

Wyoming Basin Outlook Report

May 1, 2011



Togwotee Pass SNOTEL

Basin Outlook Reports

And Federal - State - Private Cooperative Snow Surveys

For more water supply and resource management information, contact:

Lee Hackleman/Water Supply Specialist
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. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

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

The wider the spread among these values, the more uncertain the forecast is. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making their operational decisions. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

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Wyoming Water Supply Outlook Report

General

The snow water equivalent (SWE) across Wyoming is well above average for May 1st at 157%. April precipitation for the basins varied from 109-229% of average. Year-to-date precipitation for Wyoming basins varied from 100-162% of average. Forecasted runoff varies from 135-269% of average across the Wyoming basins for an overall average of 155%. Basin reservoir levels for Wyoming vary from 43-161% of average for an overall average of 99%.

Snowpack

Snow water equivalent (SWE), across Wyoming is well above average for this time of year at 157%. SWE in the NW portion of Wyoming is now about 151% of average (239% of last year). NE Wyoming SWE is currently about 148% of average (225% of last year). The SE Wyoming SWE is currently about 167% of average (180% of last year). The SW Wyoming SWE is about 168% of average (239% of last year).

Precipitation

Last month's precipitation was well above average across Wyoming. The Yellowstone & Madison Basins had the highest precipitation for the month at 229% of average. The Wind River Basin had the lowest precipitation amount at 109% of average. The following table displays the major river basins and their departure from average for this month.

Basin	Departure from average	Basin	Departure from average
Snake River	+114%	Upper North Platte River	+81%
Yellowstone & Madison	+129%	Lower North Platte	+06%
Wind River	+09%	Little Snake River	+61%
Big Horn	+47%	Upper Green River	+82%
Shoshone & Clarks Fork	+84%	Lower Green River	+57%
Powder & Tongue River	+48%	Upper Bear River	+76%
Belle Fourche & Cheyenne	+35%		

Streams

Stream flow yield for May to September is expected to be above average across Wyoming. Most probable yield for the entire State of Wyoming is forecast to be about 155% (varying from 94-269% of average). The Snake River and Upper Yellowstone & Madison River Basins are expected to yield about 145% and 139% of average, respectively; 127-150% of average for the various forecast points in the basins: Yields from the Wind and Bighorn River Basins are expected to be about 135% and 148% of average, respectively; varying from 104-148% of average in the basins: Yields from the Shoshone and Clarks Fork River Basins of Wyoming are expected to yield about 142% and 140% of average, respectively; varying from 131-161% of average: Yields from the Tongue & Powder River Basins are expected to be about 136% and 146% of average, respectively; varying from 111-167% of average: Yields for the Belle Fourche & Cheyenne River Basins are expected to be about 245% and 269% of average, respectively. Yields for the Upper and Lower North Platte River of Wyoming are expected to be about 200% and 211% of average, respectively; varying from 94-220% of average: Yields for the Little Snake, Green River, and Little Bear of Wyoming are expected to be 214%, 145%, and 213% of average respectively; yield estimates vary from 111-214% of average.

Reservoirs

Reservoir storage varies widely across the state however reservoir storage is at 99% of average for the entire state. Reservoirs on the North Platte River are above average at 106% of average. Reservoirs in the northeast are above average in storage at 112%. Reservoirs in the Wind River Basin are below average at 94%. Reservoirs on the Big Horn are average at 101%. The Buffalo Bill Reservoir on the Shoshone is below average at 95%. Reservoirs on the Green River are above average at 106%. See the following table for further information about reservoir storage.

Major Reservoirs in Wyoming May 1, 2011

BASIN AREA RESERVOIR	CURRENT AS %CAPACITY	LAST YR AS %CAPACITY	AVERAGE AS %CAPACITY	CURRENT AS %AVERAGE	CURRENT AS %LAST YR
WYOMING AND SURROUNDING STATES					
ALCOVA	98	98	97	101	100
ANGOSTURA	92	75	93	99	123
BELLE FOURCHE	92	93	82	112	99
BIG SANDY	48	62	65	74	78
BIGHORN LAKE	61	69	58	104	88
BOYSEN	86	94	88	97	91
BUFFALO BILL	52	67	54	95	77
BULL LAKE	44	58	55	80	76
DEERFIELD	98	99	89	110	99
ENNIS LAKE	71	86	82	86	83
FLAMING GORGE	84	86	79	107	98
FONTENELLE	40	37	42	96	109
GLENDO	83	94	90	92	89
GRASSY LAKE	91	88	84	109	103
GUERNSEY	49	58	73	67	85
HEBGEN LAKE	69	85	67	102	81
JACKSON LAKE	64	77	56	116	83
KEYHOLE	70	55	60	118	128
PACTOLA	98	100	87	112	98
PALISADES	27	99	62	43	27
PATHFINDER	90	79	73	123	115
PILOT BUTTE	69	91	81	85	76
SEMINOE	51	72	50	102	71
SHADEHILL	100	96	80	124	104
TONGUE RIVER	64	81	40	161	80
VIVA NAUGHTON RES	32	81	67	47	39
WHEATLAND #2	39	92	60	65	43
WOODRUFF NARROWS	77	100	67	114	77
TOTAL 28 RESERVOIRS	68	81	69	99	84

**BASIN SUMMARY OF
SNOTEL and SNOW COURSE DATA
May 2011**

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
WYOMING Snow Courses and SNOTEL Stations						
ALBANY	9400	4/26/11	61	22.1	11.9	12.3
BALD MOUNTAIN SNOTEL	9380	5/01/11	108	32.1	15.6	23.6
BASE CAMP SNOTEL	7030	5/01/11	---	26.3	4.1	12.3
BATTLE MTN. SNOTEL	7440	5/01/11	37	15.2	2.9	4.6
BEARLODGE DIVIDE	4680	4/28/11	0	.0	.0	.4
BEARTOOTH LK. SNOTEL	9280	5/01/11	103	33.3	16.5	25.9
BEAR TRAP SNOTEL	8200	5/01/11	40	11.4	3.8	2.5
BIG GOOSE SNOTEL	7760	5/01/11	47	13.1	8.7	11.6
BIG PARK	8620	4/28/11	81	30.9	14.4	19.6
BIG SANDY SNOTEL	9080	5/01/11	59	19.5	8.6	13.5
BLACKHALL MOUNTAIN	9820	5/01/11	133	50.3	31.1	--
BLACKWATER SNOTEL	9780	5/01/11	104	36.7	19.6	28.8
BLIND BULL SNOTEL	8900	5/01/11	112	43.7	19.5	27.9
BLUE RIDGE	9620	4/27/11	39	13.9	10.9	12.5
BONE SPGS. SNOTEL	9350	5/01/11	93	28.2	12.2	18.3
BROOKLYN LAKE SNOTEL	10220	5/01/11	113	42.0	23.7	28.2
BURGESS JCT. SNOTEL	7880	5/01/11	59	15.9	11.7	13.3
BURROUGHS CRK SNOTEL	8750	5/01/11	67	20.7	9.6	13.6
CANYON SNOTEL	8090	5/01/11	65	21.7	7.1	11.3
CASPER MTN. SNOTEL	7850	5/01/11	40	13.6	15.7	17.1
CASTLE CREEK SNOTEL	8400	5/01/11	18	7.2	--	--
CASTLE CREEK	8400	4/26/11	20	6.0	.0	2.4
CCC CAMP	7000	4/27/11	45	17.6	4.0	8.0
CINNABAR PARK SNOTEL	9690	5/01/11	96	30.7	19.9	16.0
CLOUD PEAK SNOTEL	9850	5/01/11	74	22.0	13.6	16.2
COLE CANYON SNOTEL	5910	5/01/11	29	9.2	.8	5.0
COLD SPRINGS SNOTEL	9630	5/01/11	29	9.5	6.5	4.8
COTTONWOOD CR SNOTEL	7700	5/01/11	---	37.2	15.5	19.8
CROW CREEK SNOTEL	8830	5/01/11	20	8.8	6.2	5.4
DARBY CANYON	8250	4/27/11	99	36.6	16.9	24.6
DEER PARK SNOTEL	9700	5/01/11	63	22.3	17.8	18.6
DIVIDE PEAK SNOTEL	8860	5/01/11	---	31.8	20.7	19.3
DOMELAKE SNOTEL	8880	5/01/11	65	19.4	8.8	13.5
DU NOIR	8760	4/25/11	35	10.5	1.2	6.3
EAST RIM DIV SNOTEL	7930	5/01/11	---	17.1	.9	13.1
ELKHART PARK SNOTEL	9400	5/01/11	---	17.6	7.2	12.8
EVENING STAR SNOTEL	9200	5/01/11	120	41.5	18.7	33.3
FOXPARK	9060	4/25/11	38	13.8	7.1	5.3
GEYSER CREEK	8500	4/25/11	31	9.9	1.6	5.4
GLADE CREEK	7040	4/27/11	76	30.9	9.8	20.1
GRAND TARGHEE SNOTEL	9260	5/01/11	170	62.4	43.2	--
GRANITE CRK SNOTEL	6770	5/01/11	---	25.7	5.0	12.8
GRANNIER MEADOWS	8860	4/27/11	46	15.4	12.3	14.6
GRASSY LAKE SNOTEL	7270	5/01/11	117	49.5	19.6	33.4
GRAVE SPRINGS SNOTEL	8550	5/01/11	46	12.3	9.2	11.1
GROS VENTRE SNOTEL	8750	5/01/11	59	18.7	8.3	13.3
GROVER PARK DIVIDE	7000	4/27/11	37	12.8	--	6.4
HAIRPIN TURN	9480	4/28/11	72	27.6	13.1	15.6
HANSEN S.M. SNOTEL	8360	5/01/11	34	10.5	2.6	4.9
HAMS FORK SNOTEL	7840	5/01/11	44	17.8	2.2	6.0

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
HASKINS CREEK	8980	4/29/11	132	51.4	30.0	31.6
HOBACK GS	6640	4/26/11	27	10.4	.0	--
HOBBS PARK SNOTEL	10100	5/01/11	60	19.1	19.5	18.0
INDIAN CREEK SNOTEL	9430	5/01/11	---	40.4	18.5	28.3
JACKPINE CREEK	7350	4/27/11	82	31.5	12.9	19.2
KELLEY R.S. SNOTEL	8180	5/01/11	---	26.5	8.9	14.1
KENDALL R.S. SNOTEL	7740	5/01/11	41	14.5	.0	10.0
KIRWIN SNOTEL	9550	5/01/11	53	16.9	10.6	13.0
LA PRELE SNOTEL	8380	5/01/11	43	15.0	7.5	7.1
LARSEN CREEK	9020	4/25/11	47	15.1	--	10.9
LARSEN CREEK SNOTEL	9020	5/01/11	44	18.0	--	--
LEWIS LAKE SNOTEL	7850	5/01/11	130	55.1	17.2	34.6
LIBBY LODGE	8750	4/28/11	45	16.8	5.6	8.3
LITTLE BEAR RUN	6240	4/28/11	11	3.3	.0	--
LITTLE GOOSE SNOTEL	8870	5/01/11	59	15.5	--	--
LITTLE WARM SNOTEL	9370	5/01/11	50	15.8	8.1	11.1
LOOMIS PARK SNOTEL	8240	5/01/11	---	25.3	4.9	14.3
MALLO	6420	4/28/11	25	9.5	.0	--
MARQUETTE SNOTEL	8760	5/01/11	27	7.1	7.6	11.3
MEDICINE LODGE LAKES	9340	4/28/11	71	22.0	8.9	11.9
MIDDLE FORK	7420	5/01/11	---	4.5E	5.7	4.7
MIDDLE POWDER SNOTEL	7760	5/01/11	50	14.8	11.3	14.3
MOSS LAKE	9800	4/27/11	119	40.8	26.2	25.8
NEW FORK SNOTEL	8340	5/01/11	39	15.2	2.1	8.4
NORRIS BASIN	7500	4/30/11	38	12.2	2.2	6.8
NORTH BARRETT CREEK	9400	4/28/11	118	43.8	27.6	22.7
NORTH FRENCH SNOTEL	10130	5/01/11	---	63.0	40.0	34.5
NORTH TONGUE	8450	4/26/11	57	17.2	8.8	13.3
OLD BATTLE SNOTEL	9920	5/01/11	---	56.7	38.2	36.9
OLD FAITHFUL	7400	4/30/11	51	20.2	4.7	9.3
ONION GULCH	8780	4/27/11	49	13.2	7.0	8.4
OWL CREEK SNOTEL	8980	5/01/11	21	7.8	.9	4.0
PARKERS PEAK SNOTEL	9400	5/01/11	138	38.3	19.1	24.5
PHILLIPS BNCH SNOTEL	8200	5/01/11	100	40.4	17.9	29.4
POCKET CREEK	9350	4/25/11	58	17.2	8.1	13.8
POCKET CREEK SNOTEL	9350	5/01/11	66	17.1	10.5	--
POLE MOUNTAIN	8700	4/25/11	39	13.2	7.7	5.0
POWDER RVR.PASS SNTL	9480	5/01/11	71	20.7	7.6	10.7
PURGATORY GULCH	8970	4/28/11	51	18.6	11.6	11.2
RANGER CREEK	8120	4/28/11	53	16.9	.0	7.6
RENO HILL SNOTEL	8500	5/01/11	---	18.7	17.6	14.7
REUTER CANYON	6280	4/29/11	32	10.6	.0	3.6
ROWDY CREEK	8300	4/26/11	84	30.6	12.3	21.1
RYAN PARK	8400	4/28/11	57	22.6	9.2	7.2
SAGE CK BASIN SNTL	7850	5/01/11	47	19.4	10.1	11.2
SALT RIVER SNOTEL	7600	5/01/11	---	21.2	7.3	10.6
SAND LAKE SNOTEL	10050	5/01/11	---	49.4	35.9	37.0
SANDSTONE RS SNOTEL	8150	5/01/11	62	23.1	9.0	9.5
SAWMILL DIVIDE	9260	4/26/11	62	17.5	11.2	15.1
SHELL CREEK SNOTEL	9580	5/01/11	97	24.4	13.6	16.8
SHERIDAN R.S.	7750	4/25/11	28	8.4	.0	3.3
SNAKE RV STA SNOTEL	6920	5/01/11	---	24.7	1.8	12.2
SNIDER BASIN SNOTEL	8060	5/01/11	57	24.4	6.9	12.6
SOLDIER PARK SNOTEL	8780	5/01/11	43	11.8	--	--
SOLDIER PARK	8780	4/25/11	32	8.6	.0	6.3
SOUR DOUGH	8460	4/25/11	40	10.6	4.0	7.4

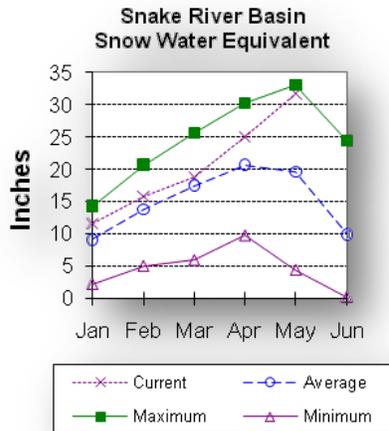
SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
SOUTH BRUSH SNOTEL	8440	5/01/11	59	25.2	12.4	11.1
SOUTH PASS SNOTEL	9040	5/01/11	56	19.3	15.1	18.0
SPRING CRK. SNOTEL	9000	5/01/11	115	44.5	20.2	28.6
ST LAWRENCE ALT SNTL	8620	5/01/11	12	3.7	6.5	6.1
SUCKER CREEK SNOTEL	8880	5/01/11	73	18.9	12.9	13.1
SYLVAN LAKE SNOTEL	8420	5/01/11	87	33.2	12.5	23.8
SYLVAN ROAD SNOTEL	7120	5/01/11	47	17.9	.8	8.1
T CROSS RANCH	7900	4/25/11	28	8.8	.0	3.3
TETON PASS W.S.	7740	5/02/11	99	39.4	17.6	27.5
THUMB DIVIDE SNOTEL	7980	5/01/11	72	29.4	7.0	14.9
TIE CREEK SNOTEL	6870	5/01/11	28	8.8	1.0	3.9
TIMBER CREEK SNOTEL	7950	5/01/11	20	6.2	1.8	4.8
TOGWOTEE PASS SNOTEL	9580	5/01/11	108	37.8	20.7	27.9
TOWNSEND CRK SNOTEL	8700	5/01/11	31	9.4	11.3	9.1
TRIPLE PEAK SNOTEL	8500	5/01/11	100	42.3	15.1	23.7
TWO OCEAN SNOTEL	9240	5/01/11	---	49.9	24.4	31.8
TYRELL RANGER STA.	8300	4/27/11	49	14.0	.0	6.1
WEBBER SPRING SNOTEL	9250	5/01/11	---	39.5	22.8	25.1
WHISKEY PARK SNOTEL	8950	5/01/11	116	44.0	26.2	30.5
WILLOW CREEK SNOTEL	8450	5/01/11	114	48.7	20.0	30.6
WINDY PEAK SNOTEL	7900	5/01/11	25	10.0	8.6	4.9
WOLVERINE SNOTEL	7650	5/01/11	43	17.4	.8	7.2
WOOD ROCK G.S.	8440	4/26/11	46	12.7	7.8	11.5
YOUNTS PEAK SNOTEL	8350	5/01/11	69	23.7	10.8	18.1

NOTE: Missing snow depth entries indicate the site has no snow depth sensor or the sensor is malfunctioning. Missing data under Last Year and Average 71-00 indicates the site is new.

Snake River Basin

Snow

The Snake River Basin snow water equivalent (SWE) is above average at 162%. SWE in the Snake River Basin above Jackson Lake is 163% of average. Pacific Creek Basin SWE is 173% of average. Gros Ventre River Basin SWE is 137% of average. SWE in the Hoback River drainage is 160% of average. SWE in the Greys River drainage is 163% of average. In the Salt River area SWE is 182% of average. SWE in the Snake River Basin above Palisades is 162% of average. 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 well above average last month. Monthly precipitation for the basin was 214% of average (157% of last year). Last month's percentages range from 167-288% of average for the 16 reporting stations. Water-year-to-date precipitation is 127% of average for the Snake River Basin (184% of last year). Year-to-date percentages range from 107-142% of average.

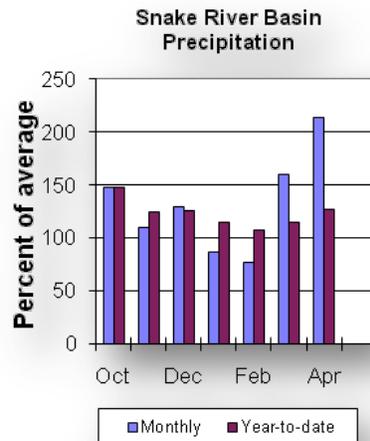
Reservoir

Current reservoir storage is 69% of average for the 3 storage reservoirs in the basin. Grassy Lake storage is about 109% of average (13,800 ac-ft compared to 13,400 last year). Jackson Lake storage is 116% of average (544,500 ac-ft compared to 656,400 ac-ft last year). Palisades Reservoir storage is about 43% of average (375,200 ac-ft compared to 1,390,000 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.

Current reservoir storage is 69% of average for the 3 storage reservoirs in the basin. Grassy Lake storage is about 109% of average (13,800 ac-ft compared to 13,400 last year). Jackson Lake storage is 116% of average (544,500 ac-ft compared to 656,400 ac-ft last year). Palisades Reservoir storage is about 43% of average (375,200 ac-ft compared to 1,390,000 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 May through September are above average for the basin. The Snake near Moran is 1,220,000 ac-ft (145% of average). Snake River above reservoir near Alpine is 3,700,000 ac-ft (146% of average). The Snake near Irwin is 5,100,000 ac-ft (145% of average). The Snake near Heise is 5,450,000 ac-ft (145% of average). Pacific Creek near Moran is 255,000 ac-ft (153% of average). Buffalo Fork above Lava near Moran is 450,000 ac-ft (136% of average). Gros Ventre River at Kelly is 320,000 ac-ft (139% of average). Greys River above Palisades Reservoir is 515,000 ac-ft (145% of average). Salt River near Etna is 540,000 ac-ft (150% of average). See the following page for detailed runoff volumes.



Snake River Basin

Streamflow Forecasts - May 1, 2011

Forecast Pt Forecast Period	<=== Drier ===		Future Conditions Chance of Exceeding * (% AVG.)		=== Wetter ===>		30 Yr Avg (1000AF)
	90% (1000AF)	70% (1000AF)	50% (1000AF)	30% (1000AF)	10% (1000AF)		
Snake R nr Moran (1,2)							
MAY-JUL	955	1060	1100	147	1140	1240	750
MAY-SEP	1060	1170	1220	145	1270	1380	840
Snake R ab Res nr Alpine (1,2)							
MAY-JUL	2800	3040	3150	146	3260	3500	2160
MAY-SEP	3270	3570	3700	146	3830	4130	2530
Snake R nr Irwin (1,2)							
MAY-JUL	3950	4220	4350	146	4480	4750	2980
MAY-SEP	4640	4960	5100	145	5240	5560	3520
Snake R nr Heise (2)							
MAY-JUL	4290	4490	4630	146	4770	4970	3170
MAY-SEP	5060	5290	5450	145	5610	5840	3760
Pacific Ck at Moran							
MAY-JUL	200	230	245	153	260	290	160
MAY-SEP	210	235	255	153	275	300	167
Buffalo Fork ab Lava nr Moran							
MAY-JUL	355	380	400	139	420	445	288
MAY-SEP	395	430	450	136	470	505	330
Gros Ventre R at Kelly							
MAY-JUL	225	255	280	151	305	335	186
MAY-SEP	260	295	320	139	345	380	230
Greys R nr Alpine							
MAY-JUL	400	425	445	148	465	490	300
MAY-SEP	460	495	515	145	535	570	355
Salt R nr Etna							
MAY-JUL	350	400	430	154	460	510	280
MAY-SEP	445	500	540	150	580	635	360

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

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

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

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
GRASSY LAKE	15.2	13.8	13.4	12.7
JACKSON LAKE	847.0	544.5	656.4	471.1
PALISADES	1400.0	375.2	1390.0	862.6

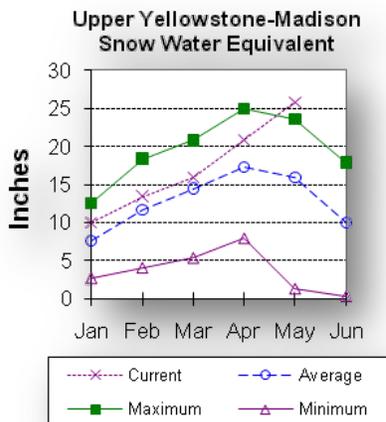
Watershed Snowpack Analysis - May 1, 2011

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
SNAKE above Jackson Lake	6	300	163
PACIFIC CREEK	2	267	173
GROS VENTRE RIVER	2	206	137
HOBACK RIVER	5	338	160
GREYS RIVER	4	232	163
SALT RIVER	5	266	182
SNAKE above Palisades	21	276	162

Upper Yellowstone & Madison River Basins

Snow

Snowfall in these basins has been well above average so far this year. Snow water equivalent (SWE) is at 165% of average in the Madison drainage. SWE in the Yellowstone drainage is at 160% of average. See the "Basin Summary of Snow Course Data" at the front of this report for details.



Precipitation

Last month precipitation in the Madison and Yellowstone drainage was about 229% of average (188% of last year). The 5 reporting stations percentages range from 156-308% of average. Water-year-to-date precipitation is about 138% of average (188% of last year's amount). Year to date percentage ranges from 122-167%.

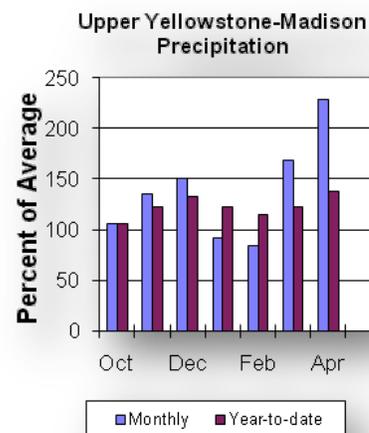
Reservoir

Ennis Lake is storing about 29,200 ac-ft of water (71% of capacity, 86% of average or 83% of

last year's volume). Hebgen Lake is storing about 259,800 ac-ft of water (69% of capacity, 102% of average or 81% 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 May through September are above average for the basins. Yellowstone at Lake Outlet is 1,100,000 ac-ft (143% of average). Yellowstone at Corwin Springs will yield around 2,680,000 ac-ft (143% of average). Yellowstone near Livingston will yield around 3,050,000 ac-ft (142% of average). Hebgen Reservoir inflow is 565,000 ac-ft (127% of average). See the following page for detailed runoff volumes.



Upper Yellowstone & Madison River Basins

Streamflow Forecasts - May 1, 2011

=====							
<=== Drier === Future Conditions === Wetter ===>							
Forecast Pt	Chance of Exceeding *						30 Yr Avg
Forecast Period	90%	70%	50%	30%	10%		
	(1000AF)	(1000AF)	(1000AF) (% AVG.)	(1000AF)	(1000AF)	(1000AF)	
=====							
Yellowstone R at Yellowstone Lake							
MAY-JUL	730	790	830	150	870	930	555
MAY-SEP	980	1050	1100	143	1150	1220	770
Yellowstone R at Corwin Springs							
MAY-JUL	2010	2170	2270	147	2370	2530	1550
MAY-SEP	2370	2550	2680	143	2810	2990	1870
Yellowstone R at Livingston							
MAY-JUL	2260	2450	2580	146	2710	2900	1770
MAY-SEP	2670	2900	3050	142	3200	3430	2150
Hebgen Reservoir Inflow (2)							
MAY-JUL	390	420	440	131	460	490	335
MAY-SEP	505	540	565	127	590	625	445

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

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

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

=====

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

Reservoir	Usable Capacity	***** This Year	***** Usable Storage Last Year	***** Average
ENNIS LAKE	41.0	29.2	35.1	33.8
HEBGEN LAKE	377.5	259.8	319.2	254.6

=====

UPPER YELLOWSTONE & MADISON RIVER BASINS
Watershed Snowpack Analysis - May 1, 2011

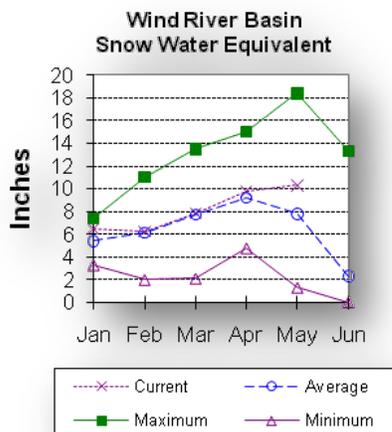
Watershed	Number of Data Sites	This Year as Percent of Last Year	Percent of Average
MADISON RIVER in WY	8	287	165
YELLOWSTONE RIVER in WY	11	270	162

=====

Wind River Basin

Snow

The Wind River Basin above Boysen Reservoir has above average snow water equivalent (SWE 132%) for this time of the year. SWE in the Wind River above Dubois is 156% of average. The Little Wind SWE is 95% of average, and the Popo Agie drainage SWE is about 109% of average. See the "Basin Summary of Snow Course Data" at the front of this report for details.



Precipitation

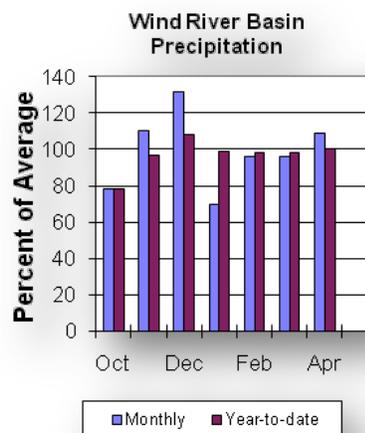
Last month's precipitation in the basin varied from 44-203% of average. Precipitation, for the basin, was about 109% of average from the 8 reporting stations; that is about 77% of last year's amount. Water year-to-date precipitation is 100% of average and about 114% of last year at this time. Year-to-date percentages range from 75-136% of average.

Reservoirs

Current storage varies from 80-97% of average. Current storage in Bull Lake is about 67,200 ac-ft (80% of average) - the reservoir is at 76% of last year. Boysen Reservoir is storing about 97% of average (510,700 ac-ft) - the reservoir is about 91% of last year. Pilot Butte is at 85% of average (21,900 ac-ft) - the reservoir is at 76% 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 May through September runoff period for the basin are above average. Dinwoody Creek near Burris is 121,000 ac-ft (130% of average). The Wind River above Bull Lake Creek is 665,000 ac-ft (130% of average). Bull Lake Creek near Lenore is 185,000 ac-ft (104% of average). Wind River at Riverton will yield around 790,000 ac-ft (130% of average). Little Popo Agie River near Lander is around 51,000 ac-ft (104% of average). South Fork of Little Wind near Fort Washakie will yield around 84,000 ac-ft (104% of average). Little Wind River near Riverton will yield around 305,000 ac-ft (105% of average). Boysen Reservoir inflow will yield around 1,020,000 ac-ft (135% of average). See the following page for detailed runoff volumes.



Wind River Basin

Streamflow Forecasts - May 1, 2011

Forecast Pt	<=== Drier === Future Conditions === Wetter ===>					30 Yr Avg	
	Chance of Exceeding *						
Forecast Period	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)	(1000AF)	
Dinwoody Ck nr Burris							
MAY-JUL	75	81	85	131	89	95	65
MAY-SEP	108	116	121	130	126	134	93
Wind R ab Bull Lake Ck (2)							
MAY-JUL	455	510	550	134	590	645	410
MAY-SEP	555	620	665	130	710	775	510
Bull Lake Ck nr Lenore (2)							
MAY-JUL	121	138	150	104	162	179	144
MAY-SEP	148	170	185	104	200	220	178
Wind R at Riverton (2)							
MAY-JUL	555	620	665	130	710	775	510
MAY-SEP	655	735	790	130	845	925	610
Little Popo Agie R nr Lander							
MAY-JUL	37	42	46	107	50	55	43
MAY-SEP	41	47	51	104	55	61	49
SF Little Wind R nr Fort Washakie							
MAY-JUL	57	67	74	106	81	91	70
MAY-SEP	64	76	84	104	92	104	81
Little Wind R nr Riverton							
MAY-JUL	163	235	280	110	325	395	255
MAY-SEP	180	255	305	105	355	430	290
Boysen Reservoir Inflow (2)							
MAY-JUL	660	805	905	136	1010	1150	665
MAY-SEP	735	905	1020	135	1140	1310	758

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

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

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural volume - actual volume may be affected by upstream water management.

(3) - Median value used in place of average.

WIND RIVER BASIN Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
BULL LAKE	151.8	67.2	88.0	83.9
BOYSEN	596.0	510.7	561.5	526.1
PILOT BUTTE	31.6	21.9	28.7	25.7

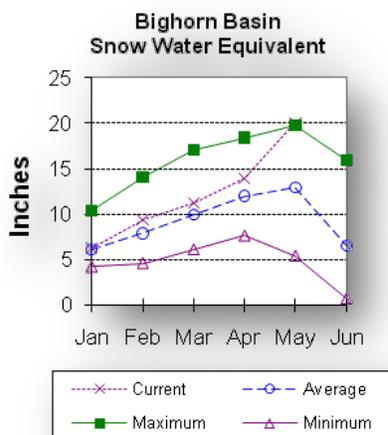
WIND RIVER BASIN Watershed Snowpack Analysis - May 1, 2011

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
WIND RIVER above Dubois	7	260	156
LITTLE WIND	2	88	95
POPO AGIE	7	112	109
WIND above Boysen Resv	14	169	132

Bighorn River Basin

Snow

The Bighorn River Basin SWE above Bighorn Reservoir is well above average at 155%. The Nowood River is at 165% of average. The Greybull River SWE is at 130% of average. Shell Creek SWE is 153% of average. See the "Basin Summary of Snow Course Data" at the front of this report for details.



time and Big Horn Lake is storing 88% 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

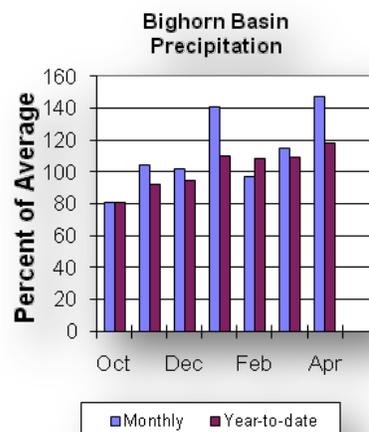
The 50% exceedance forecasts for the May through September runoffs are anticipated to be above average. Boysen Reservoir inflow should yield 1,020,000 ac-ft (135% of average); the Greybull River near Meeteetse should yield around 235,000 ac-ft (121% of average); Shell Creek near Shell should yield around 90,000 ac-ft (130% of average) and the Bighorn River at Kane should yield around 1,510,000 ac-ft (148% of average). See the following page for detailed runoff volumes.

Precipitation

Last month's precipitation was 147% of average (149% of last year). Sites ranged from 52-191% of average for the month. Year-to-date precipitation is 118% of average; that is 152% of last year at this time. Year-to-date percentages, from the 10 reporting stations, range from 82-151%.

Reservoir

Boysen Reservoir is currently storing 510,700 ac-ft (97% of average). Bighorn Lake is now at 104% of average (821,900 ac-ft). Boysen is currently storing 91% of last year volume at this



Bighorn River Basin

Streamflow Forecasts - May 1, 2011

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>					30 Yr Avg (1000AF)
	Chance of Exceeding * 90% 70% 50% 30% 10%					
	(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)
Boysen Reservoir Inflow (2)						
MAY-JUL	660	805	905	136	1010	665
MAY-SEP	735	905	1020	135	1140	758
Greybull R nr Meeteetse						
MAY-JUL	153	166	175	124	184	141
MAY-SEP	188	215	235	121	255	194
Shell Ck nr Shell						
MAY-JUL	60	68	74	130	80	57
MAY-SEP	75	84	90	130	96	69
Bighorn R at Kane (2)						
MAY-JUL	1030	1220	1350	148	1480	915
MAY-SEP	1160	1370	1510	148	1650	1020

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

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

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

BIGHORN RIVER BASIN Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	***** Usable Storage *****		Average
		This Year	Last Year	
BOYSEN	596.0	510.7	561.5	526.1
BIGHORN LAKE	1356.0	821.9	933.8	791.9

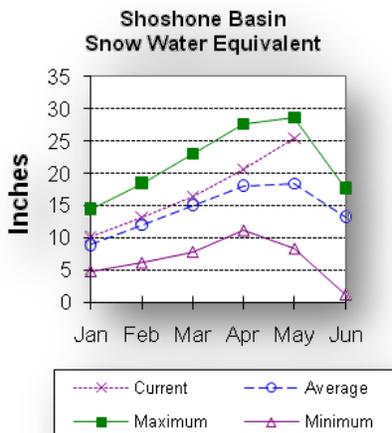
BIGHORN RIVER BASIN Watershed Snowpack Analysis - May 1, 2011

Watershed	Number of Data Sites	This Year as Percent of Last Year		Average
NOWOOD RIVER	5	243		165
GREYBULL RIVER	2	186		130
SHELL CREEK	4	245		153
BIGHORN (Boysen-Bighorn)	11	236		155

Shoshone and Clarks Fork River Basin

Snow

Snowpack in these basins is well above average for this time of year. Snow Water Equivalent (SWE) is 130% of average in the Shoshone River Basin. The Clarks Fork River Basin SWE is 145% of average. See the "Basin Summary of Snow Course Data" at the front of this report for details.



Precipitation

Precipitation for last month was 184% of average (175% of last year). Monthly percentages range from 46-220% of average. The basin year-to-date precipitation is now 133% of average (179% of last year). Year-to-date percentages range from 74-167% of average for the 8 reporting stations.

Reservoir

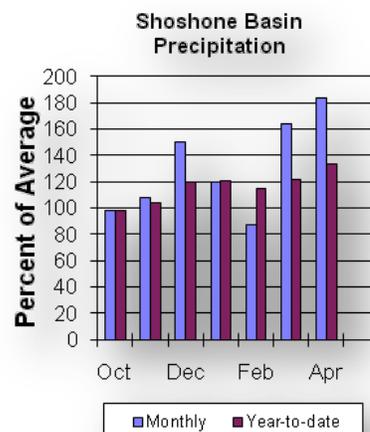
Current storage in Buffalo Bill Reservoir is about 95% of average (77% of last year's storage) - the reservoir is at about 52% of capacity.

Currently, about

335,000 ac-ft are stored in the reservoir compared to 436,100 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 May through September period are expected to be well above average for the basin. The North Fork Shoshone River at Wapiti is 780,000 ac-ft (161% of average). The South Fork of the Shoshone River near Valley is 335,000 ac-ft (131% of average), and the South Fork above Buffalo Bill Reservoir runoff is 325,000 ac-ft (151% of average). The Buffalo Bill Reservoir inflow is expected to yield around 1,070,000 ac-ft (142% of average). The yield for the Clarks Fork of the Yellowstone near Belfry, Montana is expected to be around 800,000 ac-ft (140% of average). See the following page for detailed runoff volumes.



Shoshone & Clarks Fork River Basins

Streamflow Forecasts - May 1, 2011

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=====
<=== Drier === Future Conditions === Wetter ===>
Forecast Pt |===== Chance of Exceeding * =====|
Forecast    | 90%    70%    | 50%    | 30%    10%    | 30 Yr Avg
Period      |(1000AF) (1000AF) |(1000AF) (% AVG.) |(1000AF) (1000AF) |(1000AF)
=====
NF Shoshone R at Wapiti
MAY-JUL     625    675    705    166    735    785    425
MAY-SEP     690    745    780    161    815    870    485

SF Shoshone R nr Valley
MAY-JUL     260    275    290    135    305    320    215
MAY-SEP     300    320    335    131    350    370    255

SF Shoshone R ab Buffalo Bill Res
MAY-JUL     260    290    310    155    330    360    200
MAY-SEP     270    305    325    151    345    380    215

Buffalo Bill Reservoir Inflow (2)
MAY-JUL     845    920    970    144    1020   1090   675
MAY-SEP     930    1010  1070    142    1130   1210   755

Clarks Fk Yellowstone R nr Belfry
MAY-JUL     650    690    720    140    750    790    515
MAY-SEP     715    765    800    140    835    885    570
=====

```

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

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

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

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SHOSHONE & CLARKS FORK RIVER BASINS
Reservoir Storage (1000AF) End of April
=====

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Reservoir          Usable          ***** Usable Storage *****
                   Capacity          This Year    Last Year    Average
=====
BUFFALO BILL          646.6          335.0          436.1          352.2
=====

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SHOSHONE & CLARKS FORK RIVER BASINS
Watershed Snowpack Analysis - May 1, 2011
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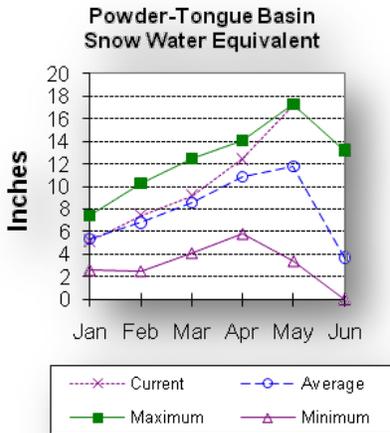
Watershed          Number of          This Year as Percent of
                   Data Sites          Last Year          Average
=====
SHOSHONE RIVER          6          229          130
CLARKS FORK in WY          7          240          145
=====

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Powder and Tongue River Basins

Snow

Snow water equivalent (SWE) in the Upper Tongue River drainage is 135% of average. The Goose Creek drainage is 124% of average. SWE in the Clear Creek drainage is 149% of average. Crazy Woman Creek drainage is 168% of average. Upper Powder River drainage SWE is 167% of average. Powder River Basin SWE in Wyoming is 158% of average. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



Precipitation

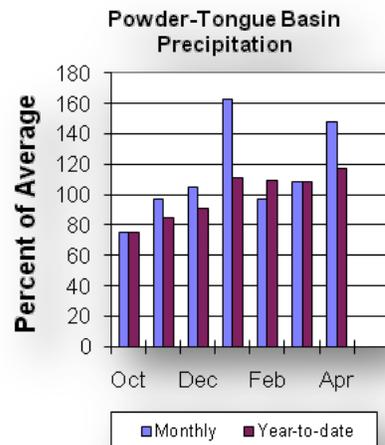
Last month's precipitation was 148% of average for the 9 reporting stations (136% of last year). Monthly percentages range from 77-191% of average. Year-to-date precipitation is 117% of average in the basin; this is 142% of last year at this time. Precipitation for the year ranges from 92-151% of average.

Reservoir

The Tongue River Reservoir currently is storing 191% of average (57,600 ac-ft) compared to 100% at this time last year.

Streamflow

The 50% exceedance forecasts for the May through September period are expected to be well above average for the basins. The yield for Tongue River near Dayton is 127,000 ac-ft (123% of average). Big Goose Creek near Sheridan is 72,000 ac-ft (124% of average). Little Goose Creek near Bighorn is 51,000 ac-ft (128% of average). The Tongue River Reservoir Inflow is 305,000 ac-ft (136% of average). The Middle Fork of the Powder River near Barnum is 18,500 ac-ft (111% of average). The North Fork of the Powder River near Hazelton should yield around 16,400 ac-ft (167% of average). Rock Creek near Buffalo will yield about 29,000 ac-ft (126% of average), and Piney Creek at Kearny should yield about 63,000 ac-ft (131% of average). The Powder River at Moorehead is 285,000 ac-ft (143% of average). The Powder River near Locate is 320,000 ac-ft (146% of average). See the following page for detailed runoff volumes.



Powder & Tongue River Basins

Streamflow Forecasts - May 1, 2011

Forecast Pt	<=== Drier ===		Future Conditions			=== Wetter ===>	
Forecast	Chance of Exceeding * =====						
Period	90%	70%	50%	30%	10%	30 Yr Avg	
(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)	
=====							
Tongue R nr Dayton (2)							
MAY-JUL	85	101	112	124	123	139	90
MAY-SEP	98	115	127	123	139	156	103
Big Goose Ck nr Sheridan							
MAY-JUL	49	58	63	129	68	77	49
MAY-SEP	58	66	72	124	78	86	58
Little Goose Ck nr Bighorn							
MAY-JUL	33	38	41	128	44	49	32
MAY-SEP	42	47	51	128	55	60	40
Tongue River Reservoir Inflow (2)							
MAY-JUL	180	235	270	136	305	360	199
MAY-SEP	210	265	305	136	345	400	225
MF Powder R nr Barnum							
MAY-JUL	12.4	15.5	17.5	112	19.5	23	15.6
MAY-SEP	13.3	16.4	18.5	111	21	24	16.6
NF Powder R nr Hazelton							
MAY-JUL	12.7	14.3	15.4	171	16.5	18.1	9.0
MAY-SEP	13.5	15.2	16.4	167	17.6	19.3	9.8
Rock Ck nr Buffalo							
MAY-JUL	18.8	23	25	132	27	31	18.9
MAY-SEP	22	26	29	126	32	36	23
Piney Ck at Kearny							
MAY-JUL	43	53	59	134	65	75	44
MAY-SEP	46	56	63	131	70	80	48
Powder R at Moorhead							
MAY-JUL	174	225	260	146	295	345	178
MAY-SEP	195	250	285	143	320	375	200
Powder R nr Locate							
MAY-JUL	181	245	290	149	335	400	195
MAY-SEP	200	270	320	146	370	440	220

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

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

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

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	***** This Year	***** Usable Storage Last Year	***** Average
TONGUE RIVER	79.1	50.9	63.7	31.7

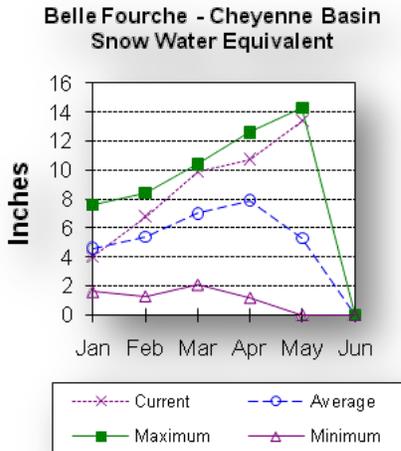
Watershed Snowpack Analysis - May 1, 2011

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
UPPER TONGUE RIVER	10	182	135
GOOSE CREEK	3	174	124
CLEAR CREEK	4	256	149
CRAZY WOMAN CREEK	3	239	168
UPPER POWDER RIVER	4	202	167
POWDER RIVER in WY	8	224	158

Belle Fourche and Cheyenne River Basins

Snow

The Belle Fourche River Basin SWE is 253% of average 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 135% of average or 109% of last year in the Black Hills. There were 3 reporting stations. Monthly percentages range from 100-200%. Year-to-date precipitation is 162% of average and 152% of last year's amount. Yearly percentages range from 150-183% of average.

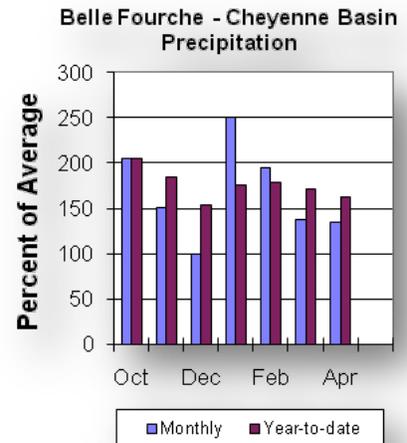
Reservoir

Current reservoir storage is about 112% of average in the basin. Angostura is currently storing 99% of average (112,600 ac-ft), about 92% of capacity. Belle

Fourche reservoir is storing 112% of average (163,300 ac-ft), about 92% of capacity. Deerfield reservoir is storing 110% of average (14,900 ac-ft), about 98% of capacity. Keyhole reservoir is storing 118% of average (136,500 ac-ft), about 70% of capacity. Pactola reservoir is storing 112% of average (53,800 ac-ft), about 98% of capacity. Shadehill reservoir is storing 124% of average (81,000 ac-ft), about 100% 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 May through July period. The Deerfield Reservoir Inflow is expected to be 9,300 ac-ft (245% of average). Pactola Reservoir Inflow is expected to yield around 49,000 ac-ft (269% of average). See the following page for detailed runoff volumes.



Belle Fourche & Cheyenne River Basins

Streamflow Forecasts - May 1, 2011

Forecast Pt	<=== Drier === Future Conditions === Wetter ===>						30 Yr Avg
	Chance of Exceeding *						
Forecast Period	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		(1000AF)
Deerfield Reservoir Inflow (2)							
MAY-JUL	5.8	7.9	9.3	245	10.7	12.8	3.8
Pactola Reservoir Inflow (2)							
MAY-JUL	30	41	49	269	57	68	18.2

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

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

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

BELLE FOURCHE & CHEYENNE RIVER BASINS Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	***** Usable Storage *****		Average
		This Year	Last Year	
ANGOSTURA	122.1	112.6	91.7	113.7
BELLE FOURCHE	178.4	163.3	165.7	145.7
DEERFIELD	15.2	14.9	15.1	13.6
KEYHOLE	193.8	136.5	107.0	115.8
PACTOLA	55.0	53.8	54.9	47.9
SHADEHILL	81.4	81.0	77.9	65.2

BELLE FOURCHE & CHEYENNE RIVER BASINS Watershed Snowpack Analysis - May 1, 2011

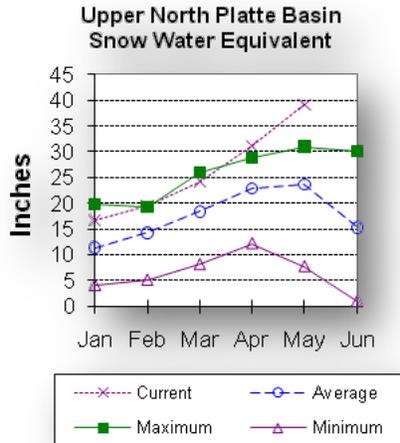
Watershed	Number of Data Sites	This Year as Percent of	
		Last Year	Average
BELLE FOURCHE	5	6157	253

Upper North Platte River Basin

Snow

The SNOTELS and snow courses above Seminoe Reservoir are showing about 166% of average (SWE) for this time of the year. SWE in the drainage area above Northgate is 167% of average at this time. SWE in the Encampment River drainage is about 153% of average. Brush Creek SWE for the year is about 193% of average.

Medicine Bow and Rock Creek drainages SWE are about 145% of average. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



Precipitation

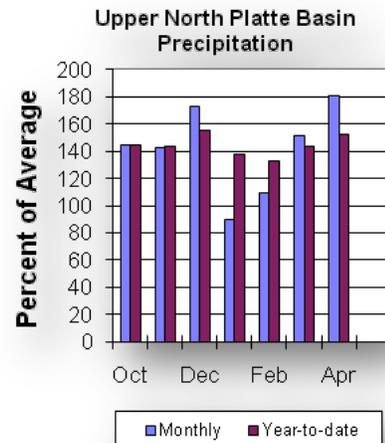
Eight reporting stations show last month's precipitation at 181% of average or 112% of last year's amount. Precipitation varied from 23-116% of average last month. Total water-year-to-date precipitation is about 152% of average for the basin, which is about 134% of last year's amount. Year to date percentage ranges from 110-232% of average.

Reservoirs

Seminoe Reservoir is estimated to be storing 519,500 ac-ft or 51% of capacity. Seminoe Reservoir is also storing about 102% of average for this time of the year and 71% 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 May through September period and are expected to be well above average for the Upper North Platte River Basin. Yield for the North Platte River near Northgate will be around 505,000 ac-ft (220% of average). The Encampment River near Encampment is 280,000 ac-ft (180% of average). Rock Creek near Arlington is 81,000 ac-ft (147% of average). The Sweetwater River near Alcova forecast is for 62,000 ac-ft (94% of average). Seminoe Reservoir inflow should be around 1,500,000 ac-ft (200% of average). See the following table for more detailed information on projected runoff.



Upper North Platte River Basin

Streamflow Forecasts - May 1, 2011

Forecast Pt Forecast Period	Future Conditions					30 Yr Avg (1000AF)
	<=== Drier ===>	Chance of Exceeding *			=== Wetter ===>	
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)	
=====						
North Platte R nr Northgate						
MAY-JUL	370	415	450	220	485	205
MAY-SEP	410	465	505	220	545	230
Encampment R nr Encampment						
MAY-JUL	230	250	265	180	280	147
MAY-SEP	245	265	280	180	295	156
Rock Ck nr Arlington						
MAY-JUL	66	72	77	148	82	52
MAY-SEP	69	76	81	147	86	55
Sweetwater R nr Alcova						
MAY-JUL	34	48	57	93	66	61
MAY-SEP	37	52	62	94	72	66
Seminoe Reservoir Inflow (2)						
MAY-JUL	1090	1260	1380	200	1500	690
MAY-SEP	1180	1370	1500	200	1630	750

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

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

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

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

Reservoir	Usable Capacity	***** Usable Storage *****		
		This Year	Last Year	Average
SEMINOE	1016.7	519.5	728.6	510.4

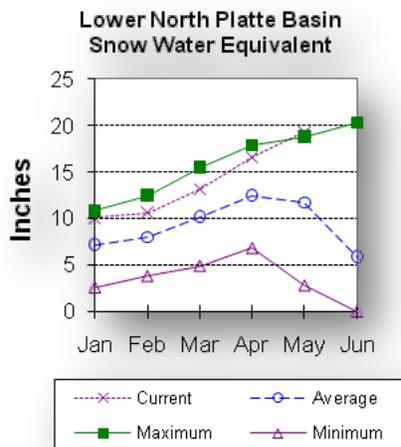
UPPER NORTH PLATTE RIVER BASIN Watershed Snowpack Analysis - May 1, 2011

Watershed	Number of Data Sites	This Year as Percent of	
		Last Year	Average
N PLATTE above Northgate	7	200	167
ENCAMPMENT RIVER	4	161	153
BRUSH CREEK	5	169	193
MEDICINE BOW & ROCK CREEKS	3	154	145
N PLATTE above Seminoe	19	174	166

Lower North Platte River Basin

Snow

SWE for the North Platte River Basin is at 165% of average. The Sweetwater drainage SWE is currently at 116% of average. Deer and LaPrele Creek SWE are at 155% of average. SWE for the North Platte above the Laramie River drainage is 160% of average. SWE for the Laramie River above Laramie is 181% of average. SWE for the Little Laramie River is 173% of average. The Laramie River above mouth, SWE is 177% of average. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



Precipitation

Last month's precipitation was 106% of average or 84% of last year's amount. Of the 8 reporting stations, percentages for the month range from 44-187%. The water year-to-date precipitation for the basin is currently 123% of average (112% of last year). Year-to-date percentages range from 75-208% of average.

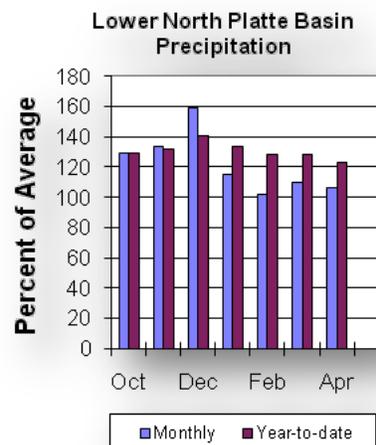
Reservoir

The Lower North Platte River basin reservoir storage is above average at 106%. Reservoir storage is as follows: Alcova 180,500 ac-ft (101% of average); Glendo 422,700 ac-ft (92% of average); Guernsey 22,300 ac-ft (67% of average);

Pathfinder 915,500 ac-ft (123% of average);
 Seminole 519,500 ac-ft (102% of average); and
 Wheatland #2 38,600 ac-ft (65% of average):

Streamflow

The following yields are based on the 50% exceedance forecasts for the May through September period. The Sweetwater River near Alcova is forecast to yield about 62,000 ac-ft (94% of average). Deer Creek at Glenrock is forecast to yield 42,000 ac-ft (150% of average). LaPrele Creek above the reservoir is forecast to yield 27,000 ac-ft (143% of average). North Platte - Alcova to Orin Gain is forecast to yield 185,000 ac-ft (152% of average). North Platte River below Glendo Reservoir is 1,730,000 ac-ft (208% of average), and below Guernsey Reservoir is anticipated to yield around 1,810,000 ac-ft (211% of average). Laramie River near Woods Landing should yield around 189,000 ac-ft (149% of average). The Little Laramie near Filmore should produce about 105,000 ac-ft (172% of average). See the following table for more detailed information on projected runoff.



Lower North Platte, Sweetwater & Laramie River Basins

Streamflow Forecasts - May 1, 2011

Forecast Pt	<=== Drier ===		Future Conditions		=== Wetter ===>		
Forecast	90%		70%		50%		30%
Period	(1000AF)		(1000AF)		(1000AF) (% AVG.)		(1000AF)
=====							
Sweetwater R nr Alcova							
MAY-JUL	34	48	57	93	66	80	61
MAY-SEP	37	52	62	94	72	87	66
Deer Ck at Glenrock							
MAY-JUL	21	33	41	152	49	61	27
MAY-SEP	22	34	42	150	50	62	28
La Prele Ck ab La Prele Reservoir							
MAY-JUL	17.0	22	26	140	30	35	18.6
MAY-SEP	18.1	23	27	143	31	36	18.9
North Platte R-Alcova to Orin Gain							
MAY-JUL	119	149	170	150	191	220	113
MAY-SEP	130	163	185	152	205	240	122
North Platte R bl Glendo Res (2)							
MAY-JUL	1420	1560	1660	208	1760	1900	800
MAY-SEP	1480	1630	1730	208	1830	1980	830
North Platte R bl Guernsey Res (2)							
MAY-JUL	1430	1610	1730	212	1850	2030	815
MAY-SEP	1500	1690	1810	211	1930	2120	860
Laramie R nr Woods							
MAY-JUL	137	157	171	149	185	205	115
MAY-SEP	151	174	189	149	205	225	127
Little Laramie R nr Filmore							
MAY-JUL	81	89	95	170	101	109	56
MAY-SEP	89	99	105	172	111	121	61

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

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

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural volume - actual volume may be affected by upstream water management.

(3) - Median value used in place of average.

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	***** This Year *****	***** Usable Storage Last Year *****	***** Average *****
ALCOVA	184.3	180.5	179.9	178.8
GLENDO	506.4	422.7	473.7	458.2
GUERNSEY	45.6	22.3	26.3	33.3
PATHFINDER	1016.5	915.5	799.2	747.1
SEMINOE	1016.7	519.5	728.6	510.4
WHEATLAND #2	98.9	38.6	90.7	59.7

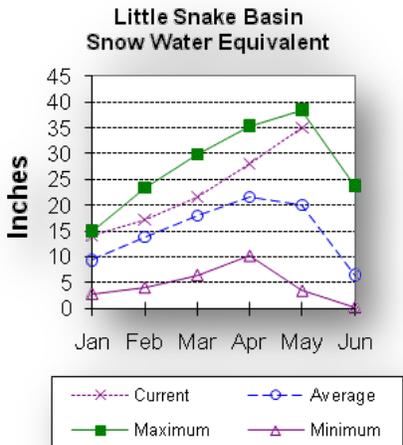
Watershed Snowpack Analysis - May 1, 2011

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
SWEETWATER	4	126	116
DEER & LaPRELE CREEKS	2	134	155
N PLATTE abv Laramie R.	25	168	160
LARAMIE RIVER abv Laramie	10	174	181
LITTLE LARAMIE RIVER	5	188	173
LARAMIE RIVER above mouth	13	181	177
NORTH PLATTE	31	171	165

Little Snake River Basin

Snow

Currently, snow water equivalent (SWE) in the Little Snake River drainage is 174% of average. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



Precipitation

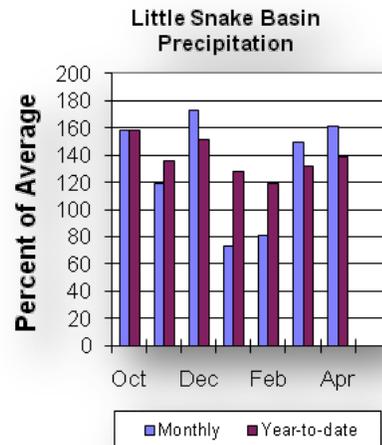
Precipitation across the basin was 161% of average (89% of last year) for the 5 reporting stations. Last month's precipitation ranged from 23-246% of average. The Little Snake River basin water-year-to-date precipitation is currently 139% of average (136% of last year). Year-to-date percentages range from 116-158% of average.

Reservoir

High Savery Dam -Pending

Streamflow

The 50% exceedance forecast for the May through July time frame on the Little Snake River drainage is expected to be well above average this year. The Little Snake River near Slater should yield around 290,000 ac-ft (206% of average). The Little Snake River near Dixon is estimated to yield around 620,000 ac-ft (214% of average). See the following table for more detailed information on projected runoff.



Little Snake River Basin

Streamflow Forecasts - May 1, 2011

```

=====
<=== Drier === Future Conditions === Wetter ===>
=====
Forecast Pt | ===== Chance of Exceeding * ===== |
Forecast    | 90%      70%      | 50%      | 30%      10%      | 30 Yr Avg
Period      | (1000AF) (1000AF) | (1000AF) (% AVG.) | (1000AF) (1000AF) | (1000AF)
=====
Little Snake R nr Slater
APR-JUL     250      285      305      192      330      365      159
MAY-JUL     235      270      290      206      315      350      141

Little Snake R nr Dixon
APR-JUL     610      640      680      206      740      840      330
MAY-JUL     550      580      620      214      680      780      290
=====

```

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

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

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

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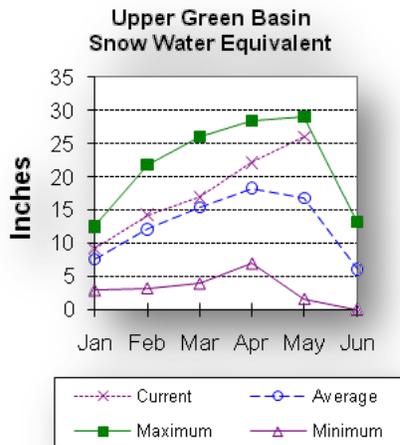
=====
LITTLE SNAKE RIVER BASIN
Watershed Snowpack Analysis - May 1, 2011
=====
Watershed          Number of          This Year as Percent of
                   Data Sites        Last Year          Average
=====
LITTLE SNAKE RIVER          8                180                174
=====

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Upper Green River Basin

Snow

SWE in the Green River Basin above Warren Bridge is about 149% of average. SWE for the West Side of Upper Green River Basin is about 159% of average. Newfork River Basin SWE is now about 143% of average. Big Sandy-Eden Valley Basin is 142% of average. SWE in the Green River Basin above Fontenelle Reservoir is about 155% of average. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



Precipitation

The 11 reporting precipitation sites in the basin were 182% of average last month (135% of last year). Last month's precipitation varied from 52-226% of average. Water year-to-date precipitation is about 126% of average (189% of last year). Year to date

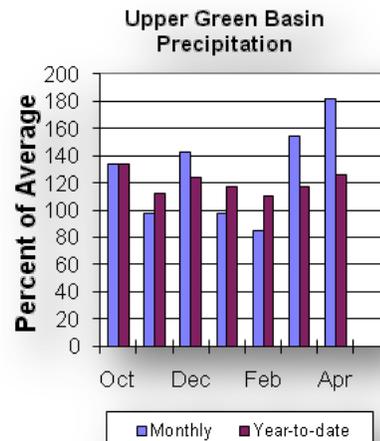
percentage of average ranges from 105-150% for the reporting stations.

Reservoir

Storage in Big Sandy Reservoir is 18,300 ac-ft or 48% of capacity. This is 74% of average. Eden Reservoir - No Report. Fontenelle Reservoir is 137,600 ac-ft or 40% of capacity; 96% of average. This is 93% 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 May through July runoff period in the Upper Green River Basin are forecast to be above average. The yield on the Green River at Warren Bridge is 330,000 ac-ft (134% of average). Pine Creek above Fremont Lake is 120,000 ac-ft (118% of average). New Fork River near Big Piney is 480,000 ac-ft (130% of average). Fontenelle Reservoir Inflow is estimated to be 1,100,000 ac-ft (144% of average), and Big Sandy near Farson is expected to be around 60,000 ac-ft (111% of average). See the following table for more detailed information on projected runoff.



Upper Green River Basin

Streamflow Forecasts - May 1, 2011

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>					30 Yr Avg (1000AF)
	Chance of Exceeding *					
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)	
Green R at Warren Bridge						
APR-JUL	295	320	340	128	360	265
MAY-JUL	285	310	330	134	350	246
Pine Ck ab Fremont Lake						
APR-JUL	105	114	121	116	128	104
MAY-JUL	104	113	120	118	127	102
New Fork R nr Big Piney						
APR-JUL	410	465	505	128	545	395
MAY-JUL	385	440	480	130	520	368
Fontenelle Reservoir Inflow (2)						
APR-JUL	925	1080	1190	138	1310	860
MAY-JUL	830	985	1100	144	1220	765
Big Sandy R nr Farson						
APR-JUL	50	58	63	109	69	58
MAY-JUL	47	55	60	111	66	54

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

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

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

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

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
BIG SANDY	38.3	18.3	23.6	24.8
FONTENELLE	344.8	137.6	126.7	143.5

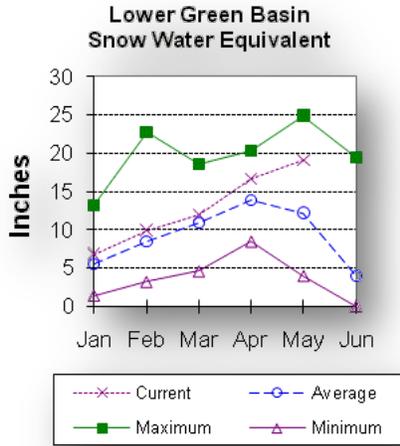
UPPER GREEN RIVER BASIN Watershed Snowpack Analysis - May 1, 2011

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
GREEN above Warren Bridge	4	412	149
UPPER GREEN (West Side)	7	240	159
NEWFORK RIVER	3	241	143
BIG SANDY/EDEN VALLEY	2	227	142
GREEN above Fontenelle	14	268	155

Lower Green River Basin

Snow

SWE in the Green River Basin above Flaming Gorge is 157% of average. SWE in the Hams Fork Basin is 170% of average. Blacks Fork Basin SWE is currently 159% of average. In the Henrys Fork drainage SWE is 138%. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



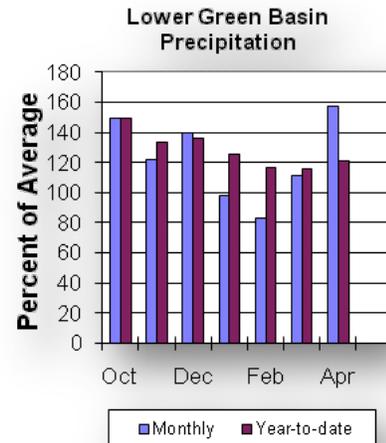
Precipitation

Precipitation for the 3 reporting stations during last month was at 157% of average or 130% of last year. Precipitation ranged from 142-179% of average for the month. The basin year-to-date precipitation is currently 121% of average (177% of last year). Year-to-date percentages range from 167-187% of average.

Reservoirs

Fontenelle Reservoir is currently storing 137,600 ac-ft; this is 96% of average (109% of last year). Flaming Gorge is currently

storing 3,156,000 ac-ft; this is 107% of average (98% of last year). Viva Naughton is currently storing 13,400 ac-ft, 47% of average or 32% 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 May through July runoff period in the Lower Green River Basin are forecast to be above average. The Green River near Green River is forecast to yield about 1,130,000 ac-ft (145% of average). The Blacks Fork near Robertson is forecast to yield 130,000 ac-ft (141% of average). East Fork of Smiths Fork near Robertson is forecast to yield 40,000 ac-ft (143% of average). Hams Fork below Pole Creek near Frontier is forecast to be 110,000 ac-ft (183% of average). The Hams Fork Inflow to Viva Naughton Reservoir is forecast to be 150,000 ac-ft (197% of average). The Flaming Gorge Reservoir inflow will be about 1,500,000 ac-ft (145% of average). See the following table for more detailed information on projected runoff.

Lower Green River Basin

Streamflow Forecasts - May 1, 2011

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>					30 Yr Avg (1000AF)	
	Chance of Exceeding *						
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		
Green R nr Green River, WY (2)							
APR-JUL	1040	1090	1220	139	1360	1490	875
MAY-JUL	950	1000	1130	145	1270	1400	780
Blacks Fk nr Robertson							
APR-JUL	109	124	135	142	147	164	95
MAY-JUL	104	119	130	141	142	159	92
EF of Smiths Fork nr Robertson (2)							
APR-JUL	32	37	41	141	45	52	29
MAY-JUL	31	36	40	143	44	51	28
Hams Fk bl Pole Ck nr Frontier							
APR-JUL	92	104	114	175	122	138	65
MAY-JUL	89	101	110	183	119	134	60
Viva Naughton Reservoir Inflow (2)							
APR-JUL	129	145	159	179	174	184	89
MAY-JUL	120	136	150	197	165	175	76
Flaming Gorge Reservoir Inflow (2)							
APR-JUL	1300	1510	1660	140	1820	2060	1190
MAY-JUL	1140	1350	1500	145	1660	1900	1035

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

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

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

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

Reservoir	Usable	***** Usable Storage *****		
	Capacity	This Year	Last Year	Average
FONTENELLE	344.8	137.6	126.7	143.5
FLAMING GORGE	3749.0	3156.0	3220.0	2952.0
VIVA NAUGHTON RES	42.4	13.4	34.4	28.6

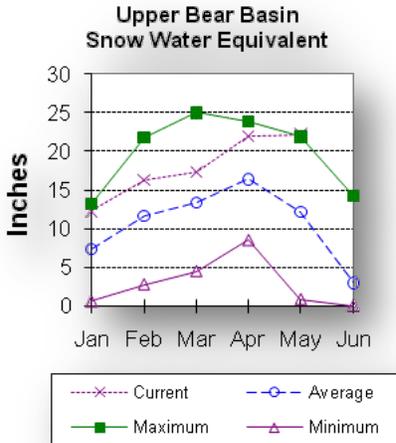
LOWER GREEN RIVER BASIN Watershed Snowpack Analysis - May 1, 2011

Watershed	Number of	This Year as Percent of	
	Data Sites	Last Year	Average
HAMS FORK RIVER	4	263	170
BLACKS FORK	4	195	159
HENRYS FORK	2	163	137
GREEN above Flaming Gorge	24	257	157

Upper Bear River Basin

Snow

Snow water equivalent (SWE) in the Upper Bear River Basin in Utah is estimated to be 203% of average. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is at 164% of average. Bear River Basin SWE, above the Idaho State line, is 182% of average. For more information see "Basin Summary of Snow Course Data" at the beginning of this report.



Precipitation

Precipitation for last month was 176% of average for the 2 reporting stations; this is 129% of the precipitation received last year. The year-to-date precipitation, for the basin, is 125% of average; this is 186% of last year's

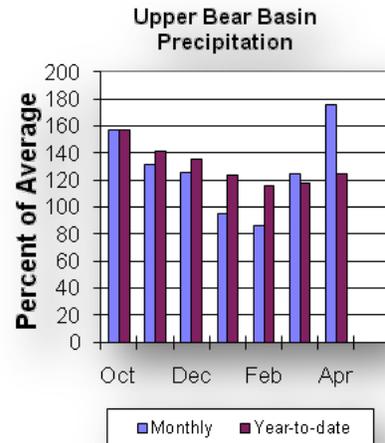
amount.

Reservoir

Storage in Woodruff Narrows reservoir is 44,000 ac-ft (114% of average). Current reservoir storage is about 77% of capacity. Reservoir storage last year at this time was 57,300 ac-ft.

Streamflow

The following 50% exceedance forecasts are for the May through September period. The Bear River near the Utah-Wyoming State Line is 215,000 ac-ft (181% of average). The Bear River above Reservoir near Woodruff is 260,000 ac-ft (213% of average). The Smiths Fork River near Border is 180,000 ac-ft (161% of average). See the following table for more detailed information on projected runoff.



Upper Bear River Basin

Streamflow Forecasts - May 1, 2011

Forecast Pt Forecast Period	Future Conditions					30 Yr Avg (1000AF)
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)	

Bear R nr UT-WY State Line							
APR-JUL	182	196	205	181	215	230	113
APR-SEP	195	210	220	176	230	245	125
MAY-JUL	179	192	200	187	210	220	107
MAY-SEP	192	205	215	181	225	240	119

Bear R ab Res nr Woodruff							
APR-JUL	260	275	290	213	305	320	136
APR-SEP	270	285	300	211	315	330	142
MAY-JUL	220	240	250	216	260	280	116
MAY-SEP	230	250	260	213	270	290	122

Smiths Fk nr Border							
APR-JUL	148	156	161	156	166	174	103
APR-SEP	170	179	186	154	193	200	121
MAY-JUL	142	150	155	163	160	168	95
MAY-SEP	164	173	180	161	187	196	112

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

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

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

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

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
WOODRUFF NARROWS	57.3	44.0	57.3	38.5

UPPER BEAR RIVER BASIN Watershed Snowpack Analysis - May 1, 2011

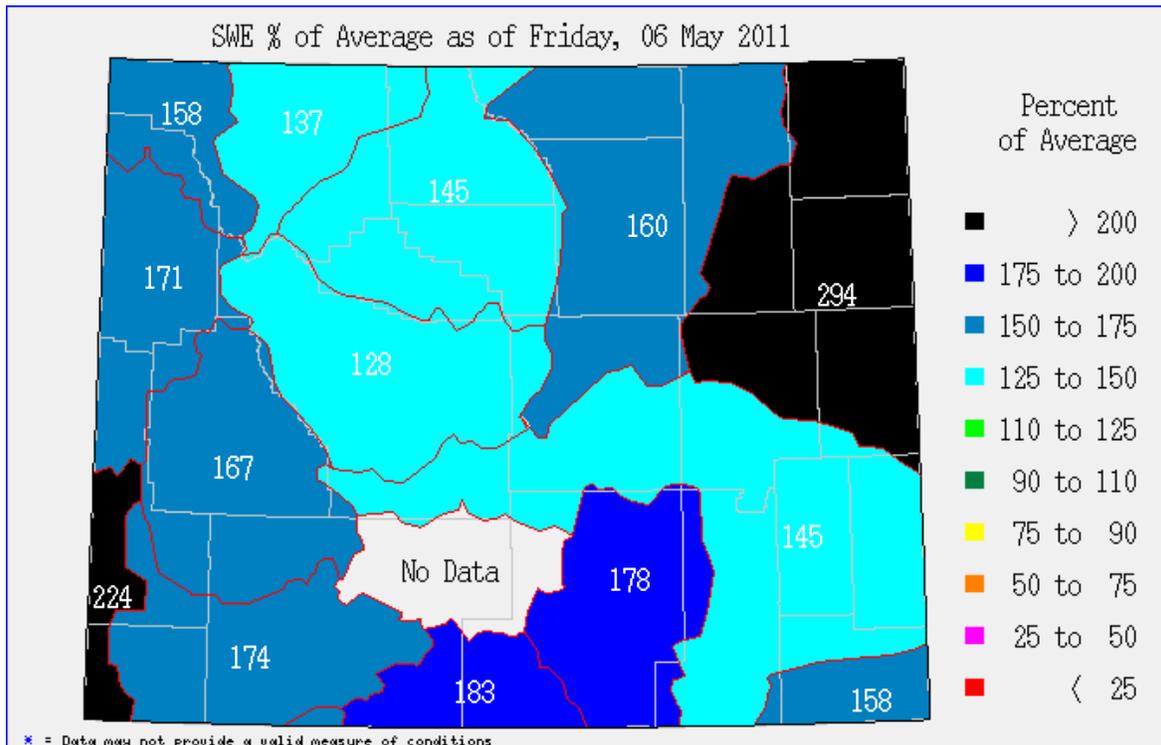
Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
UPPER BEAR RIVER in Utah	7	262	203
SMITHS & THOMAS FORKS	4	242	164
BEAR RIVER abv ID line	8	262	182
NORTHWEST	67	242	151
NORTHEAST	20	225	148
SOUTHEAST	35	180	167
SOUTHWEST	32	239	168

Issued by

Dave White (Chief)
U.S. Department of Agriculture
Natural Resources Conservation Service
Washington D.C.

Released by

J Xavier Montoya
State Conservationist
N R C S
Casper, Wyoming



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

FEDERAL:

United States Department of the Interior (National Park Service)

United States Department of Agriculture (Forest Service)

United States Department of the Interior (Bureau of Reclamation)

United States Department of Commerce NOAA (National Weather Service)

State:

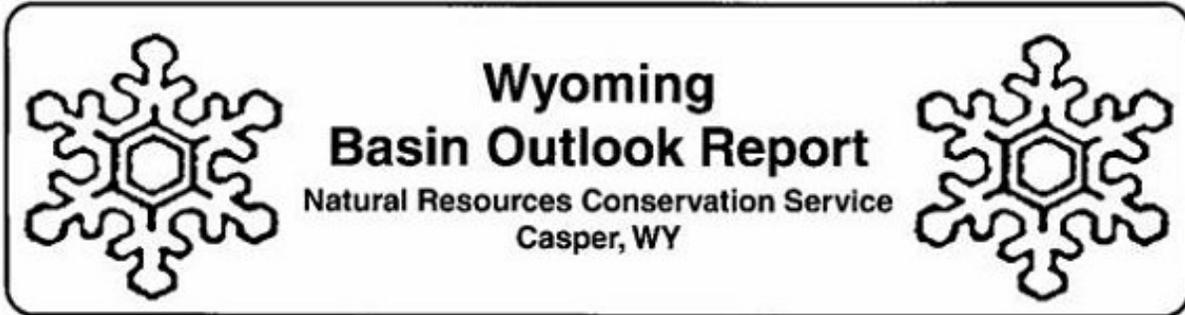
The Wyoming State Engineer's Office

The University of Wyoming

Local:

The City of Cheyenne

The City of Rawlins



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

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

«MailingListID»