LAKE - LOWER MADISON RES HEBGEN LAKE	(KAF) 28.2 305.5 333.7	(KAF) 27.8	(KAF) 29.8	(KAF) 41.0 377.5				
End of February, 2014 ENNIS LAKE - LOWER MADISON RES HEBGEN LAKE Basin-wide Total	(KAF) 28.2 305.5 333.7	(KAF) 27.8 287.8 315.6	(KAF) 29.8 274.6 304.4	(KAF) 41.0 377.5 418.5				

#### Yellowstone River Basin

#### Snow

SWE in the Yellowstone River drainage is at 128% of median. The Clarks



Fork of the Yellowstone River drainage in Wyoming SWE is 150% of median. See the "Basin Summary of Snow Course Data" at the front of this report for details.

#### Precipitation

Last month precipitation in the Yellowstone drainage was about 211% of average. The 17 reporting stations percentages range from 140-339% of average. Water-year-to-date precipitation is about 123% of average, which is about 132% of last year. Year to date percentage ranges from 85-174%.

#### Reservoirs

No reservoir data for the basin.

#### Streamflow

The 50% exceedance forecasts for April through September are above average for the basin. Yellowstone at Lake Outlet is 825,000 ac-ft (107% of average). Yellowstone at Corwin Springs will yield around 2,140,000 ac-ft (114% of average). Yellowstone near Livingston will yield around 2,440,000 ac-ft (114% of average). See the following page for detailed runoff volumes.

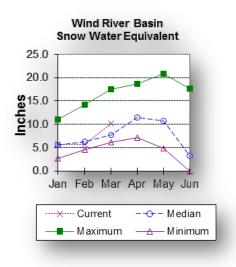


	١	ellowsto	one River	Basin				
	Stream	flow Fore	ecasts - N	larch 1,	2014			
		F	orecast Excee	edance Prob	abilities for Ri	sk Assessme	nt	
			Chance the	at actual volu	ume will excee	d forecast		_
YELLOWSTONE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Yellowstone R at Yellowstone Lake Outlet				` '				
	APR-JUL	510	580	625	109%	670	740	575
	APR-SEP	675	765	825	107%	885	975	770
Yellowstone R at Corwin Springs								
	APR-JUL	1520	1710	1830	115%	1960	2140	1590
	APR-SEP	1770	1990	2140	114%	2290	2510	1880
Yellowstone R at Livingston								
	APR-JUL	1700	1930	2090	116%	2240	2480	1800
	APR-SEP	1980	2250	2440	114%	2630	2900	2140
1) 90% and 10% exceedance probabilitie	s are actually 9	5% and 5%						
2) Forecasts are for unimpaired flows. A	ctual flow will be	e dependent o	on manageme	nt of upstrea	m reservoirs	and diversion	S	
3) Median value used in place of average								
Watershed Snowpack Analysis March 1, 2014	# of Sites	% Median	Last Year % Median					
YELLOWSTONE RIVER in WY	8	129%	94%					
CLARKS FORK in WY	8	150%	94%					

#### Wind River Basin

#### Snow

The Wind River Basin above Boysen Reservoir is 131% of median for snow water equivalent at this time of the year. SWE in the Wind River above Dubois is 171% of median. The Little Wind SWE is 100% of median, and the Popo Agie drainage SWE is about 96% of median. 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 58-413% of average. Precipitation, for the basin, was about 219% of average from the 14 reporting stations. Water year-to-date precipitation is 119% of average and about 144% of last year at this time. Year-to-date percentages range from 71-238% of average.

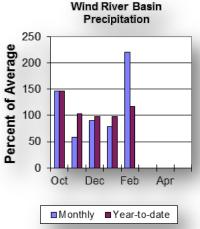
#### Reservoirs

Current storage in Bull Lake is about 99,000 ac-ft (131% of average) - the reservoir is at 128% of last year. Boysen Reservoir is storing about 112% of average (557,000 ac-ft) - the reservoir is about 116% of last year. Pilot Butte

is at 107% of average (25,000 ac-ft) - the reservoir is at 101% 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 vary considerably but are above average overall. Dinwoody Creek near Burris is 115,000 ac-ft (125% of average). The Wind River above Bull Lake Creek is 665,000 ac-ft (136% of average). Bull Lake Creek near Lenore is 205,000 ac-ft (121% of average). Wind River at Riverton will yield around 765,000 ac-ft (139% of average). Little Popo Agie River near Lander is around 41,000 ac-ft (84% of average). South Fork of Little Wind near Fort Washakie will yield around 76,000 ac-ft (93% of average). Little Wind River



near Riverton will yield around 215,000 ac-ft (80% of average). Boysen Reservoir inflow will yield around 965,000 ac-ft (145% of average). See the following page for detailed runoff volumes.

	Stroom		River Ba		014			
	Stream			March 1, 2 edance Probal		isk Assessme	ent	1
			Chance th	at actual volun	ne will excee	ed forecast		
WIND RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Dinwoody Ck nr Burris		•						
	APR-JUL	71	79	84	127%	89	97	66
	APR-SEP	98	108	115	125%	122	132	92
Wind R Ab Bull Lake Ck								
	APR-JUL	505	570	615	135%	660	725	455
	APR-SEP	535	615	665	136%	715	795	490
Bull Lake Ck nr Lenore								
	APR-JUL	137	156	168	121%	181	199	139
	APR-SEP	167	190	205	121%	220	245	169
Wind R at Riverton								
	APR-JUL	500	595	655	138%	720	815	475
	APR-SEP	575	685	765	139%	840	955	550
Little Popo Agie R nr Lander								
, ,	APR-JUL	20	29	35	83%	41	50	42
	APR-SEP	25	34	41	84%	47	57	49
SF Little Wind R nr Fort Washakie								
	APR-JUL	47	59	67	93%	75	88	72
	APR-SEP	53	67	76	93%	85	99	82
Little Wind R nr Riverton								
	APR-SEP	100	185	240	81%	300	385	295
	APR-JUL	85	161	215	80%	265	340	270
Boysen Reservoir Inflow								
•	APR-JUL	480	710	865	142%	1020	1250	610
	APR-SEP	530	790	965	145%	1140	1390	665
1) 90% and 10% exceedance probabilities	are actually 9	5% and 5%						
Forecasts are for unimpaired flows. Act			n manageme	nt of upstream	reservoirs	and diversion	s	
Median value used in place of average			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
-,								
Reservoir Storage	Current	Last Year	Average	Capacity				
End of February, 2014	(KAF)	(KAF)	(KAF)	(KAF)				
BULL LAKE	99.0	77.6	75.4	151.8				
BOYSEN	557.0	478.9	495.8	596.0				
PILOT BUTTE	25.0	24.8	23.3	31.6				
Basin-wide Total	681.0	581.3	594.5	779.4				
# of reservoirs	3	3	3	3				
Watershed Snowpack Analysis March 1, 2014	# of Sites	% Median	Last Year % Median					
WIND above Dubois	6	171%	86%					
LITTLE WIND	2	100%	85%					
POPO AGIE	7	96%	75%					
WIND RIVER BASIN	17	133%	82%					+

# **Bighorn River Basin**

#### Snow

The Bighorn River Basin SWE above Bighorn Reservoir is at 142% of median. The Nowood River is at 148% of median. The Greybull River SWE is at 141% of median. Shell Creek SWE is 136% of median. See the "Basin Summary of

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



#### Precipitation

Last month's precipitation was 189% of average. Sites ranged from 18-309% of average for the month. Year-to-date precipitation is 132% of average; that is 145% of last year at this time. Year-todate percentages, from the 16 reporting stations, range from 105-183%.

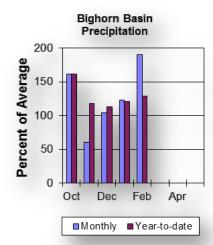
#### Reservoirs

Boysen Reservoir is currently storing 557,000 ac-ft (112% of average). Bighorn

Lake is now at 866,400

ac-ft (109%

of average). Boysen is currently storing 116% of last year volume at this time and Big Horn Lake is storing 100% 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 well above average. Boysen Reservoir inflow should yield 965,000 ac-ft (145% of average); the Greybull River near Meeteetse should yield around 245,000 ac-ft (138% of

average); Shell Creek near Shell should yield around 76,000 ac-ft (115% of average) and the Bighorn River at Kane should yield around 1,410,000 ac-ft (156% of average). See the following page for detailed runoff volumes.

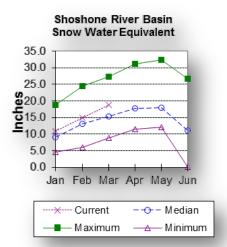
		Bighori	n River B	asin				
	Stream	flow Fore	ecasts - N	larch 1, 2	014			
		F	orecast Excee	edance Probal	bilities for R	isk Assessme	ent	
			Chance that actual volume will exceed forecast					
BIGHORN RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avç (KAF)
Boysen Reservoir Inflow				•				
•	APR-JUL	480	710	865	142%	1020	1250	610
	APR-SEP	530	790	965	145%	1140	1390	665
Greybull R nr Meeteetse								
·	APR-JUL	143	166	181	138%	196	220	131
	APR-SEP	197	225	245	138%	265	295	177
Shell Ck nr Shell				-				
	APR-JUL	49	58	65	118%	71	80	55
	APR-SEP	59	69	76	115%	83	93	66
Bighorn R at Kane								
	APR-JUL	760	1070	1280	152%	1490	1800	840
	APR-SEP	840	1180	1410	156%	1640	1970	905
1) 90% and 10% exceedance probabilities	are actually 9	5% and 5%						
2) Forecasts are for unimpaired flows. Act			on manageme	nt of upstream	reservoirs	and diversion	S	
3) Median value used in place of average		·						
,								
Reservoir Storage	Current	Last Year	Average	Capacity				
End of February, 2014	(KAF)	(KAF)	(KAF)	(KAF)				
BOYSEN	557.0	478.9	495.8	596.0				
BIGHORN LAKE	866.4	863.9	797.1	1356.0				
Basin-wide Total	1423.4	1342.8	1292.9	1952.0				
# of reservoirs	2	2	2	2				
Watershed Snowpack Analysis March 1, 2014	# of Sites	% Median	Last Year % Median					
NOWOOD RIVER	7	148%	104%					
GREYBULL RIVER	2	195%	98%					
SHELL CREEK	4	136%	87%					
BIGHORN RIVER BASIN	14	148%	96%					

#### Shoshone River Basin

#### Snow

Snowpack in this basin is above median for this time of year. Snow Water Equivalent (SWE) is 144% of median in the Shoshone River Basin. See the

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



#### Precipitation

Precipitation for last month was 288% of average (416% of last year). Monthly percentages range from 188-1267% of average. The basin year-to-date precipitation is now 145% of average (151% of last year). Year-to-date percentages range from 124-365% of average for the 11 reporting stations.

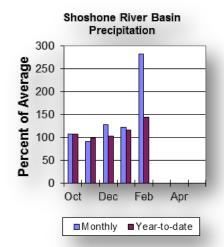
#### Reservoirs

Current storage in Buffalo Bill Reservoir is about 130% of average (106% of last year's storage) - the reservoir is at about 71% of capacity. Currently, about 456,200

ac-ft are stored in the reservoir compared to 430,000 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 well above average for the basin. The North Fork Shoshone River at Wapiti is 645,000 acft (125% of average). The South Fork of the Shoshone River near Valley is 330,000 ac-ft (135% of average), and the South Fork above Buffalo Bill Reservoir runoff is 295,000 acft (148% of average). The Buffalo Bill Reservoir inflow is expected to yield around 965,000 ac-ft (130% of average). Clarks



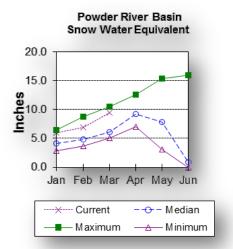
Fork of the Yellowstone near Belfry 720,000 ac-ft (131% of average). See the following page for detailed runoff volumes.

		Shoshor	ne River I	Basin				
	Stream	flow Fore	ecasts - N	March 1, 2	2014			
		F	orecast Excee	edance Proba	bilities for Ri	sk Assessme	nt	
			Chance th	ce that actual volume will exceed forecast				
SHOSHONE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
NF Shoshone R at Wapiti			•	•				
	APR-JUL	480	540	580	126%	620	680	460
	APR-SEP	535	600	645	125%	690	755	515
SF Shoshone R nr Valley								
	APR-JUL	240	265	285	133%	305	330	215
	APR-SEP	280	310	330	135%	350	380	245
SF Shoshone R ab Buffalo Bill Reservoir								
	APR-JUL	200	245	275	142%	305	350	193
	APR-SEP	215	260	295	148%	325	370	200
Buffalo Bill Reservoir Inflow <sup>2</sup>								
	APR-JUL	705	800	865	128%	930	1020	675
	APR-SEP	790	895	965	130%	1040	1140	745
Clarks Fk Yellowstone R nr Belfry <sup>2</sup>								
,	APR-JUL	550	610	650	127%	690	750	510
	APR-SEP	610	675	720	131%	760	830	550
	71111021	0.0	0.0		10170		- 555	
1) 90% and 10% exceedance probabilities	are actually 9	5% and 5%						
Forecasts are for unimpaired flows. Acti			n manageme	nt of upstream	reservoirs	and diversion	s	
3) Median value used in place of average								
Reservoir Storage	Current	Last Year	Average	Capacity				
End of February, 2014	(KAF)	(KAF)	(KAF)	(KAF)				
BUFFALO BILL	456.2	430.0	350.7	646.6				
Basin-wide Total	456.2	430.0	350.7	646.6				
# of reservoirs	1	1	1	1				
Watershed Snowpack Analysis March 1, 2014	# of Sites	% Median	Last Year % Median					
SHOSHONE RIVER BASIN	7	148%	92%					

#### Powder River Basin

#### Snow

Snow water equivalent (SWE) in the Powder River drainage is 154% of median. Upper Powder River drainage SWE is 152% of median. SWE in the



Clear Creek drainage is 157% of median. Crazy Woman Creek drainage is 158% of median. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.

#### Precipitation

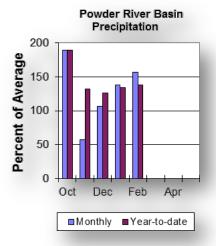
Last month's precipitation was 158% of average for the 9 reporting stations. Monthly percentages range from 80-250% of average. Year-to-date precipitation is 138% of average in the basin; this is 143% of last year at this time. Precipitation for the year ranges from 120-169% of average.

#### Reservoirs

No reservoir data for the basin.

#### Streamflow

The 50% exceedance forecasts for the April through September period are expected to be well above average for the basin. Middle Fork of the Powder River near Barnum is 23,000 ac-ft (135% of average). The North Fork of the Powder River near Hazelton should yield around 15,000 ac-ft (152% of average). Rock Creek near Buffalo will yield about 31,000 ac-ft (141% of average), and Piney Creek at Kearny should yield about 61,000 ac-ft (130% of average). The Powder River at Moorhead is 310,000 ac-ft (158% of average). The Powder River near Locate is 355,000 ac-ft (161% of average). See the following page for detailed runoff volumes.



		Powde	r River Ba	asin				
	Stream	flow Fore	ecasts - M	larch 1,	2014			
		F	orecast Excee	dance Prob	abilities for Ri	sk Assessme	nt	
			Chance tha	at actual volu	ıme will excee	d forecast		
POWDER RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
MF Powder R nr Barnum		,						
	APR-JUL	16.2	19.7	22	137%	24	28	16.1
	APR-SEP	17	21	23	135%	25	29	17
NF Powder R nr Hazelton								
	APR-JUL	10.9	12.8	14.1	155%	15.4	17.3	9.1
	APR-SEP	11.7	13.6	15	152%	16.4	18.3	9.9
Rock Ck nr Buffalo								
	APR-JUL	18.7	23	26	140%	29	34	18.6
	APR-SEP	23	27	31	141%	34	39	22
Piney Ck at Kearny								
	APR-JUL	33	47	57	130%	67	82	44
	APR-SEP	36	51	61	130%	71	86	47
Powder R at Moorehead								
	APR-JUL	166	235	280	158%	325	395	177
	APR-SEP	191	260	310	158%	355	425	196
Powder R nr Locate								
	APR-JUL	184	265	320	161%	375	455	199
	APR-SEP	210	295	355	161%	415	500	220
1) 90% and 10% exceedance probabilities	are actually 9	5% and 5%						
Forecasts are for unimpaired flows. Act			n managemer	nt of upstrea	m reservoirs a	and diversion	s	
Median value used in place of average								
Watershed Snowpack Analysis March 1, 2014	# of Sites	% Median	Last Year % Median					
UPPER POWDER RIVER	5	152%	105%					
CLEAR CREEK	4	157%	91%					
CRAZY WOMAN CREEK	3	158%	102%					
POWDER RIVER BASIN	9	154%	99%					

# **Tongue River Basin**

#### Snow

Snow water equivalent (SWE) in the Upper Tongue River drainage is 135% of median. The Goose Creek drainage is 130% of median. For more information

Tongue River Basin Snow Water Equivalent

20.0

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

#### Precipitation

Last month's precipitation was 193% of average for the 7 reporting stations. Monthly percentages range from 173-224% of average. Year-to-date precipitation is 127% of average in the basin; this is 149% of last year at this time. Precipitation for the year ranges from 104-148% of average.

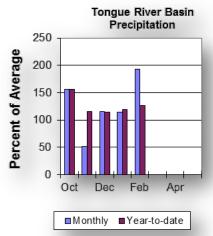
#### Reservoirs

The Tongue River Reservoir currently is storing 55,000 ac-ft, while last year's storage

was 48,400 ac-ft. The Tongue River Reservoir is at 195% of average or 70% of capacity for this time of year.

#### Streamflow

The 50% exceedance forecasts for the April through September period are expected to be above average for the basin. The yield for Tongue River near Dayton is 117,000 ac-ft (119% of average). Big Goose Creek near Sheridan is 65,000 ac-ft (120% of average). Little Goose Creek near Bighorn is 47,000 ac-ft (121% of average). The Tongue River Reservoir Inflow is 275,000 ac-ft (128% of average). See the following page for detailed runoff volumes.

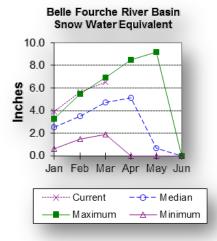


		Tongue	River B	asin				
	Stream			larch 1, 2				
		F	orecast Excee	edance Probal	bilities for Ri	sk Assessme	nt	
		Chance that actual volume will exceed forecast						
TONGUE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Tongue R nr Dayton	. 000	(,	(,	(10.17)		(,	1 (10 11 )	. (10 11 /
	APR-JUL	72	90	103	120%	116	134	86
	APR-SEP	83	103	117	119%	131	151	98
Big Goose Ck nr Sheridan								
	APR-JUL	37	49	56	122%	64	76	46
	APR-SEP	45	57	65	120%	73	85	54
Little Goose Ck nr Bighorn								
	APR-JUL	27	34	39	126%	43	51	31
	APR-SEP	34	42	47	121%	53	60	39
Tongue River Reservoir Inflow								
	APR-JUL	138	205	250	130%	290	360	193
	APR-SEP	158	225	275	128%	320	390	215
1) 90% and 10% exceedance probabilities a	are actually 9	5% and 5%						
2) Forecasts are for unimpaired flows. Actu	ual flow will be	dependent d	n manageme	nt of upstream	reservoirs	and diversion	S	
3) Median value used in place of average								
Reservoir Storage	Current	Last Year	Average	Capacity				
End of February, 2014	(KAF)	(KAF)	(KAF)	(KAF)				
TONGUE RIVER RES	55.0	48.4	28.2	79.1				
Basin-wide Total	55.0	48.4	28.2	79.1				
# of reservoirs	1	1	1	1				
Watershed Snowpack Analysis March 1, 2014	# of Sites	% Median	Last Year % Median					
GOOSE CREEK	3	130%	84%					
TONGUE RIVER BASIN	9	135%	90%					

#### Belle Fourche River Basin

#### Snow

The Belle Fourche River Basin SWE is 139% of median 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 86% of average or 92% of last year in the Black Hills. There were 6 reporting stations. Year-to-date precipitation is 156% of average and 211% of last year's amount.

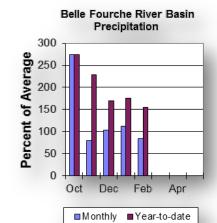
#### Reservoirs

Belle Fourche Reservoir is storing 126% of average (142,200 ac-ft), about 80% of capacity. Keyhole Reservoir is storing 181% of average (163,600 ac-ft), about 84% of

capacity.
Shadehill

Reservoir is storing 138% of

average (69,000 ac-ft), about 85% of capacity. Detailed reservoir data is shown following and on the reservoir storage summary at the beginning of this report.



#### Streamflow

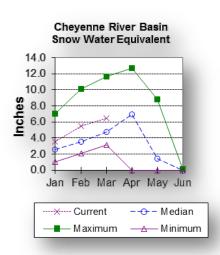
There are no streamflow forecast points for the basin.

Reservoir Storage	Current	Last Year	Average	Capacity	
End of February, 2014	(KAF)	(KAF)	(KAF)	(KAF)	
BELLE FOURCHE	142.2	107.2	119.4	178.4	
KEYHOLE	163.6	149.2	90.6	193.8	
SHADEHILL	69.0	35.2	45.1	81.4	
Basin-wide Total	374.8	291.7	255.1	453.6	
# of reservoirs	3	3	3	3	
Watershed Snowpack Analysis	# of Sites	% Median	Last Year		
March 1, 2014			% Median		
BELLE FOURCHE RIVER BASIN	6	139%	97%		

# Cheyenne River Basin

#### Snow

The Cheyenne River Basin SWE is 136% of median at this time of year. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.

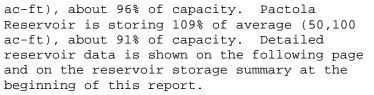


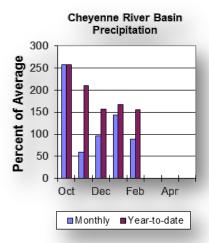
#### Precipitation

Precipitation for last month was 90% of average or 92% of last year in the Black Hills. There were 5 reporting stations. Year-to-date precipitation is 155% of average and 177% of last year's amount.

#### Reservoirs

Angostura is currently storing 100% of average (101,700 ac-ft), about 83% of capacity. Deerfield reservoir is storing 111% of average (14,600





#### Streamflow

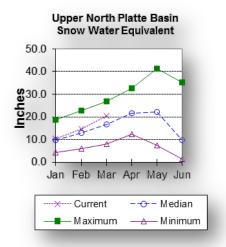
The following runoff values are the 50% exceedance forecasts for the April through July period. The Deerfield Reservoir Inflow is expected to be 7,300 ac-ft (140% of average). Pactola Reservoir Inflow is expected to yield around 30,000 ac-ft (136% of average). See the following for detailed runoff volumes.

		Chevenr	e River E	Basin				
	Stream	•		larch 1, 2	014			
				edance Probal		sk Assessme	nt	
		-	Chance th	at actual volun	ne will excee	d forecast	_	
CHEYENNE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Deerfield Reservoir Inflow				-				
	MAR-JUL	4.9	7.2	8.7	140%	10.2	12.5	6.2
	APR-JUL	4.4	6	7.3	140%	8.7	11	5.2
Pactola Reservoir Inflow								
	MAR-JUL	16.1	27	34	136%	41	52	25
	APR-JUL	15.3	23	30	136%	37	50	22
90% and 10% exceedance probabilities at 2) Forecasts are for unimpaired flows. Act 3) Median value used in place of average			n manageme	nt of upstream	reservoirs a	and diversion	S	
Reservoir Storage	Current	Last Year	Average	Capacity				
End of February, 2014	(KAF)	(KAF)	(KAF)	(KAF)				
ANGOSTURA	101.7	72.2	87.6	122.1				
DEERFIELD	14.6	15.1	13.9	15.2				
PACTOLA	50.1	49.1	45.6	55.0				
Basin-wide Total	166.4	136.3	147.1	192.3				
# of reservoirs	3	3	3	3				
Watershed Snowpack Analysis	# of Sites	% Median	Last Year % Median					
March 1, 2014			70 IVICUIAIT					

# Upper North Platte River Basin

#### Snow

The sites above Seminoe Reservoir are showing about 122% of median (SWE) for this time of the year. SWE in the drainage area above Northgate is 127% of median at this time. SWE in the Encampment River drainage is about 128% of median. Brush Creek SWE for the year is about 116% of



median. Medicine Bow and Rock Creek drainages SWE are about 126% of median. 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 161% of average. Precipitation varied from 55-256% of average last month. Total water-year-to-date precipitation is about 119% of average for the basin, which is about 151% of last year's amount. Year to date percentage ranges from 61-151% of average.

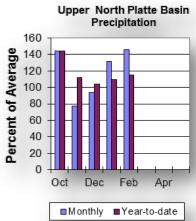
#### Reservoirs

Seminoe Reservoir is estimated to be storing 312,200 ac-ft or 31% of capacity. Seminoe Reservoir is also storing about 63% of average for this time of the year and 64% 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 above average for the Upper North Platte River Basin. Yield for the North Platte River near Northgate will be around 305,000 ac-ft (122% of average). The Encampment River near Encampment is 165,000 ac-ft (120% of average). Rock Creek near Arlington is 63,000 ac-ft (121% of average).



Seminoe Reservoir inflow should be around 910,000 ac-ft (118% of average). See the following table for more detailed information on projected runoff.

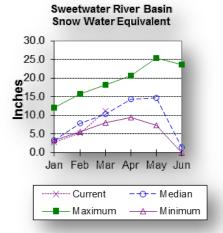
				ver Basir				
	Stream			March 1, 2 edance Proba		ick Accoccmo	nt	1
		''		at actual volur			111	
			Chance un	at actual volui	HE WIII EXCEE	u iorecasi		
UPPER NORTH PLATTE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
North Platte R nr Northgate	. 000	(10.11)	(10 /	()		(,	(,	(,
3	APR-JUL	164	230	275	122%	320	385	225
	APR-SEP	180	255	305	122%	355	430	250
Encampment R nr Encampment <sup>2</sup>					,			
	APR-JUL	113	138	155	120%	172	197	129
	APR-SEP	120	147	165	120%	183	210	138
Rock Ck nr Arlington					1_0,0			
<b>3</b>	APR-JUL	43	53	59	120%	65	75	49
	APR-SEP	46	56	63	121%	70	80	52
Sweetwater R nr Alcova								
	APR-JUL	19.2	37	48	81%	60	78	59
	APR-SEP	20	39	52	81%	65	84	64
Seminoe Reservoir Inflow								
	APR-JUL	415	670	840	117%	1010	1260	715
	APR-SEP	445	725	910	118%	1100	1370	770
90% and 10% exceedance probabilities     Forecasts are for unimpaired flows. Act     Median value used in place of average			n manageme	nt of upstream	n reservoirs	and diversion	S	
Reservoir Storage	Current	Last Year	Average	Capacity				
End of February, 2014	(KAF)	(KAF)	(KAF)	(KAF)				
SEMINOE	312.2	485.6	493.1	1016.7				
Basin-wide Total	312.2	485.6	493.1	1016.7				
# of reservoirs	1	1	1	1				
Watershed Snowpack Analysis March 1, 2014	# of Sites	% Median	Last Year % Median					
N PLATTE above Northgate	11	131%	74%					
ENCAMPMENT RIVER	4	128%	82%					
BRUSH CREEK	5	116%	81%					
MEDICINE BOW & ROCK CREEKS	2	126%	83%					
UPPER NORTH PLATTE RIVER BASIN	24	123%	77%					

#### Sweetwater River Basin

#### Snow

SWE for the Sweetwater River Basin is at 108% of median. For more information see "Basin Summary of Snow Course Data" at the beginning of

this report.



#### Precipitation

Last month's precipitation was 167 of average for the three reporting stations (45-187%). The water year-to-date precipitation for the basin is currently 95% of average. Year-to-date percentages range from 84-157% of average.

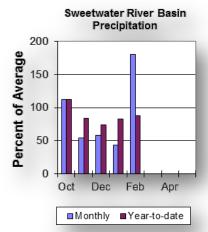
#### Reservoirs

Reservoir storage is as follows: Pathfinder 373,500 ac-

ft (64% of average).

#### Streamflow

The following yield is based on the 50% exceedance forecast for the April through September period, and is expected to be below average. The Sweetwater River near Pathfinder is forecast to yield about 52,000 ac-ft (81% of average). See the following table for more detailed information on projected runoff.



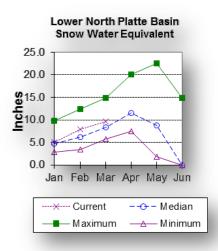
	;	Sweetwa	ter River	Basin				
	Stream	flow Fore	ecasts - N	larch 1, 2	014			
		F	orecast Excee	dance Probal	bilities for Ri	sk Assessme	nt	
			Chance th	at actual volun	ne will excee	d forecast		
SWEETWATER RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Sweetwater R nr Alcova			•	` '				
	APR-JUL	19.2	37	48	81%	60	78	59
	APR-SEP	20	39	52	81%	65	84	64
1) 90% and 10% exceedance probabilities	are actually 9	5% and 5%						
2) Forecasts are for unimpaired flows. Acti	ual flow will be	e dependent c	n manageme	nt of upstream	reservoirs a	and diversion	s	
3) Median value used in place of average								
Reservoir Storage	Current	Last Year	Average	Capacity				
End of February, 2014	(KAF)	(KAF)	(KAF)	(KAF)				
PATHFINDER	373.5	427.5	582.4	1016.5				
Basin-wide Total	373.5	427.5	582.4	1016.5				
# of reservoirs	1	1	1	1				
Watershed Snowpack Analysis March 1, 2014	# of Sites	% Median	Last Year % Median					
SWEETWATER RIVER BASIN	5	114%	70%					

#### Lower North Platte River Basin

#### Snow

SWE for the Laramie Range Mts. is at 114% of median. Deer and LaPrele Creek SWE are at 107% of median. 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. Of the 6 reporting stations, percentages for the month range from 45-130%. The water year-to-date precipitation for the basin is currently 119% of average (172% of last year). Year-to-date percentages range from 86-173% of average.

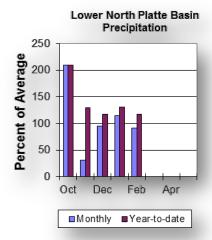
#### Reservoirs

Reservoir storage is as follows: Alcova 145,200 ac-ft (93% of average)(79% of capacity); Glendo 339,100 ac-ft (99% of average)(67% of capacity); Guernsey 11,100 ac-ft (73% of average)(24% of capacity);

Pathfinder 373,500 ac-ft (64% of average)(37% of capacity).

#### Streamflow

The following yields are based on the 50% exceedance forecasts for the April through September period, and are expected to be above average. North Platte - Alcova to Orin Gain is forecast to yield 38,000 acft. La Prele Creek above La Prele Reservoir 18,700 ac-ft (94% of average). North Platte River below Glendo Reservoir is 1,000,000 ac-ft (118% of average), and below Guernsey Reservoir is anticipated to yield around 1,040,000 ac-ft (122% of average). See the following table for more detailed information on projected runoff.

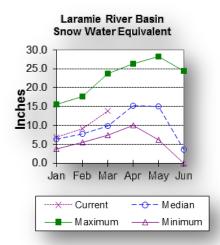


	Stroam	flow Ford	raete - N	larch 1, 2	N11			
	Stream			dance Proba		sk Assessme	nt	
				at actual volun				
			Chance an	at actual void!	TIC WIII CACCC	10100000		
LOWER NORTH PLATTE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Av
North Platte R - Alcova to Orin Gain								
	APR-JUL	-59	25	82	161%	139	225	51
	APR-SEP	-110	-22	38	190%	98	186	20
North Platte R bl Glendo Reservoir								
	APR-JUL	705	865	970	118%	1080	1230	820
	APR-SEP	725	890	1000	118%	1120	1280	850
North Platte R bl Guernsey Reservoir								
	APR-JUL	665	860	995	121%	1130	1320	820
	APR-SEP	695	900	1040	122%	1170	1380	850
<ol> <li>90% and 10% exceedance probabilities</li> <li>Forecasts are for unimpaired flows. Act</li> <li>Median value used in place of average</li> </ol>			n manageme	nt of upstream	reservoirs a	and diversion	S	
Reservoir Storage	Current	Last Year	Average	Capacity				
End of February, 2014	(KAF)	(KAF)	(KAF)	(KAF)				
ALCOVA	145.2	157.1	155.8	184.3				
GLENDO	339.1	280.9	342.9	506.4				
GUERNSEY	11.1	6.0	15.2	45.6				
PATHFINDER	373.5	427.5	582.4	1016.5				
Basin-wide Total	868.9	871.5	1096.3	1752.8				
# of reservoirs	4	4	4	4				
Watershed Snowpack Analysis March 1, 2014	# of Sites	% Median	Last Year % Median					
DEER & LaPRELE CREEKS	2	107%	69%					
LOWER NORTH PLATTE RIVER BASIN	4	114%	67%					

#### Laramie River Basin

#### Snow

SWE for the Laramie River above Laramie is 134% of median. SWE for the



Little Laramie River is 150% of median. The SWE total for the entire Laramie River Basin (above mouth entering North Platte) is 141% of median. SWE total for the entire North Platte River Basin is at 124% of median. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.

#### Precipitation

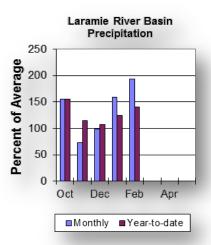
Last month's precipitation was 187% of average or 201% of last year's amount. For the 8 reporting stations, percentages for the month range from 94-387%. The water year-to-date precipitation for the basin is currently 139% of average (187% of last year). Year-to-date percentages range from 106-237% of average.

#### Reservoirs

Reservoir storage is as follows: Wheatland #2 49,700 ac-ft (113% of average)(50% of capacity).

#### Streamflow

The following yields are based on the 50% exceedance forecasts for the April through September period, and are expected to be above average. Laramie River near Woods Landing should yield around 147,000 ac-ft (117% of average). The Little Laramie near Filmore should produce about 70,000 ac-ft (127% of average). See the following table for more detailed information on projected runoff.



		F	orecast Exce	edance Prob	abilities for Ri	sk Assessme	nt	
			Chance th	nat actual volu	ıme will excee	d forecast	ĺ	
LARAMIE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Laramie R nr Woods					-			
	APR-JUL	99	120	134	117%	148	169	115
	APR-SEP	108	131	147	117%	163	186	126
Little Laramie R nr Filmo	ore							
	APR-JUL	45	57	65	127%	73	85	51
	APR-SEP	48	61	70	127%	79	92	55
1) 90% and 10% excee	dance probabilit	ies are actu	ally 95% and	5%				
2) Forecasts are for uni	mpaired flows.	Actual flow	will be depend	dent on mana	gement of ups	stream reserv	oirs and dive	ersions
3) Median value used in	place of average	ge						

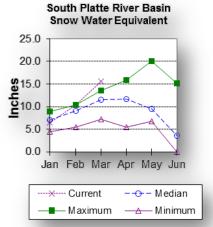
Reservoir Operations	Current	Last Year	Average	Capacity	Current %	Last Year %	Average %	Current %	Last Year %
Reservoir Operations	(KAF)	(KAF)	(KAF)	(KAF)	Capacity	Capacity	Capacity	Average	Average
WHEATLAND #2	49.7	24.2	43.9	98.9	50%	24%	44%	113%	55%
Basin-wide Tot	al 49.7	24.2	43.9	98.9	50%	24%	44%	113%	55%
# of reservoir	s 1	1	1	1	1	1	1	1	1

Watershed Snowpack Analysis	# af Cita	0/ Madian	Last Year
March 1, 2014	# or Sites	% Median	% Median
LARAMIE RIVER abv Laramie	7	133%	75%
LITTLE LARAMIE RIVER	5	150%	74%
LARAMIE RIVER BASIN	13	140%	74%
NORTH PLATTE TOTAL RIVER BASIN	39	125%	76%

## South Platte River Basin

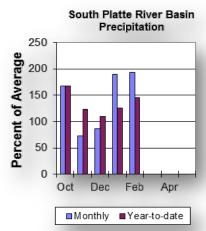
#### Snow

SWE for the South Platte River Basin is at 135% of median. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



#### Precipitation

Last month's precipitation was 181% of average for the 4 reporting stations. The water year-to-date precipitation for the basin is currently 149% of average (181% of last year). Year-to-date percentages range from 104-245% of average.



#### Reservoirs

No reservoir data for the basin.

#### Streamflow

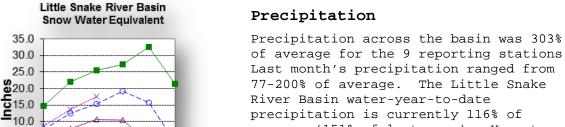
There are no streamflow forecast points for the basin.

South Platte River Basin - March 1, 201									
Watershed Snowpack Analysis March 1, 2014	# of Sites	% Median	Last Year % Median						
SOUTH PLATTE RIVER BASIN	8	136%	74%						

#### Little Snake River Basin

#### Snow

Currently, snow water equivalent (SWE) in the Little Snake River drainage is 114% of median. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



of average for the 9 reporting stations. Last month's precipitation ranged from 77-200% of average. The Little Snake River Basin water-year-to-date precipitation is currently 116% of average (151% of last year). Year-todate percentages range from 86-154% of average.

#### Reservoirs

High Savery Dam - 7,200 ac-ft (56%

of average)(32% of capacity).

-- → - Median

—A— Minimum

Jan Feb Mar Apr May Jun

#### Streamflow

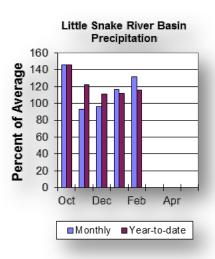
5.0

0.0

----X---- Current

Maximum

The following yields are based on the 50% exceedance forecasts for the April through July period, and are expected to be above average. The Little Snake River near Slater should yield around 185,000 ac-ft (119% of average). The Little Snake River near Dixon is estimated to yield around 400,000 ac-ft (116% of average). See the following table for more detailed information on projected runoff.

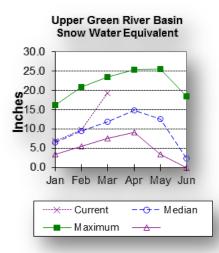


	I	Little Sna	ke River	Basin				
	Stream	flow Fore	ecasts - N	larch 1, 2	2014			
		Fo	orecast Excee	edance Proba	bilities for Ri	sk Assessme	nt	
			Chance th	at actual volur	ne will excee	d forecast	ì	
LITTLE SNAKE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Little Snake R nr Slater <sup>2</sup>								
	APR-JUL	135	164	185	119%	210	245	156
Little Snake R nr Dixon <sup>2</sup>								
	APR-JUL	245	335	400	116%	475	590	345
1) 90% and 10% exceedance probabilities a	are actually 9	5% and 5%						
2) Forecasts are for unimpaired flows. Actu	ual flow will be	e dependent d	n manageme	nt of upstream	n reservoirs a	and diversion	S	
3) Median value used in place of average								
Reservoir Storage	Current	Last Year	Average	Capacity				
End of February, 2014	(KAF)	(KAF)	(KAF)	(KAF)				
HIGH SAVERY RESERVOIR	7.2	7.3	12.0	22.4				
Basin-wide Total	7.2	7.3	12.0	22.4				
# of reservoirs	1	1	1	1				
Watershed Snowpack Analysis March 1, 2014	# of Sites	% Median	Last Year % Median					
LITTLE SNAKE RIVER BASIN	10	114%	78%					

# **Upper Green River Basin**

#### Snow

SWE in the Upper Green River Basin above Fontenelle Reservoir is about 163% of median. SWE in the Green River Basin above Warren Bridge is about 159% of median. SWE for the West Side of Upper Green River Basin is about



168% of median. New Fork River SWE is now about 157% of median. Big Sandy-Eden Valley Basin is 120% of median. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.

#### Precipitation

The 13 reporting precipitation sites in the basin were 303% of average last month (712% of last year). Last month's precipitation varied from 244-370% of average. Water year-to-date precipitation is about 135% of average (171% of last year). Year to date percentage of average ranges from 112-151% for the reporting stations.

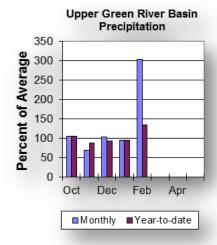
#### Reservoir

Storage in Big Sandy Reservoir is 8,500 ac-ft, or 23% of capacity and 51% of average. Fontenelle Reservoir is 162,100 ac-ft (39% of capacity)(106%

of average) The combined Upper and Lower Green River Basins are 102% of average. Detailed reservoir data is shown on the following page and on the reservoir storage summary at the beginning of this report.

#### Streamflow

The following yields are based on the 50% exceedance forecasts for the April through July period, and are expected to be below average. The yield on the Green River at Warren Bridge is 215,000 ac-ft (88% of average). Pine Creek above Fremont Lake is 93,000 ac-ft (95% of average). New Fork River near Big Piney is 300,000 ac-ft (85% of average). Fontenelle Reservoir Inflow is estimated



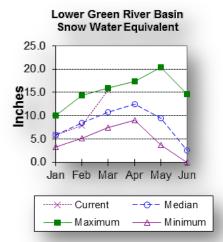
to be 635,000 ac-ft (88% of average), and Big Sandy near Farson is expected to be around 38,000 ac-ft (73% of average). See the following table for more detailed information on projected runoff.

	ι	Jpper Gre	en River	Basin				
				larch 1, 2	014			
		Fo	recast Excee	dance Probal	oilities for Ri	sk Assessme	nt	
			Chance tha	at actual volun	ne will excee	d forecast		J
UPPER GREEN RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Green R at Warren Bridge								
	APR-JUL	240	285	310	127%	345	390	245
Pine Creek ab Fremont Lake								
	APR-JUL	98	108	116	118%	123	134	98
New Fork R nr Big Piney								
	APR-JUL	325	410	470	132%	535	645	355
Fontenelle Reservoir Inflow								
	APR-JUL	710	895	1030	142%	1180	1410	725
Big Sandy R nr Farson								
	APR-JUL	39	49	57	110%	65	78	52
Forecasts are for unimpaired flows. Actu     Median value used in place of average	ual flow will be	e dependent o	n managemer	nt of upstream	reservoirs	and diversion	S	
Reservoir Storage	Current	Last Year	Average	Capacity				
End of February, 2014	(KAF)	(KAF)	(KAF)	(KAF)				
BIG SANDY	9.0	7.1	17.7	38.3				
FONTENELLE	135.8	140.4	127.6	344.8				
Basin-wide Total	144.8	147.5	145.3	383.1				
Baoiii Wide Total								
# of reservoirs	2	2	2	2				
	# of Sites	2 % Median	2 Last Year % Median	2				
# of reservoirs  Watershed Snowpack Analysis March 1, 2014			Last Year	2				
# of reservoirs  Watershed Snowpack Analysis March 1, 2014  GREEN above Warren Bridge	# of Sites	% Median	Last Year % Median	2				
# of reservoirs  Watershed Snowpack Analysis March 1, 2014  GREEN above Warren Bridge  UPPER GREEN - West Side	# of Sites	% Median	Last Year % Median 84%	2				
# of reservoirs  Watershed Snowpack Analysis	# of Sites 5 5	% Median 159% 172%	Last Year % Median 84% 82%	2				

#### Lower Green River Basin

#### Snow

SWE in the Lower Green River Basin is 131% of median. SWE in the Hams Fork drainage is 139% of median. Blacks Fork drainage SWE is currently 120% of median. In the Henrys Fork drainage SWE is 95%. SWE for the



entire Green River Basin (above Flaming Gorge) is 145% of median. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.

#### Precipitation

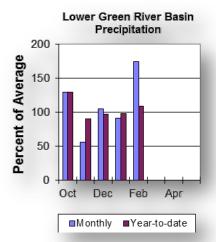
Precipitation for the 13 reporting stations during last month was at 178% of average or 324% of last year. Precipitation ranged from 42-294% of average for the month. The basin year-to-date precipitation is currently 111% of average (141% of last year). Year-to-date percentages range from 72-195% of average.

#### Reservoirs

Fontenelle Reservoir is currently storing 135,800 ac-ft; this is 106% of average (97% of last year), (39% of capacity). Flaming Gorge is currently storing 2,868,500 ac-ft; this is 95% of average (97% of last year), (77% of capacity). Viva Naughton is currently storing 25,200 ac-ft, 88% of average (108% of last year), (59% 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 yields are based on the 50% exceedance forecasts for the April through July period, and are expected to be below average. The Green River near Green River is forecast to yield about 635,000 ac-ft (87% of average). The Blacks Fork near Robertson is forecast to yield 74,000 ac-ft (83% of average). East Fork of Smiths Fork near Robertson is forecast to yield 24,000 ac-ft (89% of average). Hams Fork below Pole Creek near Frontier is forecast to be 41,000 ac-ft (76% 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



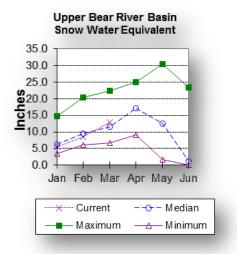
inflow will be about 780,000 ac-ft (80% of average). See the following table for more detailed information on projected runoff.

	L	ower Gre	en River	Basin						
	Stream	flow Fore	ecasts - N	larch 1, 2	014					
		Forecast Exceedance Probabilities for Risk Assessment								
		Chance that actual volume will exceed forecast								
		2001	=00/	=00/		2001	100/			
LOWER GREEN RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)		
Green R nr Green River, WY 2										
	APR-JUL	715	910	1060	145%	1220	1480	730		
Blacks Fk nr Robertson										
	APR-JUL	60	77	90	101%	104	126	89		
EF of Smiths Fork nr Robertson <sup>2</sup>										
	APR-JUL	16.6	23	28	104%	33	42	27		
Hams Fk bl Pole Ck nr Frontier										
	APR-JUL	47	59	69	128%	79	94	54		
Viva Naughton Reservoir Inflow										
_	APR-JUL	62	82	97	131%	114	140	74		
	APR-SEP									
Flaming Gorge Reservoir Inflow 2										
3 2 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	APR-JUL	805	1090	1310	134%	1550	1940	980		
1) 90% and 10% exceedance probabilities	are actually 9	5% and 5%								
2) Forecasts are for unimpaired flows. Acti			n manageme	nt of upstream	reservoirs	and diversion	S			
Median value used in place of average										
c,										
Reservoir Storage	Current	Last Year	Average	Capacity						
End of February, 2014	(KAF)	(KAF)	(KAF)	(KAF)						
FONTENELLE	135.8	140.4	127.6	344.8						
FLAMING GORGE RESERVOIR	2868.5	2968.0	3014.0	3749.0						
VIVA NAUGHTON RES	25.2	23.4	28.8	42.4						
Basin-wide Total	3029.5	3131.8	3170.4	4136.2						
# of reservoirs	3	3	3	3						
# 61 16661 V6.116			Ü							
Watershed Snowpack Analysis March 1, 2014	# of Sites	% Median	Last Year % Median							
HAMS FORK RIVER	4	143%	77%							
BLACKS FORK	2	122%	74%							
HENRYS FORK	2	100%	93%							

# **Upper Bear River Basin**

#### Snow

Snow water equivalent (SWE) in the Upper Bear River Basin in Utah is estimated to be 104% of median. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is at 136% of median. Bear River



Basin SWE, above the Idaho State line, is 112% of median. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.

#### Precipitation

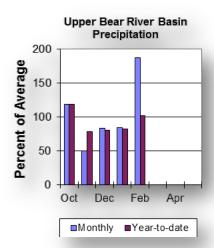
Precipitation for last month was 188% of average for the 8 reporting stations; this is 410% of the precipitation received last year. The year-to-date precipitation, for the basin, is 102% of average; this is 129% of last year's amount. ). Year-to-date percentages range from 83-120% of average.

#### Reservoirs

Storage in Woodruff Narrows Reservoir was 16,580 ac-ft, about 29% of capacity and 53% of average.

#### Streamflow

The following 50% exceedance forecasts are for the April through September period, and are expected to be below average. The Bear River near the Utah-Wyoming State Line is 102,000 ac-ft (83% of average). The Bear River above Reservoir near Woodruff is 111,000 ac-ft (87% of average). The Smiths Fork River near Border Jct. is 86,000 ac-ft (83% of average). See the following table for more detailed information on projected runoff.



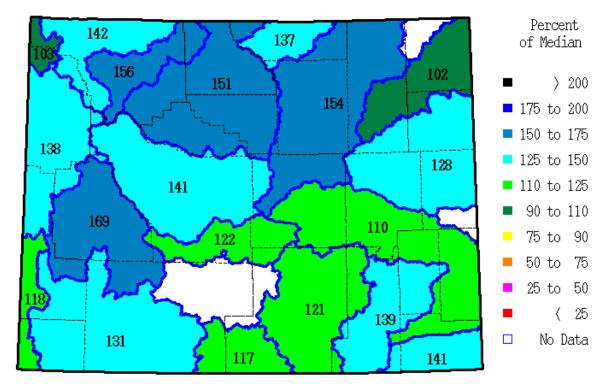
	Upj	per Bear	River Bas	sin					
S	treamflo	w Foreca	sts - Marc	ch 1, 2014	4				
		Forecast Exceedance Probabilities for Risk Assessment							
	Chance that actual volume will exceed forecast								
UPPER BEAR RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr A	
Bear R nr UT-WY State Line			` '						
	APR-JUL	73	92	105	94%	118	137	112	
	APR-SEP	78	100	115	93%	130	152	123	
Bear R ab Resv nr Woodruff									
	APR-JUL	68	96	115	95%	134	162	121	
	APR-SEP	72	100	120	94%	140	168	128	
Smiths Fk nr Border									
	APR-JUL	75	91	85	96%	113	129	89	
	APR-SEP	89	107	100	96%	133	151	104	
1) 90% and 10% exceedance probabilities are actua	llv 95% and 5	5%							
2) Forecasts are for unimpaired flows. Actual flow w	ill be depende	ent on manag	ement of upst	ream reservoi	rs and divers	sions			
3) Median value used in place of average									
Reservoir Storage	Current	Last Year	Average	Capacity					
End of February, 2014	(KAF)	(KAF)	(KAF)	(KAF)					
WOODRUFF NARROWS RESERVOIR	16.6	8.7	31.6	57.3					
Basin-wide Total	16.6	8.7	31.6	57.3					
# of reservoirs	1	1	1	1					
Watershed Snowpack Analysis March 1, 2014	# of Sites	% Median	Last Year % Median						
UPPER BEAR RIVER in Utah	4	101%	73%						
SMITHS & THOMAS FORKS	3	144%	77%						
UPPER BEAR RIVER BASIN	8	118%	75%						

#### Issued by Released by

Jason Weller (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 Sunday, 02 March 2014



\* = 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





Natural Resources Conservation Service 100 East B Street Box 33124 Casper, WY 82601

«Name»

«Title»

«Address1»

«Address2»

«City», «State» «PostalCode»