United States
Department of
Agriculture

Wyoming Basin Outlook Report
Jan. 1, 2017

**Natural
Resources
Conservation
Service**

Base Camp SNOTEL #314 ID 10F02S established 10/01/80

(In Teton Forest 7.5 miles above Moran, WY)

Basin Outlook Reports
And
Federal - State - Private Cooperative Snow Surveys

For more water supply and resource management information, contact:

Lee Hackleman/Water Supply Specialist
100 East "B" Street Casper, WY 82601 (307) 233-67443

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.

Wyoming Water Supply Outlook Report

General

The snow water equivalent (SWE) across Wyoming is above median on Jan. 3rd at 109%. Monthly precipitation for the basins was from 79-247% of average for an overall average of 163%. The year-to-date precipitation average for Wyoming basins is now at 116% varying from 75-172% of average. Forecasted runoff varies from 82-145% of average across the Wyoming basins for an overall average of 122%. Basin reservoir levels for Wyoming vary from 83-189% of average for an overall average of 123%.

Snowpack

Snow water equivalent (SWE), across Wyoming is above median for Jan. 3rd at 109%. SWE in the Powder River Basin of Wyoming was the lowest at 80%. While SWE in the Sweetwater River Basin is the highest at 144% of median? *See Appendix A for further information.*

Precipitation

Last month's precipitation was above average across the Wyoming Mountains at 163% of average. Year to date precipitation is at 116% of average. The Sweetwater River Basin had the highest precipitation for the month at 247% of average. The Cheyenne River Basin had the lowest precipitation amount at 79% of average. The following table displays the major river basins and their departure from average for last month.

Basin	Departure from average	Basin	Departure from average
Snake River	+75%	Upper North Platte River	+42%
Madison-Gallatin	+35%	Sweetwater River	+147%
Yellowstone River	+66%	Lower North Platte River	+62%
Wind River	+115%	Laramie River	+33%
Bighorn River	+50%	South Platte River	+52%
Shoshone River	+105%	Little Snake River	+23%
Powder River	+55%	Upper Green River	+121%
Tongue River	+49%	Lower Green River	+71%
Belle Fourche River	+37%	Upper Bear River	+57%
Cheyenne River	-21%		

See Appendix B for further information.

Streams

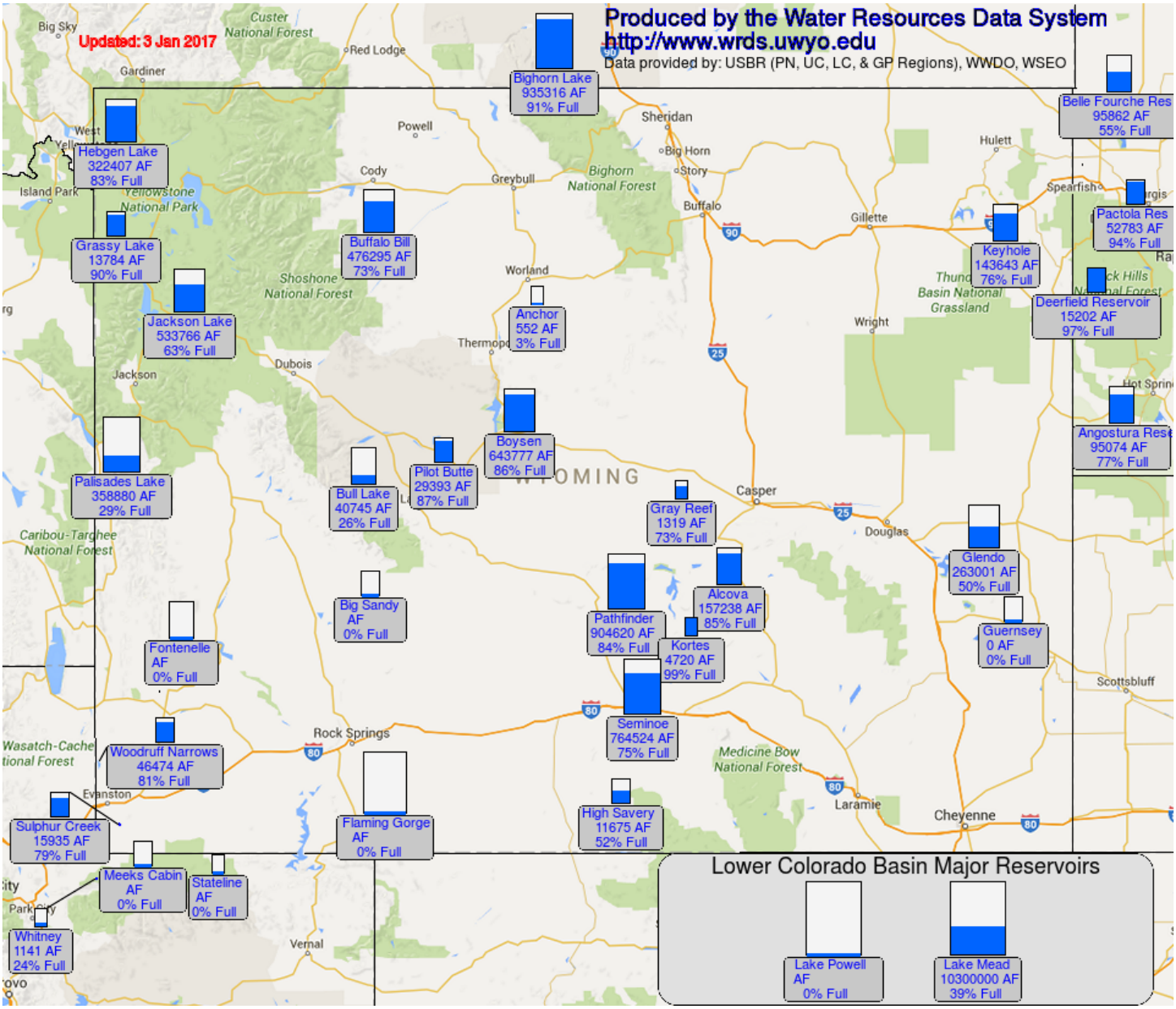
Stream flow yields for June thru September are forecast to be about average statewide over Wyoming at 122%. The Snake River, Madison, and Upper Yellowstone River Basins should yield about 126%, 105% and 130% of average, respectively. Yields from the Wind and Bighorn River Basins should be about 126% and 128% of average, respectively. Yields from the Shoshone and Clarks Fork River Basins of Wyoming should be about 146% and 125% of average, respectively. Yields from the Powder & Tongue River Basins should be about 90% and 91% of average, respectively. Yield for the Cheyenne River Basin should be about 85% of average. Yields for the Upper North Platte, Sweetwater, Lower North Platte, and Laramie Rivers of Wyoming should be about 96%, 134%, 76%, and 96% of average, respectively. Yields for the Little Snake, Green River, and Smith's Fork of Wyoming should be 84%, 127%, and 123% of average respectively. *See Appendix C for further information.*

Reservoirs

Reservoir storage is above average at 123% for the entire state. Reservoirs in the Snake River Basin are below average at 83%. Reservoirs in the Madison-Gallatin Basin are above average at 110%. Reservoirs in the Wind River Basin are above average at 108%. Reservoirs on the Big Horn are above average at 109%. The Buffalo Bill Reservoir on the Shoshone is above average at 134%. The Tongue River Basin Reservoir is above average at 189%. Reservoirs in the Belle Fourche and Cheyenne River Basins are above average in storage at 117 & 111% respectively. Reservoirs on the Upper and Lower North Platte River are above average at 138% and 138% respectively. Reservoirs on the Laramie and Little Snake River basins are at 105% and 99% respectively. Reservoirs on the Upper Green River are above average at 117%. Reservoirs on the Lower Green River Basin are above average at 102%. Reservoir on the Upper Bear River Basin is above average at 170%. *See below for further info.*

Wyoming Reservoir Levels for Jan.1st, 2017

WYOMING	Current (KAF)	Last Yr (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
Alcova	156.9	156.8	155.0	184.3	85%	85%	84%	101%	101%
Bighorn Lake	967.2	912.4	918.3	1356.0	71%	67%	68%	105%	99%
Big Sandy	20.0	18.1	15.6	38.3	52%	47%	41%	128%	116%
Boysen	620.9	572.8	539.6	596.0	104%	96%	91%	115%	106%
Buffalo Bill	470.1	423.4	357.1	646.6	73%	65%	55%	132%	119%
Bull Lake	36.6	70.0	74.7	151.8	24%	46%	49%	49%	94%
Fontenelle	231.3	220.1	199.7	344.8	67%	64%	58%	116%	110%
Glendo	221.7	199.8	209.9	506.4	44%	39%	41%	106%	95%
Grassy Lake	13.2	12.4	11.4	15.2	87%	82%	75%	116%	109%
Guernsey	0.0	12.3	7.3	45.6	0%	27%	16%	0%	168%
High Savery Reservoir	11.4	10.8	11.6	22.4	51%	48%	52%	98%	93%
Jackson Lake	510.7	548.0	417.8	847.0	60%	65%	49%	122%	131%
Kendrick Project	959.1	944.8		1201.7	80%	79%			
Keyhole	142.7	165.7	87.3	193.8	74%	86%	45%	163%	190%
Meeks Cabin Reservoir	7.8	4.1	10.0	32.5	24%	13%	31%	78%	41%
North Platte Project	737.0	669.7		1062.1	69%	63%			
Pathfinder	899.1	796.6	517.6	1016.5	88%	78%	51%	174%	154%
Pilot Butte	26.9	23.9	23.1	31.6	85%	76%	73%	116%	104%
Seminoe	772.4	766.4	583.0	1016.7	76%	75%	57%	132%	131%
Viva Naughton Res	32.4	33.0	32.7	42.4	76%	78%	77%	99%	101%
Wheatland #2	40.6	45.3	40.3	98.9	41%	46%	41%	101%	112%
Woodruff Narrows Reservoir	48.9	37.2	24.2	57.3	85%	65%	42%	202%	154%
Basin-wide Total	5230.8	5029.1	4236.2	7244.1	72%	69%	58%	123%	119%

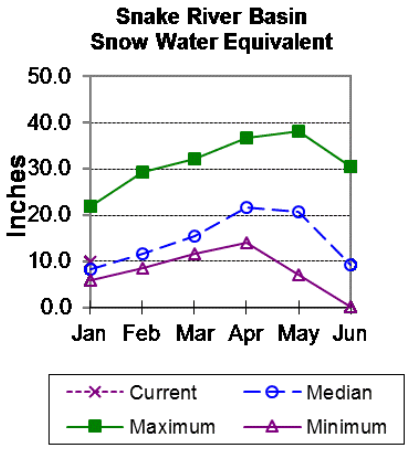

Produced by the Water Resources Data System
http://www.wrds.uwyo.edu
Data provided by: USBR (PN, UC, LC, & GP Regions), WWDO, WSEO
Updated: 3 Jan 2017
Bighorn Lake 935316 AF 91% Full
Belle Fourche Res 95862 AF 55% Full
Hebgen Lake 322407 AF 83% Full
Grassy Lake 13784 AF 90% Full
Buffalo Bill 476295 AF 73% Full
Keyhole 143643 AF 76% Full
Pactola Res 52783 AF 94% Full
Deerfield Reservoir 15202 AF 97% Full
Jackson Lake 533766 AF 63% Full
Anchor 552 AF 3% Full
Boysen 643777 AF 86% Full
Angostura Res 95074 AF 77% Full
Palisades Lake 358880 AF 29% Full
Bull Lake 40745 AF 26% Full
Pilot Butte 29393 AF 87% Full
Gray Reef 1319 AF 73% Full
Glendo 263001 AF 50% Full
Big Sandy AF 0% Full
Pathfinder 904620 AF 84% Full
Alcova 157238 AF 85% Full
Kortes 4720 AF 99% Full
Guernsey 0 AF 0% Full
Fontenelle AF 0% Full
Seminoe 764524 AF 75% Full
Woodruff Narrows 46474 AF 81% Full
Flaming Gorge AF 0% Full
High Savery 11675 AF 52% Full
Sulphur Creek 15935 AF 79% Full
Meeks Cabin AF 0% Full
Stateline AF 0% Full
Whitney 1141 AF 24% Full
Lower Colorado Basin Major Reservoirs
Lake Powell AF 0% Full
Lake Mead 10300000 AF 39% Full
WYOMING
Big Sky
Gardiner
Red Lodge
Custer National Forest
Powell
Sheridan
Big Horn
Story
Hulett
Cody
Greybull
Bighorn National Forest
Buffalo
Gillette
Spearfish
Island Park
Yellowstone National Park
Shoshone National Forest
Worland
Thermopolis
Wright
Dubois
Jackson
Casper
Douglas
Caribou-Targhee National Forest
Rock Springs
Wasatch-Cache National Forest
Evanston
Medicine Bow National Forest
Laramie
Cheyenne
Scottsbluff
Vernal

Snake River Basin

Snow

The Snake River Basin SWE above Palisades is 120% of median (94% last year). SWE in the Snake River Basin above Jackson Lake is 120% of median (104% last year). Pacific Creek Basin SWE is 143% of median (102% last year). Buffalo Fork SWE is 120% of median (81% last year). Gros Ventre River Basin SWE is 116% of median (88% last year). SWE in the Hoback River drainage is 151% of median (99% last year). SWE in the Greys River drainage is 129% of median (92% last year). In the Salt River Basin SWE is 108% of median (83% last year).

See Appendix A at the end of this report for a detailed listing of snow course information.



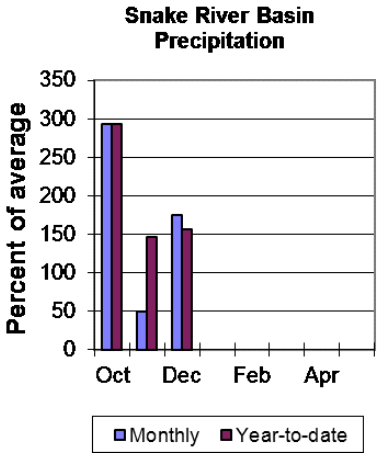
Precipitation

Last month's precipitation for the Snake River Basin was 109% of average (147% last year). Percentages range from 72-196% of average for the 28 reporting stations. Water-year-to-date precipitation is 96% of average for the Snake River Basin (89% last year). Year-to-date percentages range from 77-115% of average.

Reservoirs

Current reservoir storage is 83% of average for the three storage reservoirs in the basin. Grassy Lake storage is about 119% of average (13,800 ac-ft compared to 12,800 last year). Jackson Lake storage is 126% of average (533,800 ac-ft compared to 556,000 ac-ft last year). Palisades Reservoir storage is about 63% of average (552,900 ac-ft compared to 704,300 ac-ft last year).

Detailed reservoir data shown on the following page and in Appendix D.



Streamflow

The 50% exceedance forecasts for April through September are above average for this basin. The Snake near Moran yield is 1,040,000 ac-ft (123% of average). Snake River above Reservoir near Alpine will yield about 3,270,000 ac-ft (131% of average). The Snake near Irwin will yield about 4,430,000 ac-ft (127% of average). The Snake near Heise yield will be about 4,780,000 ac-ft (126% of average). Pacific Creek near Moran yield will be around 250,000 ac-ft (145% of average). Buffalo Fork above Lava near Moran yield will be around 435,000 ac-ft (136% of average). Greys River above Palisades Reservoir yield will be around 445,000 ac-ft (124% of average). Salt River near Etna yield will be around 470,000 ac-ft (127% of average). *See the following page for further information.*

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Snake River Basin
Streamflow Forecasts - January 1, 2017

SNAKE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
		Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast						
Snake R nr Moran[2]								
	APR-JUL	725	850	930	122%	1020	1140	765
	APR-SEP	810	945	1040	123%	1130	1260	845
Snake R ab Reservoir nr Alpine[2]								
	APR-JUL	2210	2590	2850	131%	3110	3490	2170
	APR-SEP	2560	2980	3270	131%	3560	3990	2500
Snake R nr Irwin [2]								
	APR-JUL	2930	3470	3840	128%	4200	4750	3010
	APR-SEP	3390	4010	4430	127%	4860	5480	3500
Snake R nr Heise[2]								
	APR-JUL	3160	3730	4120	127%	4520	5090	3240
	APR-SEP	3680	4330	4780	126%	5230	5890	3780
Pacific Ck at Moran								
	APR-JUL	180	215	240	146%	265	300	164
	APR-SEP	191	225	250	145%	275	315	173
Buffalo Fk ab Lava Ck nr Moran								
	APR-JUL	295	345	380	136%	415	465	280
	APR-SEP	340	395	435	136%	475	530	320
Greys R ab Reservoir nr Alpine								
	APR-JUL	285	340	385	126%	425	480	305
	APR-SEP	330	400	445	124%	490	560	360
Salt R ab Reservoir nr Etna								
	APR-JUL	250	335	390	130%	445	525	300
	APR-SEP	315	410	470	127%	535	630	370

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

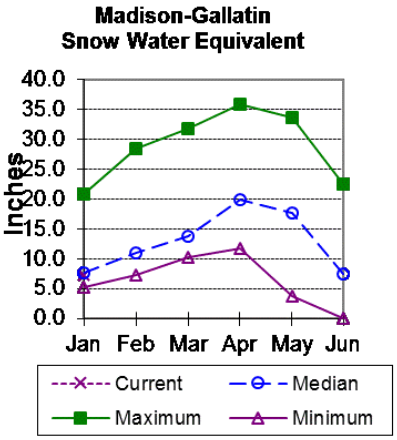
Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Grassy Lake	13.8	12.8	11.6	15.2
Jackson Lake	533.8	556.0	424.1	847.0
Palisades Reservoir	552.9	704.3	882.5	1400.0
Basin-wide Total	1100.5	1273.1	1318.2	2262.2
# of reservoirs	3	3	3	3

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
SNAKE above Jackson Lake	9	123%	108%
PACIFIC CREEK	3	148%	108%
BUFFALO FORK	2	121%	81%
GROS VENTRE RIVER	4	125%	94%
HOBACK RIVER	3	153%	99%
GREYS RIVER	5	130%	92%
SALT RIVER	3	109%	83%
SNAKE RIVER BASIN	26	122%	97%

Madison-Gallatin Rivers Basin

Snow

In the Madison-Gallatin drainage, SWE is 96% of median (97% last year). *See Appendix A at the end of this report for a detailed listing of snow course information.*

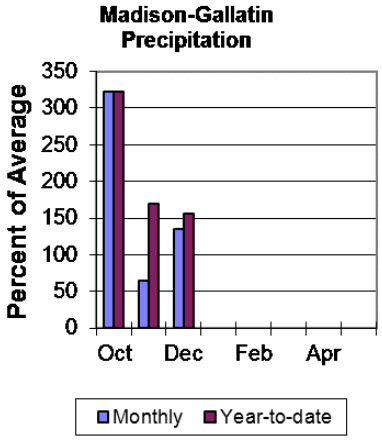


Precipitation

Last month precipitation in the Madison-Gallatin drainage was 75% of average (121% last year). The six reporting stations percentages range from 65-83% of average. Water-year-to-date precipitation is about 83% of average, which was 71% last year. Year to date percentage ranges from 78-89%.

Reservoirs

Ennis Lake is storing about 28,500 ac-ft of water (70% of capacity, 95% of average or 95% last year). Hebgen Lake is storing about 316,700 ac-ft of water (84% of capacity, 112% of average, 112% last year). *Detailed reservoir data shown below & in Appendix D.*



Streamflow

The 50% exceedance forecast for April through September is above average for the basin. Hebgen Reservoir inflow will be about 495,000 ac-ft (105% of average). *See below for detailed runoff volumes.*

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Madison-Gallatin River Basins
Streamflow Forecasts - January 1, 2017

Forecast Exceedance Probabilities for Risk Assessment
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	290	350	390	105%	425	485	370
	APR-SEP	375	445	495	105%	540	610	470

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

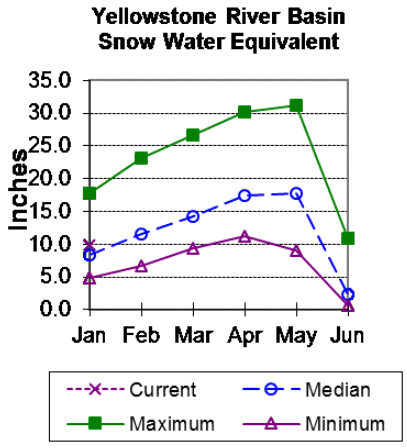
Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Ennis Lake	28.5	28.5	30.0	41.0
Hebgen Lake	316.7	318.5	283.2	378.8
Basin-wide Total	345.2	347.0	313.2	419.8
# of reservoirs	2	2	2	2

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
MADISON-GALLATIN RIVER BASINS	7	97%	102%

Yellowstone River Basin

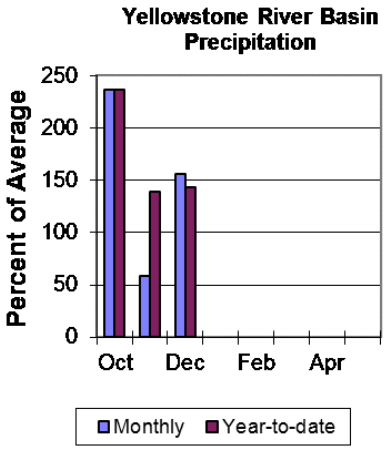
Snow

SWE in the Yellowstone River Basin is 117% of median (97% last year). SWE in the Yellowstone River Drainage in WY is 114% of median (95% last year). SWE in the Clarks Fork Drainage of the Yellowstone River Basin in Wyoming is 115% of median (98% last year). *See Appendix A at the end of this report for a detailed listing of snow course information.*



Precipitation

Last month's precipitation in the Yellowstone River Basin was 83% of average (125% last year). The 16 reporting stations percentages range from 53-196% of average. Water-year-to-date precipitation is 90% of average, which was 94% last year. Year to date percentages range from 77-174%.



Reservoirs

No reservoir data

Streamflow

The 50% exceedance forecasts for April through September are above average for the basin. Yellowstone River at Lake Outlet will yield around 1,010,000 ac-ft (131% of average). Yellowstone at Corwin Springs will yield around 2,430,000 ac-ft (129% of average). Yellowstone near Livingston will yield around 2,790,000 ac-ft (130% of average). Clarks Fork of the Yellowstone near Belfry will yield around 685,000 ac-ft (125% of average). *See the following for further information.*

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Yellowstone River Basin

Streamflow Forecasts - January 1, 2017

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed 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	585	685	750	130%	820	915	575
	APR-SEP	790	920	1010	131%	1100	1240	770
Yellowstone R at Corwin Springs								
	APR-JUL	1660	1890	2050	129%	2200	2430	1590
	APR-SEP	1970	2250	2430	129%	2620	2890	1880
Yellowstone R at Livingston								
	APR-JUL	1890	2160	2350	131%	2540	2820	1800
	APR-SEP	2240	2570	2790	130%	3010	3330	2140
Clarks Fk Yellowstone R nr Belfry[2]								
	APR-JUL	480	565	625	123%	685	775	510
	APR-SEP	525	620	685	125%	750	845	550

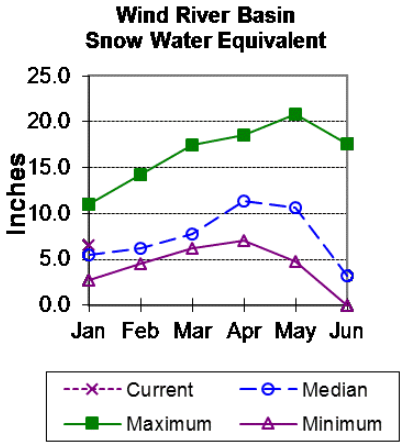
1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
YELLOWSTONE RIVER in WY	8	114%	95%
CLARKS FORK in WY	8	115%	98%

Wind River Basin

Snow

Wind River Basin above Boysen Reservoir SWE is 119% of median (78% last year). SWE in the Wind River above Dubois is 116% of median (85% last year). Little Wind River SWE above Riverton is 100% of median (62% last year), and Popo Agie drainage SWE is 128% of median (69% last year). *See Appendix A at the end of this report for a detailed listing of snow course information.*



Precipitation

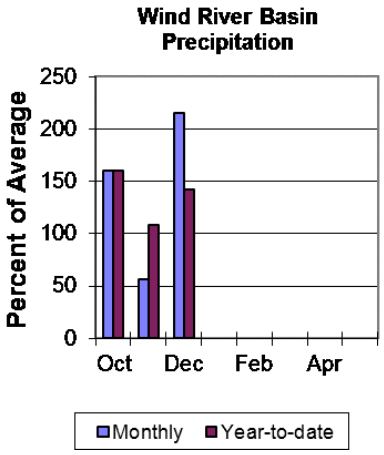
Last month's basin's precipitation varied from 94-203% of average. Precipitation for the basin was 151% of average (191% last year) from the 11 reporting stations. Water year-to-date precipitation is 113% of average and was 98% last year at this time. Year-to-date percentages range from 88-166% of average.

Reservoirs

Current storage in Bull Lake is 39,800 ac-ft (53% of average) (70,500 ac-ft or 94% last year). Boysen Reservoir is storing (604,600 ac-ft) (116% of average or 561,900 ac-ft last year). Pilot Butte is at 111% of average (25,600 ac-ft) (23,800 ac-ft or 103% last year). *Detailed reservoir data shown on the following page and in Appendix D.*

Streamflow

The 50% exceedance forecasts for the April through September runoff period are above average. Dinwoody Creek near Burris should yield around 102,000 ac-ft (111% of average). The Wind River above Bull Lake Creek will yield around 615,000 ac-ft (126% of average). Bull Lake Creek near Lenore will yield around 189,000 ac-ft (112% of average). Wind River at Riverton will yield around 690,000 ac-ft (125% of average). Little Popo Agie River near Lander should yield around 56,000 ac-ft (114% of average). South Fork of Little Wind near Fort Washakie will yield around ac-ft (% of average). Little Wind River near Riverton will yield around 335,000 ac-ft (114% of average). Boysen Reservoir inflow will yield around 835,000 ac-ft (126% of average). *See the following page for detailed runoff volumes.*



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Wind River Basin

Streamflow Forecasts - January 1, 2017

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed 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	59	68	74	112%	80	88	66
	APR-SEP	85	95	102	111%	109	119	92
Wind R Ab Bull Lake Ck								
	APR-JUL	400	500	570	125%	635	735	455
	APR-SEP	435	540	615	126%	690	800	490
Bull Lake Ck nr Lenore								
	APR-JUL	120	141	156	112%	170	191	139
	APR-SEP	146	172	189	112%	205	230	169
Wind R at Riverton								
	APR-JUL	415	525	600	126%	675	785	475
	APR-SEP	485	610	690	125%	775	900	550
Little Popo Agie R nr Lander								
	APR-JUL	30	42	50	119%	58	69	42
	APR-SEP	35	48	56	114%	64	77	49
Little Wind R nr Riverton								
	APR-JUL	146	240	305	113%	370	470	270
	APR-SEP	167	270	335	114%	405	505	295
Boysen Reservoir Inflow								
	APR-JUL	425	635	775	127%	915	1120	610
	APR-SEP	465	685	835	126%	985	1210	665

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

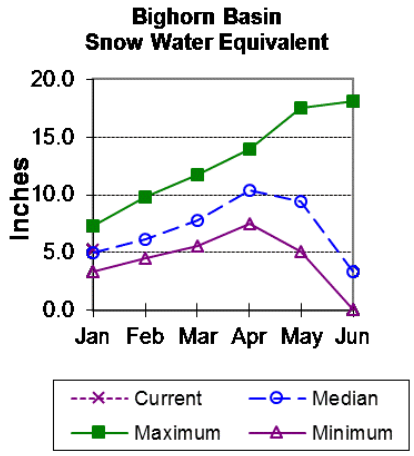
Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Bull Lake	39.8	70.5	75.2	151.8
Boysen	604.6	561.9	521.7	596.0
Pilot Butte	25.6	23.8	23.1	31.6
Basin-wide Total	670.0	656.2	620.0	779.4
# of reservoirs	3	3	3	3

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
WIND above Dubois	2	116%	85%
LITTLE WIND	2	101%	62%
POPO AGIE	4	128%	69%
WIND RIVER BASIN	9	119%	78%

Bighorn River Basin

Snow

The Bighorn River Basin SWE above Bighorn Reservoir is 105% of median (59% last year). The Nowood River SWE is 72% of median (58% last year). The Greybull River SWE is 148% of median (5% last year). Shell Creek SWE is at 115% of median (50% last year). *See Appendix A at the end of this report for a detailed listing of snow course information.*

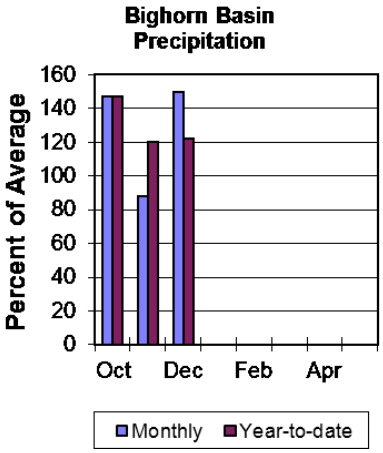


Precipitation

Last month's precipitation was 87% of average (173% last year). Sites ranged from 51-127% of average for the month. Year-to-date precipitation is 95% of average (105% last year). Year-to-date percentages, from the 18 reporting stations, range from 75-150%.

Reservoirs

Boysen Reservoir is currently storing 604,600 ac-ft (121% of average). Bighorn Lake is now at 847,500 ac-ft (100% of average). Boysen was at 561,900 ac-ft or 137% of average last year at this time and Big Horn Lake was at 883,600 ac-ft or 112% last year. *Detailed reservoir data shown below and in Appendix D.*



Streamflow

The 50% exceedance forecasts for the April through September runoffs are above average. Boysen Reservoir inflow should yield 835,000 ac-ft (126% of average); the Greybull River near Meeteetse should yield around 215,000 ac-ft (121% of average); Shell Creek near Shell should yield around 69,000 ac-ft (105% of average) and the Bighorn River at Kane should yield around 1,160,000 ac-ft (128% of average). *See the following for detailed runoff.*

Data Current as of: 1/6/2017 1:57:22 PM

Bighorn River Basin
Streamflow Forecasts - January 1, 2017

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

BIGHORN RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Boysen Reservoir Inflow								
	APR-JUL	425	635	775	127%	915	1120	610
	APR-SEP	465	685	835	126%	985	1210	665
Greybull R nr Meeteetse								
	APR-JUL	106	139	161	123%	183	215	131
	APR-SEP	152	191	215	121%	245	285	177
Shell Ck nr Shell								
	APR-JUL	41	50	57	104%	64	73	55
	APR-SEP	51	61	69	105%	76	86	66
Bighorn R at Kane								
	APR-JUL	595	890	1090	130%	1290	1580	840
	APR-SEP	635	950	1160	128%	1380	1700	905

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

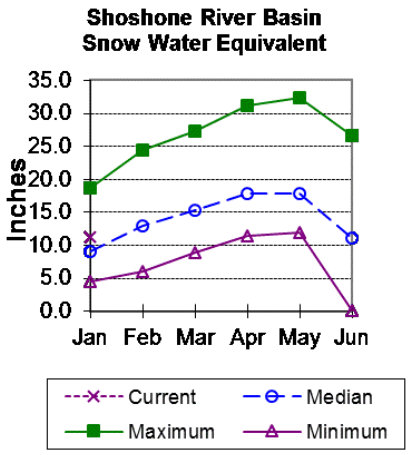
Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Boysen	604.6	561.9	521.7	596.0
Bighorn Lake	919.1	883.6	871.2	1356.0
Basin-wide Total	1523.7	1445.5	1392.9	1952.0
# of reservoirs	2	2	2	2

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
NOWOOD RIVER	4	73%	58%
GREYBULL RIVER	2	148%	95%
SHELL CREEK	3	115%	50%
BIGHORN RIVER BASIN	10	105%	59%

Shoshone River Basin

Snow

Snowpack in this basin is above median for this time of year. Snow Water Equivalent (SWE) is 123% of median (94% last year)in the Shoshone River Basin. *See Appendix A at the end of this report for a detailed listing of snow course information.*

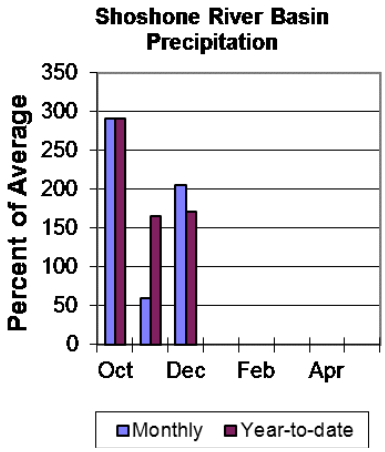


Precipitation

Precipitation for last month was 80% of average (132% last year). Monthly percentages range from 53-101% of average. The basin year-to-date precipitation is now 103% of average (97% last year). Year-to-date percentages range from 84-155% of average for the 9 reporting stations.

Reservoirs

Current storage in Buffalo Bill Reservoir is about 134% of average (119 last year) – the reservoir is at about 74% of capacity. Currently, about 475,900 ac-ft are stored in the reservoir compared to 424,700 ac-ft last year. *Detailed reservoir data shown on the following page and in Appendix D.*



Streamflow

The 50% exceedance forecasts for the April through September period are above average for the basin. The North Fork Shoshone River at Wapiti will yield around 705,000 ac-ft (137% of average). The South Fork of the Shoshone River near Valley will yield around 320,000 ac-ft (131% of average), and the South Fork above Buffalo Bill Reservoir runoff will yield around 300,000 ac-ft (150% of average). The Buffalo Bill Reservoir inflow will yield around 1,090,000 ac-ft (146% of average). *See the following for detailed runoff volumes.*

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Shoshone River Basin

Streamflow Forecasts - January 1, 2017

Forecast Exceedance Probabilities for Risk Assessment
Chance 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	535	595	635	138%	675	735	460
	APR-SEP	605	665	705	137%	750	810	515
SF Shoshone R nr Valley								
	APR-JUL	230	255	275	128%	295	325	215
	APR-SEP	265	300	320	131%	345	375	245
SF Shoshone R ab Buffalo Bill Reservoir								
	APR-JUL	220	260	290	150%	320	360	193
	APR-SEP	225	270	300	150%	330	375	200
Buffalo Bill Reservoir Inflow[2]								
	APR-JUL	770	900	985	146%	1070	1200	675
	APR-SEP	855	995	1090	146%	1180	1320	745

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

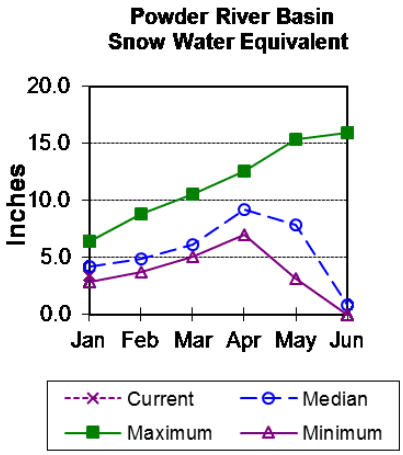
Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Buffalo Bill	475.9	424.7	355.5	646.6
Basin-wide Total	475.9	424.7	355.5	646.6
# of reservoirs	1	1	1	1

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
SHOSHONE RIVER BASIN	5	123%	94%

Powder River Basin

Snow

Powder River SWE is 82% of median (56% last year). Upper Powder River drainage is 72% of median (58% last year). SWE in the Clear Creek drainage is 98% of median (54% last year). Crazy Woman Creek drainage SWE is 52% of median (48% last year). *See Appendix A at the end of this report for a detailed listing of snow course information.*



Precipitation

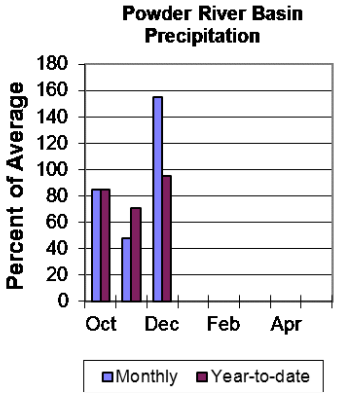
Last month's precipitation was 75% of average (199% last year) for the nine reporting stations. Monthly percentages range from 37-103% of average. Year-to-date precipitation is 89% of average in the basin (108% last year). Precipitation for the year ranges from 75-122% of average.

Reservoirs

No reservoir data for the basin.

Streamflow

The 50% exceedance forecasts for the April through September period are below average for the basin. The Middle Fork of the Powder River near Barnum should yield around 13,900 ac-ft (82% of average). The North Fork of the Powder River near Hazelton should yield around 8,600 ac-ft (87% of average). Rock Creek near Buffalo will yield about 22,000 ac-ft (100% of average), and Piney Creek at Kearny should yield about 47,000 ac-ft (100% of average). The Powder River at Moorhead will yield around 176,000 ac-ft (90% of average). The Powder River near Locate will yield around 198,000 ac-ft (90% of average). *See the following for detailed runoff volumes.*



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Powder River Basin
Streamflow Forecasts - January 1, 2017

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed 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	6.1	10.3	13.1	81%	15.9	20	16.1
	APR-SEP	6.7	11	13.9	82%	16.8	21	17
NF Powder R nr Hazelton								
	APR-JUL	4.7	6.6	7.9	87%	9.3	11.2	9.1
	APR-SEP	5.2	7.2	8.6	87%	10	12	9.9
Rock Ck nr Buffalo								
	APR-JUL	11.8	15.7	18.3	98%	21	25	18.6
	APR-SEP	15	19.2	22	100%	25	29	22
Piney Ck at Kearny								
	APR-JUL	20	34	44	100%	53	67	44
	APR-SEP	23	37	47	100%	57	71	47
Powder R at Moorehead								
	APR-JUL	17.3	102	160	90%	215	300	177
	APR-SEP	31	118	176	90%	235	320	196
Powder R nr Locate								
	APR-JUL	25	118	181	91%	245	340	199
	APR-SEP	32	131	198	90%	265	365	220

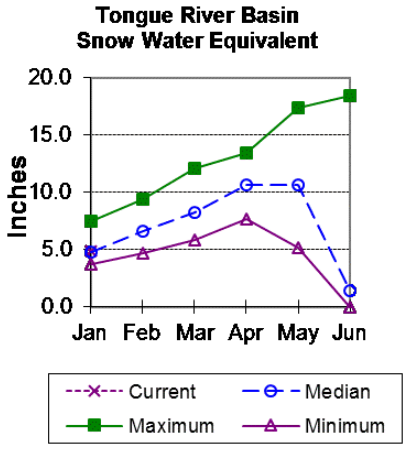
1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
UPPER POWDER RIVER	4	73%	58%
CLEAR CREEK	2	96%	54%
CRAZY WOMAN CREEK	1	56%	48%
POWDER RIVER BASIN	6	82%	56%

Tongue River Basin

Snow

Upper Tongue River SWE is 104% of median (47% last year). The Goose Creek drainage SWE is 105% of median (38% last year). *See Appendix A at the end of this report for a detailed listing of snow course information.*

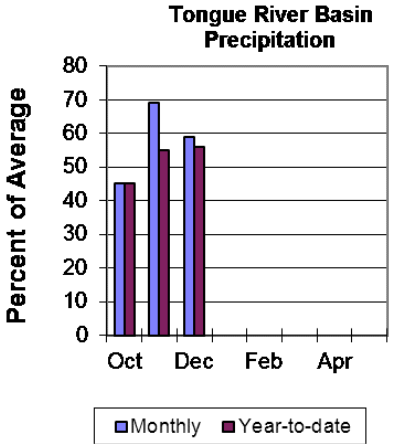


Precipitation

Last month's precipitation was 65% of average (184% last year) for 12 reporting stations. Monthly percentages range from 36-110% of average. Year-to-date precipitation is 90% of average in the basin (107% last year). Precipitation for the year ranges from 77-128% of average.

Reservoirs

The Tongue River Reservoir currently is storing 49,900 ac-ft, while last year's storage was 49,000 ac-ft. The Tongue River Reservoir is at 189% of average for this time of year or 63% of capacity. *Detailed reservoir data shown below and in Appendix D.*



Streamflow

The 50% exceedance forecasts for the April through September period are below average for the basin. The yield for Tongue River near Dayton will be around 89,000 ac-ft (91% of average). Big Goose Creek near Sheridan will yield around 49,000 ac-ft (91% of average). Little Goose Creek near Bighorn will yield around 36,000 ac-ft (92% of average). The Tongue River Reservoir Inflow will be around 210,000 ac-ft (98% of average). *See below for detailed runoff volumes.*

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Tongue River Basin
Streamflow Forecasts - January 1, 2017

		Forecast Exceedance Probabilities for Risk Assessment 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								
	APR-JUL	44	64	78	91%	92	112	86
	APR-SEP	53	75	89	91%	104	126	98
Big Goose Ck nr Sheridan								
	APR-JUL	21	33	42	91%	50	62	46
	APR-SEP	29	41	49	91%	58	70	54
Little Goose Ck nr Bighorn								
	APR-JUL	15.8	24	29	94%	34	42	31
	APR-SEP	22	31	36	92%	42	50	39
Tongue River Reservoir Inflow								
	APR-JUL	82	146	189	98%	230	295	193
	APR-SEP	97	164	210	98%	255	325	215

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

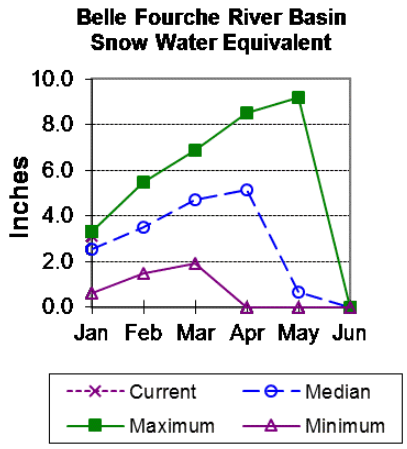
Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Tongue River Res	49.9	49.0	26.4	79.1
Basin-wide Total	49.9	49.0	26.4	79.1
# of reservoirs	1	1	1	1

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
GOOSE CREEK	2	104%	38%
TONGUE RIVER BASIN	6	104%	47%

Belle Fourche River Basin

Snow

Belle Fourche River Basin SWE is 123% of median (73% last year). *See Appendix A at the end of this report for a detailed listing of snow course information.*

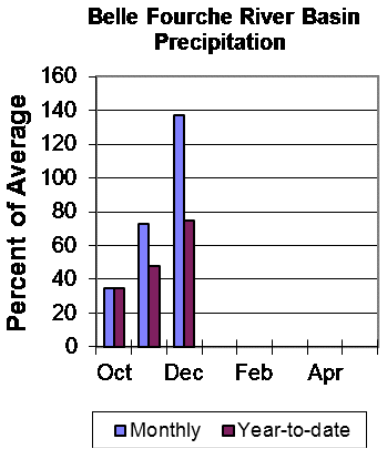


Precipitation

Precipitation for last month was 31% of average (200% last year) in the Black Hills for the 5 reporting stations. Year-to-date precipitation is 77% of average (116% last year).

Reservoirs

Belle Fourche Reservoir is storing 91% of average (92,000 ac-ft), about 52% of capacity. Keyhole Reservoir is storing 164% of average (143,300 ac-ft), about 74% of capacity. Shadehill Reservoir is storing 84% of average (37,200 ac-ft), about 46% of capacity. *Detailed reservoir data shown below and in Appendix D.*



Streamflow

There are no streamflow forecast points for the basin.

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Belle Fourche River Basin - January 1, 2017

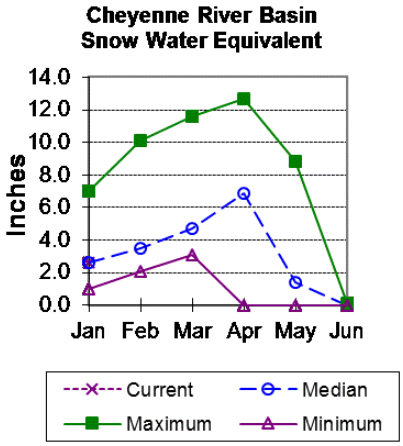
Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Belle Fourche	92.0	141.8	101.2	178.4
Keyhole	143.3	166.1	87.4	193.8
Shadehill	37.2	53.4	44.1	81.4
Basin-wide Total	272.5	361.3	232.7	453.6
# of reservoirs	3	3	3	3

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
BELLE FOURCHE RIVER BASIN	3	110%	68%

Cheyenne River Basin

Snow

Cheyenne River Basin SWE is 102% of median (72% last year). *See Appendix A at the end of this report for a detailed listing of snow course information.*

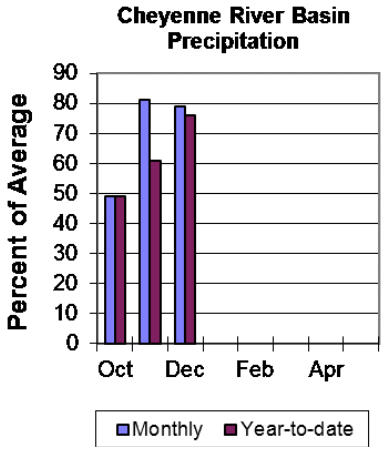


Precipitation

Precipitation for last month was 37% of average (154% last year) in the Black Hills. There were three reporting stations. Year-to-date precipitation is 68% of average (93% last year).

Reservoirs

Angostura is currently storing 110% of average (89,200 ac-ft), about 73% of capacity. Deerfield reservoir is storing 111% of average (15,000 ac-ft), about 99% of capacity. Pactola Reservoir is storing 113% of average (51,700 ac- ft), about 94% of capacity. *Detailed reservoir data shown below and in Appendix D.*



Streamflow

The following runoff values are the 50% exceedance forecasts for the April through July period. The Deerfield Reservoir Inflow yield is around 4,800 ac-ft (92% of average). Pactola Reservoir Inflow yield is around 18,300 ac-ft (83% of average). *See the following for detailed runoff volumes.*

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Cheyenne River Basin
Streamflow Forecasts - January 1, 2017

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed 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	1.16	4	5.9	95%	7.8	10.6	6.2
	APR-JUL	1.95	3.5	4.8	92%	6.3	8.9	5.2
Pactola Reservoir Inflow								
	MAR-JUL	-1.91	11.7	21	84%	30	44	25
	APR-JUL	4.8	11.8	18.3	83%	26	41	22

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

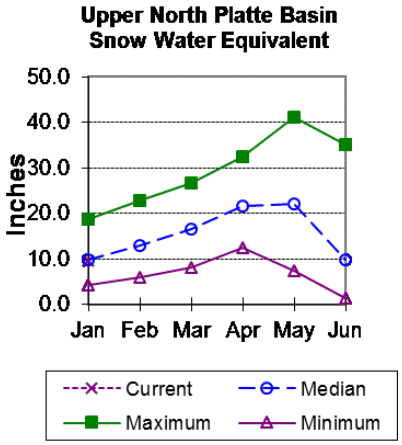
Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Angostura	89.2	103.0	81.1	122.1
Deerfield	15.0	14.3	13.5	15.2
PactoLa	51.7	49.8	45.6	55.0
Basin-wide Total	155.9	167.1	140.2	192.3
# of reservoirs	3	3	3	3

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
CHEYENNE RIVER BASIN	6	104%	66%

Upper North Platte River Basin

Snow

The Upper North Platte River Basin above Seminoe Reservoir SWE is 97% of median (95% last year). North Platte above Northgate SWE is 103% of median (100% last year). Encampment River SWE is 97% of median (94% last year). Brush Creek SWE is 84% of median (79% last year). Medicine Bow and Rock Creek SWE are 96% of median (97% last year). *See Appendix A at the end of this report for a detailed listing of snow course information.*

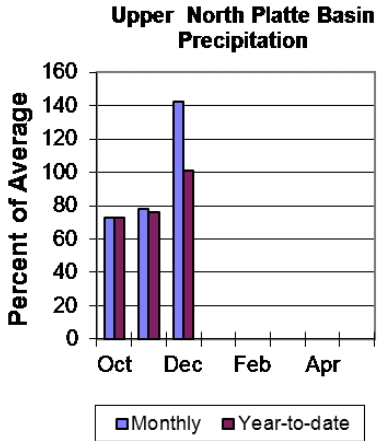


Precipitation

Eighteen reporting stations show last month's precipitation at 133% of average (171% last year). Precipitation varied from 62-144% of average last month. Total water-year-to-date precipitation is 112% of average for the basin (93% last year). Year-to-date percentages range from 97-196% of average.

Reservoirs

Seminoe Reservoir is storing 762,700 ac- ft or 75% of capacity. Seminoe Reservoir is at 138% of average and was at 134% of average last year. *Detailed reservoir data shown on the following page and in Appendix D.*



Streamflow

The 50% exceedance forecasts for the April through September period are around average for the Upper North Platte River Basin. The yield for the North Platte River near Northgate will be around 260,000 ac-ft (104% of average). The Encampment River near Encampment yield will be around 129,000 ac-ft (93% of average). Rock Creek near Arlington yield will be around 50,000 ac-ft (96% of average). Sweetwater River near Pathfinder will yield about 86,000 ac-ft (134% of average). Seminoe Reservoir inflow should be around 740,000 ac-ft (96% of average). *See the following page for more detailed information on projected runoff.*

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Upper North Platte River Basin
Streamflow Forecasts - January 1, 2017

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

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								
	APR-JUL	101	181	235	104%	290	370	225
	APR-SEP	115	200	260	104%	320	405	250
Encampment R nr Encampment[2]								
	APR-JUL	50	92	121	94%	149	191	129
	APR-SEP	56	99	129	93%	158	200	138
Rock Ck nr Arlington								
	APR-JUL	27	39	47	96%	56	68	49
	APR-SEP	28	41	50	96%	59	72	52
Sweetwater R nr Alcova								
	APR-JUL	46	66	80	136%	94	114	59
	APR-SEP	49	71	86	134%	100	122	64
Seminoe Reservoir Inflow								
	APR-JUL	240	505	680	95%	855	1120	715
	APR-SEP	280	555	740	96%	925	1200	770

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

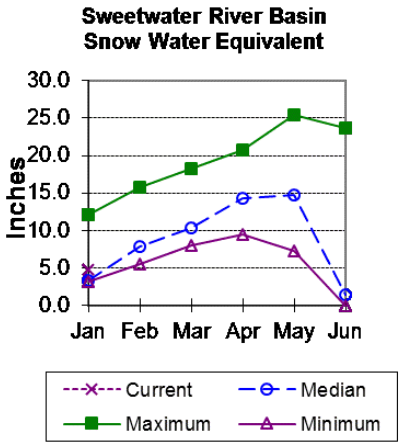
Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Seminoe	762.7	740.1	553.7	1016.7
Basin-wide Total	762.7	740.1	553.7	1016.7
# of reservoirs	1	1	1	1

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
N PLATTE above Northgate	9	104%	100%
ENCAMPMENT RIVER	3	97%	94%
BRUSH CREEK	2	84%	79%
MEDICINE BOW & ROCK CREEKS	1	96%	97%
UPPER NORTH PLATTE RIVER BASIN	17	98%	95%

Sweetwater River Basin

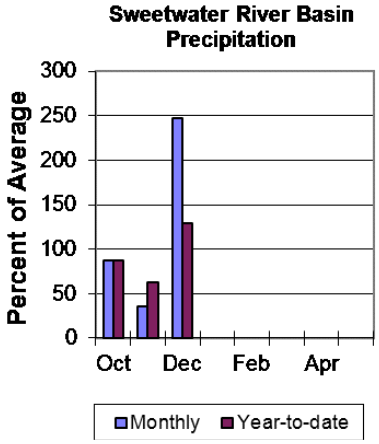
Snow

Sweetwater River Basin SWE is 145% of median (66% last year). See *Appendix A at the end of this report for a detailed listing of snow course information.*



Precipitation

Last month's precipitation was 147% of average (224% last year) for the four reporting stations ranging from 121-158%. The water year-to-date precipitation for the basin is currently 106% of average (98% last year). Year-to-date percentages range from 95-140% of average.



Reservoirs

Reservoir storage is as follows: Pathfinder 903,200 ac-ft (168% of average or 89% of capacity.

Streamflow

The 50% exceedance forecast for the April through September period will be above average. The Sweetwater River near Pathfinder will yield about 86,000 ac-ft (134% of average). *See below for detailed information on projected runoff.*

Data Current as of: 1/6/2017 1:57:31 PM

Sweetwater River Basin
Streamflow Forecasts - January 1, 2017

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed 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	46	66	80	136%	94	114	59
	APR-SEP	49	71	86	134%	100	122	64

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

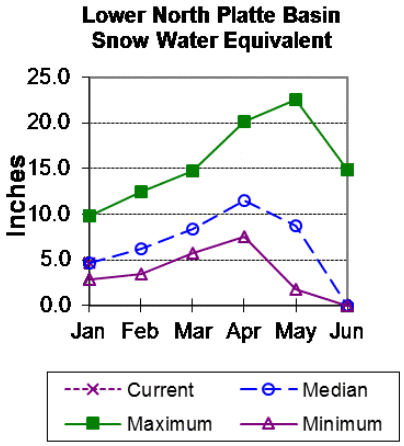
Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Pathfinder	903.2	818.6	536.1	1016.5
Basin-wide Total	903.2	818.6	536.1	1016.5
# of reservoirs	1	1	1	1

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
SWEETWATER RIVER BASIN	3	145%	66%

Lower North Platte River Basin

Snow

Lower North Platte River Basin SWE is 98% of median (77% last year). *See Appendix A at the end of this report for a detailed listing of snow course information.*

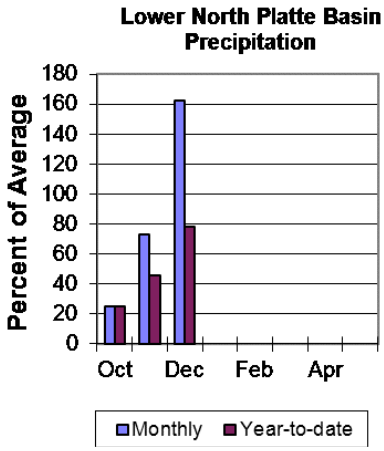


Precipitation

Last month's precipitation was 98% of average (191% last year). The seven reporting stations percentages for the month range from 114-292%. The water year-to-date precipitation for the basin is currently 120% of average (105% last year). Year-to-date percentages range from 100-171% of average.

Reservoirs

Reservoir storage is as follows: Alcova 157,100 ac-ft (101% of average) (85% of capacity); Glendo 258,600 ac-ft (102% of average) (51% of capacity); Guernsey 0 ac-ft (0% of average) (0% of capacity); Pathfinder 903,200 ac-ft (168% of average) (89% of capacity) (153% of average last year). *Detailed reservoir data shown on the following page and in Appendix D.*



Streamflow

The 50% exceedance forecasts for the April through September period will be above average. North Platte - Alcova to Orin Gain will yield ---- ac-ft. LaPrele Creek above LaPrele Reservoir should yield around 15,100 ac-ft (76% of average). North Platte River below Glendo Reservoir should yield around 885,000 ac-ft (104% of average), and below Guernsey Reservoir should yield around 915,000 ac-ft (108% of average). *See the following for more detailed information on projected runoff.*

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Lower North Platte River Basin
Streamflow Forecasts - January 1, 2017

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

LOWER NORTH PLATTE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
La Prele Ck ab La Prele Reservoir								
	APR-JUL	-2.8	7.6	14.7	74%	22	32	19.9
	APR-SEP	-2.6	7.9	15.1	76%	22	33	19.9
North Platte R bl Glendo Reservoir								
	APR-JUL	265	610	850	104%	1080	1430	820
	APR-SEP	285	640	885	104%	1130	1490	850
North Platte R bl Guernsey Reservoir								
	APR-JUL	540	735	870	106%	1000	1200	820
	APR-SEP	575	780	915	108%	1050	1260	850

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

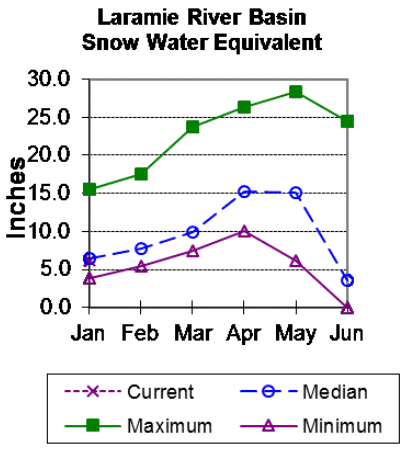
Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Alcova	157.1	157.3	154.9	184.3
Glendo	258.6	232.8	254.7	506.4
Guernsey	0.0	15.2	9.2	45.6
Pathfinder	903.2	818.6	536.1	1016.5
Basin-wide Total	1318.9	1223.9	954.9	1752.8
# of reservoirs	4	4	4	4

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
DEER & LaPRELE CREEKS	2	103%	80%
LOWER NORTH PLATTE RIVER BASIN	4	99%	80%

Laramie River Basin

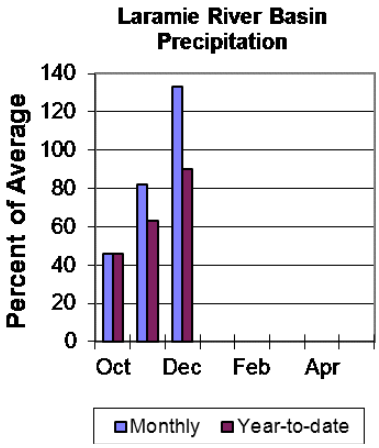
Snow

SWE for the entire Laramie River Basin (above mouth entering North Platte) is 96% of median (110% last year). SWE for the Laramie River above Laramie is 93% of median (114% last year). SWE for the Little Laramie River is 96% of median (107% last year). **SWE total for the entire North Platte River Basin above Torrington is 100% of median (93% last year).** *See Appendix A at the end of this report for a detailed listing of snow course information.*



Precipitation

Last month's precipitation was 114% of average (169% last year). For the 12 reporting stations percentages for the month range from 35-157%. The water year-to-date precipitation for the basin is currently 128% of average (111% last year). Year- to-date percentages range from 107-185% of average.



Reservoirs

Reservoir storage is as follows: Wheatland #2 44,500 ac-ft (105% of average) (45% of capacity) was (117% of average last year). *Detailed reservoir data shown on the following page and in Appendix D.*

Streamflow

The 50% exceedance forecasts for the April through September period will be above average. Laramie River near Woods Landing should yield around 121,000 ac-ft (96% of average). The Little Laramie near Filmore should produce about 52,000 ac-ft (95% of average). *See below for detailed information on projected runoff.*

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Laramie River Basin
Streamflow Forecasts - January 1, 2017

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

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	54	88	110	96%	133	166	115
	APR-SEP	61	97	121	96%	145	181	126
Little Laramie R nr Filmore								
	APR-JUL	23	38	49	96%	59	74	51
	APR-SEP	25	41	52	95%	63	79	55

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

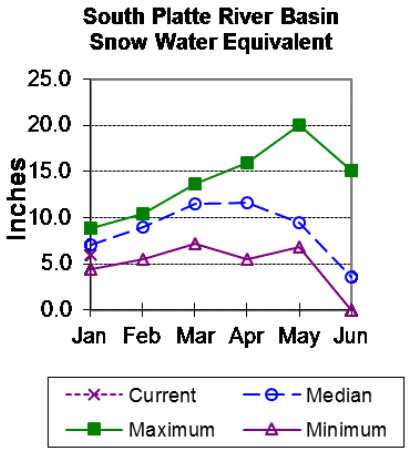
Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Wheatland #2	44.5	49.4	42.4	98.9
Basin-wide Total	44.5	49.4	42.4	98.9
# of reservoirs	1	1	1	1

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
LARAMIE RIVER abv Laramie	4	94%	114%
LITTLE LARAMIE RIVER	2	96%	107%
LARAMIE RIVER BASIN	7	96%	110%
NORTH PLATTE TOTAL RIVER BASIN	26	101%	93%

South Platte River Basin (WY)

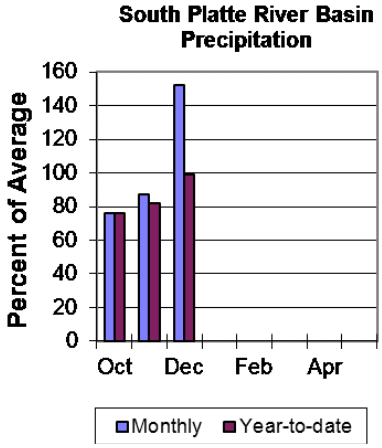
Snow

South Platte River Basin SWE in WY is 86% of median (91% last year). *See Appendix A at the end of this report for a detailed listing of snow course information.*



Precipitation

Last month's precipitation was 92% of average (170% last year) for the five reporting stations. The water year-to-date precipitation for the basin is currently 114 of average (111% last year). Year-to-date percentages range from 97-158% of average.



Reservoirs

No reservoir data for the basin.

Streamflow

There are no streamflow forecast points for the basin.

Data Current as of: 1/6/2017 1:57:35 PM

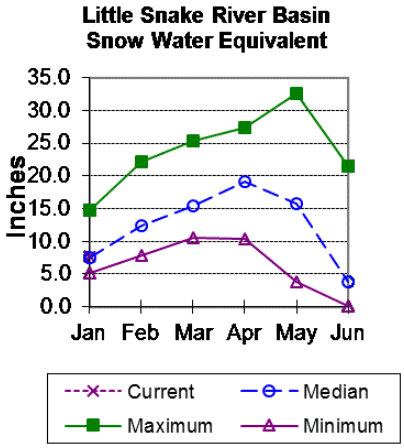
South Platte River Basin - January 1, 2017

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
SOUTH PLATTE RIVER BASIN	4	87%	91%

Little Snake River Basin

Snow

Little Snake River drainage SWE is 102% of median (95% last year). See *Appendix A at the end of this report for a detailed listing of snow course information.*

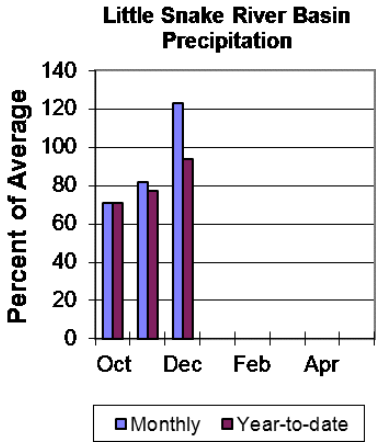


Precipitation

Precipitation across the basin was 171% of average (190% last year) for the eight reporting stations. Last month's precipitation ranged from 89-243% of average. The Little Snake River Basin water-year-to-date precipitation is currently 110% of average (83% last year). Year-to-date percentages range from 92-129% of average.

Reservoirs

High Savery Dam – 11,600 ac-ft (99% of average) (52% of capacity) (92% average last year). *See below for detailed information on reservoirs and in Appendix D.*



Streamflow

The 50% exceedance forecasts for the April through July period will be below average. The Little Snake River near Slater should yield around 135,000 ac-ft (87% of average). The Little Snake River near Dixon should yield around 290,000 ac-ft (84% of average). *See below for detailed information on projected runoff.*

Data Current as of: 1/6/2017 1:57:36 PM

Little Snake River Basin
Streamflow Forecasts - January 1, 2017

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

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[2]	APR-JUL	75	109	135	87%	164	210	156
Little Snake R nr Dixon[2]	APR-JUL	112	210	290	84%	385	550	345

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

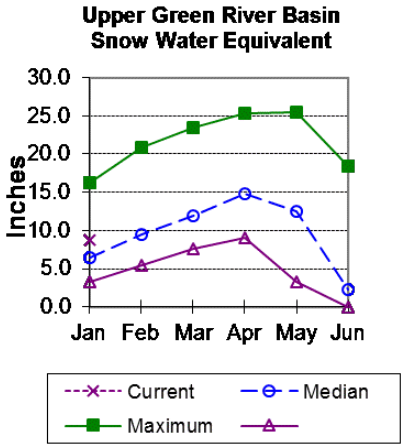
Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
High Savery Reservoir	11.6	10.8	11.7	22.4
Basin-wide Total	11.6	10.8	11.7	22.4
# of reservoirs	1	1	1	1

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
LITTLE SNAKE RIVER BASIN	8	103%	95%

Upper Green River Basin

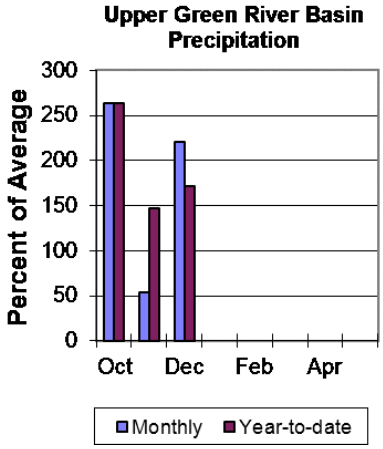
Snow

Upper Green River Basin above Fontenelle Reservoir SWE is 135% of median (91% last year). Green River Basin above Warren Bridge SWE is 134% of median (92% last year). West Side of Upper Green River Basin SWE is 140% of median (98% last year). New Fork River SWE is 119% of median (84% last year). Big Sandy-Eden Valley Basin SWE is 145% of median (59% last year). *See Appendix A at the end of this report for a detailed listing of snow course information.*



Precipitation

The 16 reporting precipitation sites in the basin were 151% of average last month (175% last year). Last month's precipitation varied from 92-363% of average. Water year-to-date precipitation is 104% of average (97% last year). Year to date percentages of average range from 84-166%.



Reservoir

Storage in Big Sandy Reservoir is 21,200 ac-ft or 55% of capacity (130% of average) (115% last year). Fontenelle Reservoir is 202,600 ac-ft (59% of capacity) (116% of average) (114% last year). *Detailed reservoir data shown on the following page and in Appendix D.*

Streamflow

The 50% exceedance forecasts for the April through July period will be above average. The yield on the Green River at Warren Bridge is about 300,000 ac-ft (122% of average). Pine Creek above Fremont Lake yield will be about 115,000 ac-ft (117% of average). New Fork River near Big Piney yield will be about 445,000 ac-ft (125% of average). Fontenelle Reservoir Inflow is estimated to be around 960,000 ac-ft (132% of average), and Big Sandy near Farson yield will be around 63,000 ac-ft (121% of average). *See the following for a more detailed forecast.*

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Upper Green River Basin
Streamflow Forecasts - January 1, 2017

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

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	215	265	300	122%	340	400	245
Pine Creek ab Fremont Lake	APR-JUL	93	106	115	117%	125	140	98
New Fork R nr Big Piney	APR-JUL	270	370	445	125%	530	665	355
Fontenelle Reservoir Inflow	APR-JUL	570	790	960	132%	1150	1450	725
Big Sandy R nr Farson	APR-JUL	42	54	63	121%	74	90	52

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

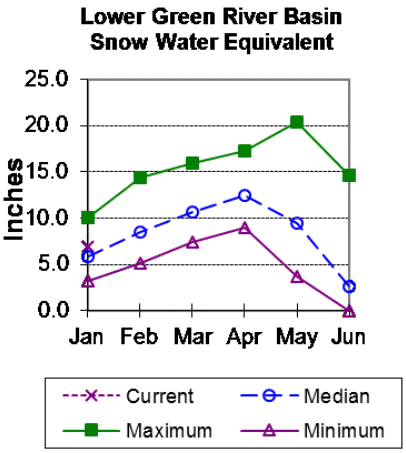
Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Big Sandy	21.2	18.7	16.3	38.3
Fontenelle	202.6	199.0	175.3	344.8
Basin-wide Total	223.8	217.7	191.6	383.1
# of reservoirs	2	2	2	2

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
GREEN above Warren Bridge	5	135%	92%
UPPER GREEN - West Side	4	141%	98%
NEWFORK RIVER	2	120%	84%
BIG SANDY-EDEN VALLEY	2	147%	59%
GREEN above Fontenelle	12	136%	91%

Lower Green River Basin

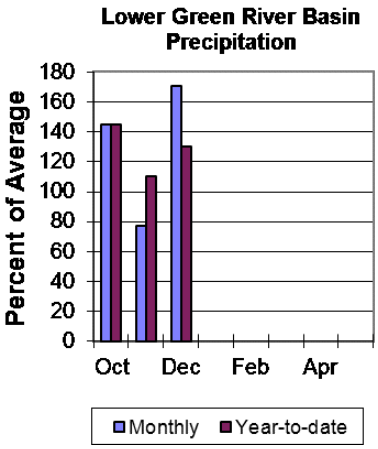
Snow

Lower Green River Basin SWE is 118% of median (99% last year). Hams Fork drainage SWE is 118% of median (84% last year). Blacks Fork drainage SWE is 116% of median (113% last year). Henrys Fork SWE is 122% of median (126% last year). SWE for the entire Green River Basin (above Flaming Gorge) is 129% of median (94% last year). *See Appendix A at the end of this report for a detailed listing of snow course information.*



Precipitation

Precipitation for the 12 reporting stations during last month was 223% of average (239% last year). Precipitation ranged from 148-390% of average for the month. The basin year-to- date precipitation is currently 125% of average (101% last year). Year-to-date percentages range from 94-222% of average.



Reservoirs

Fontenelle Reservoir is currently storing 202,600 ac-ft; this is 116% of average (114% last year) (59% of capacity). Flaming Gorge is currently storing 3,128,200 ac-ft; this is 101% of average (104% last year) (83% of capacity). Viva Naughton is currently storing 31,600 ac-ft; this is 101% of average (100% last year) (75% of capacity). *Detailed reservoir data shown on the following page and in Appendix D.*

Streamflow

The 50% exceedance forecasts for the April through July period will be above average. The Green River near Green River will yield about 975,000 ac-ft (134% of average). The Blacks Fork near Robertson will yield about 96,000 ac-ft (112% of average). East Fork of Smiths Fork near Robertson will yield around 27,000 ac-ft (100% of average). Hams Fork below Pole Creek near Frontier will yield around 58,000 ac-ft (107% of average). The Hams Fork Inflow to Viva Naughton Reservoir will yield about 82,000 ac-ft (111% of average). The Flaming Gorge Reservoir inflow will be about 1,240,000 ac-ft (127% of average). *See the following page for more detailed information on projected runoff.*

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Lower Green River Basin
Streamflow Forecasts - January 1, 2017

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

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	550	790	975	134%	1190	1530	730
Blacks Fk nr Robertson	APR-JUL	62	81	96	112%	112	137	86
EF of Smiths Fork nr Robertson [2]	APR-JUL	16.8	22	27	100%	31	39	27
Hams Fk bl Pole Ck nr Frontier	APR-JUL	32	47	58	107%	70	90	54
Viva Naughton Reservoir Inflow	APR-JUL	41	64	82	111%	102	136	74
Flaming Gorge Reservoir Inflow [2]	APR-JUL	670	985	1240	127%	1510	1970	980

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

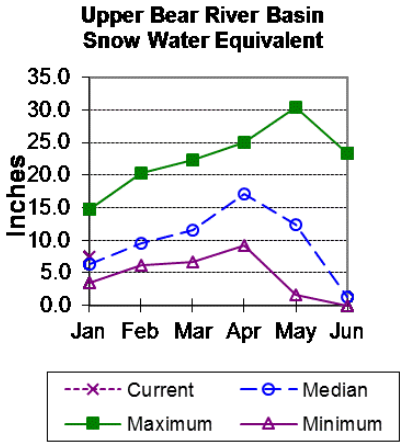
Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Fontenelle	202.6	199.0	175.3	344.8
Flaming Gorge Reservoir	3128.2	3217.9	3091.0	3749.0
Viva Naughton Res	31.6	31.5	31.4	42.4
Basin-wide Total	3362.4	3448.4	3297.7	4136.2
# of reservoirs	3	3	3	3

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
HAMS FORK RIVER	3	120%	84%
BLACKS FORK	2	116%	113%
HENRYS FORK	2	122%	126%
LOWER GREEN RIVER BASIN	7	119%	99%
GREEN above FLAMING GORGE	19	131%	94%

Upper Bear River Basin

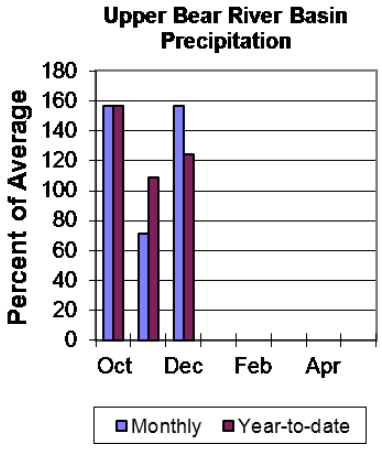
Snow

Upper Bear River Basin in Utah SWE is 118% of median (96% last year). SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is 120% of median (84% last year). Upper Bear River Basin SWE in Utah is 113% of median (94% last year). *See Appendix A at the end of this report for a detailed listing of snow course information.*



Precipitation

Precipitation for last month was 176% of average for the 9 reporting stations; this was 182% last year. The year-to-date precipitation for the basin is 105% of average; this was 80% last year. Year-to-date percentages range from 93-165% of average.



Reservoirs

Storage in Woodruff Narrows Reservoir is 46,400 ac-ft about 81% of capacity (170% of average) (144% last year). *Detailed reservoir data shown below and in Appendix D.*

Streamflow

The following 50% exceedance forecasts for the April through September period will be above average. The Bear River near the Utah-Wyoming State Line should yield about 138,000 ac-ft (112% of average). The Bear River above Reservoir near Woodruff should yield around 155,000 ac-ft (121% of average). The Smiths Fork River near Border Jct. will yield around 128,000 ac-ft (123% of average). *See below for detailed information on projected runoff.*

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Upper Bear River Basin
Streamflow Forecasts - January 1, 2017

		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 Avg (KAF)
Bear R nr UT-WY State Line								
	APR-JUL	82	108	125	112%	143	169	112
	APR-SEP	91	119	138	112%	157	186	123
Bear R ab Resv nr Woodruff								
	APR-JUL	59	111	146	121%	182	235	121
	APR-SEP	62	117	155	121%	193	250	128
Smiths Fk nr Border								
	APR-JUL	74	95	110	124%	125	146	89
	APR-SEP	88	112	128	123%	145	169	104

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

Reservoir Storage End of December, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Woodruff Narrows Reservoir	46.4	39.2	27.3	57.3
Basin-wide Total	46.4	39.2	27.3	57.3
# of reservoirs	1	1	1	1

Watershed Snowpack Analysis January 1, 2017	# of Sites	% Median	Last Year % Median
UPPER BEAR RIVER in Utah	3	113%	94%
SMITHS & THOMAS FORKS	2	123%	84%
UPPER BEAR RIVER BASIN	7	118%	96%

Appendix A

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Basinwide Summary: January 1, 2017
(Averages/Medians based on 1981-2010 reference period)

Snowpack Summary for January 1, 2017

SNAKE above Jackson Lake	Network	Elevation (ft)	Depth (in)	SWE (in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median
Aster Creek	SC	7750			11.4		12.4	109%
Glade Creek	SC	7040			8.5		10.0	118%
Grassy Lake	SNOTEL	7265	71	15.2	12.8	119%	13.0	102%
Huckleberry Divide	SC	7300			8.0		8.8	110%
Lewis Lake Divide	SNOTEL	7850	56	12.4	13.3	93%	14.2	107%
Moran	SC	6750			5.1		6.6	129%
Snake River Station	SNOTEL	6920		9.8	6.4	153%	7.2	113%
Thumb Divide	SNOTEL	7980		6.4	6.2	103%	6.4	103%
Two Ocean Plateau	SNOTEL	9240		17.8	12.5	142%	12.6	101%
Basin Index						**120%**		**104%**
# of sites						5		5

PACIFIC CREEK	Network	Elevation (ft)	Depth (in)	SWE (in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median
Base Camp	SNOTEL	7030	46	10.3	7.2	143%	7.5	104%
Moran	SC	6750			5.1		6.6	129%
Two Ocean Plateau	SNOTEL	9240		17.8	12.5	142%	12.6	101%
Basin Index						**143%**		**102%**
# of sites						2		2

BUFFALO FORK	Network	Elevation (ft)	Depth (in)	SWE (in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median
Four Mile	SC	6900						
Togwotee Pass	SNOTEL	9580	54	13.9	11.1	125%	9.2	83%
Turpin Meadows	SC	6900						
Younts Peak	SNOTEL	8350	32	7.9	7.0	113%	5.4	77%
Basin Index						**120%**		**81%**
# of sites						2		2

GROS VENTRE RIVER	Network	Elevation (ft)	Depth (in)	SWE (in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median
Elbo Ranch	SC	7100			3.9		5.1	131%
Gros Ventre Summit	SNOTEL	8750		6.3	6.2	102%	5.3	85%
Gunsight Pass	SNOTEL	9820	33	7.0	6.1	115%	6.0	98%
Togwotee Pass	SNOTEL	9580	54	13.9	11.1	125%	9.2	83%
Basin Index						**116%**		**88%**
# of sites						3		3

HOBACK RIVER	Network	Elevation (ft)	Depth (in)	SWE (in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median
Blind Bull Sum	SNOTEL	8650	50	13.5	9.1	148%	9.7	107%
East Rim Divide	SNOTEL	7930	34	7.0	4.3	163%	3.8	88%
Granite Creek	SNOTEL	6770		9.5	6.5	146%	6.3	97%
Hoback GS	SC	6664						
Snow King Mountain	SC	7660						
Basin Index						**151%**		**99%**
# of sites						3		3

GREYS RIVER	Network	Elevation (ft)	Depth (in)	SWE (in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median
Blind Bull Sum	SNOTEL	8650	50	13.5	9.1	148%	9.7	107%

Appendix B

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Basinwide Summary: January 1, 2017
(Averages/Medians based on 1981-2010 reference period)

			Monthly Total Precipitation for December 2016					Water Year to Date Precipitation through December 2016				
SNAKE above Jackson Lake	**Network**	**Elevation (ft)**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**
Grassy Lake	SNOTEL	7265	12.3	7.2	171%	9.4	131%	27.1	17.1	158%	17.7	104%
Lewis Lake Divide	SNOTEL	7850	11.4	7.2	158%	10.3	143%	24.2	17	142%	17.8	105%
Snake River Station	SNOTEL	6920	8.5	4.4	193%	5.9	134%	18.7	11	170%	12.5	114%
Thumb Divide	SNOTEL	7980	4.8	3.4	141%	4.1	121%	12.5	8.8	142%	8.5	97%
Two Ocean Plateau	SNOTEL	9240	8.4	4.6	183%	6.4	139%	19.2	12.7	151%	13.3	105%
Basin Index					**169%**		**135%**			**153%**		**105%**
# of sites					5		5			5		5

PACIFIC CREEK	**Network**	**Elevation (ft)**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**
Base Camp	SNOTEL	7030	9.1	4	228%	4.7	118%	18.1	10	181%	10.9	109%
Two Ocean Plateau	SNOTEL	9240	8.4	4.6	183%	6.4	139%	19.2	12.7	151%	13.3	105%
Basin Index					**203%**		**129%**			**164%**		**107%**
# of sites					2		2			2		2

BUFFALO FORK	**Network**	**Elevation (ft)**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**
Togwotee Pass	SNOTEL	9580	8.9	4.3	207%	4.8	107%	17.6	11.6	152%	11.5	99%
Younts Peak	SNOTEL	8350	7.1	2.8	254%	2.6	93%	12.8	7.8	164%	6.4	82%
Basin Index					**225%**		**101%**			**157%**		**92%**
# of sites					2		2			2		2

GROS VENTRE RIVER	**Network**	**Elevation (ft)**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**
Gros Ventre Summit	SNOTEL	8750	4.4	2	220%	2.5	125%	10.6	6.2	171%	5.7	92%
Gunsight Pass	SNOTEL	9820	5	2.4	208%	2.5	104%	11.4	6.5	175%	7.3	112%
Togwotee Pass	SNOTEL	9580	8.9	4.3	207%	4.8	107%	17.6	11.6	152%	11.5	99%
Basin Index					**210%**		**110%**			**163%**		**101%**
# of sites					3		3			3		3

HOBACK RIVER	**Network**	**Elevation (ft)**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**
Blind Bull Sum	SNOTEL	8650	8.3	3.7	224%	3.2	86%	15	9.4	160%	7	74%
East Rim Divide	SNOTEL	7930	5.1	2.1	243%	2.2	105%	9.6	5.5	175%	5.2	95%
Granite Creek	SNOTEL	6770	8.1	4.1	198%	4.5	110%	15.9	9.5	167%	8.9	94%
Basin Index					**217%**		**100%**			**166%**		**88%**
# of sites					3		3			3		3

GREYS RIVER	**Network**	**Elevation (ft)**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**
Blind Bull Sum	SNOTEL	8650	8.3	3.7	224%	3.2	86%	15	9.4	160%	7	74%
Cottonwood Creek	SNOTEL	7670	6.5	4.3	151%	4.4	102%	16.7	11.2	149%	9.3	83%
Spring Creek Divide	SNOTEL	9000	8.2	4.3	191%	4.5	105%	17.7	10.9	162%	9	83%
Triple Peak	SNOTEL	9500	9.5	4.2	226%	5.1	121%	19	11	173%	10.6	96%
Willow Creek	SNOTEL	8380	8.6	6.1	141%	5.6	92%	22.3	15.7	142%	12.3	78%
Basin Index					**182%**		**101%**			**156%**		**83%**
# of sites					5		5			5		5

SALT RIVER	**Network**	**Elevation (ft)**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**
Cottonwood Creek	SNOTEL	7670	6.5	4.3	151%	4.4	102%	16.7	11.2	149%	9.3	83%
Salt River Summit	SNOTEL	7760	4.6	3.2	144%	2.6	81%	11.3	7.6	149%	5.9	78%
Willow Creek	SNOTEL	8380	8.6	6.1	141%	5.6	92%	22.3	15.7	142%	12.3	78%
Basin Index					**145%**		**93%**			**146%**		**80%**
# of sites					3		3			3		3

SNAKE RIVER BASIN	**Network**	**Elevation (ft)**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**	**Current (in)**	**Average (in)**	**% Average**	**Last Year (in)**	**Last Year % Avg**
Afton	COOP	6210	1.55	1.25	124%	1.02	82%	6.74	4.36	155%	2.97	68%
Alta 1 NW	COOP	6430	3.14	2.34	134%	2.34	100%	10.19	6.49	157%	6.26	96%
Base Camp	SNOTEL	7030	9.1	4	228%	4.7	118%	18.1	10	181%	10.9	109%
Bedford 3 SE	COOP	6430	2.71	1.98	137%	2.11	107%	10.07	5.85	178%	5.47	97%
Black Bear	SNOTEL	8170	10.3	7.4	139%	10.4	141%	25.2	18	140%	18.2	101%
Blind Bull Sum	SNOTEL	8650	8.3	3.7	224%	3.2	86%	15	9.4	160%	7	74%
Bondurant	COOP	6620		2.35		2.49	106%		5.62		5.24	93%
Cottonwood Creek	SNOTEL	7670	6.5	4.3	151%	4.4	102%	16.7	11.2	149%	9.3	83%
Darwin Ranch	COOP	8160	2.17	1.22	178%	1.24	102%	7.35	3.74	197%	3.88	104%
East Rim Divide	SNOTEL	7930	5.1	2.1	243%	2.2	105%	9.6	5.5	175%	5.2	95%
Grand Targhee	SNOTEL	9260	6.9	5	138%	6	120%	22.3	14.8	151%	14.5	98%
Granite Creek	SNOTEL	6770	8.1	4.1	198%	4.5	110%	15.9	9.5	167%	8.9	94%
Grassy Lake	SNOTEL	7265	12.3	7.2	171%	9.4	131%	27.1	17.1	158%	17.7	104%
Gros Ventre Summit	SNOTEL	8750	4.4	2	220%	2.5	125%	10.6	6.2	171%	5.7	92%
Gunsight Pass	SNOTEL	9820	5	2.4	208%	2.5	104%	11.4	6.5	175%	7.3	112%
Jackson	COOP	6230	3.22	1.53	210%	1.9	124%	9.16	4.43	207%	4.36	98%
Lewis Lake Divide	SNOTEL	7850	11.4	7.2	158%	10.3	143%	24.2	17	142%	17.8	105%
Loomis Park	SNOTEL	8240	8.5	3.4	250%	3.4	100%	14.9	8.2	182%	7.6	93%
Moose	COOP	6470	5.27	2.67	197%	3.93	147%	12.26	6.78	181%	7.98	118%
Moran 5 WNW	COOP	6790	5.8	2.88	201%	3.3	115%	12.94	7.57	171%	7.55	100%

Appendix C
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Basinwide Summary: January 1, 2017
(averages based on 1981-2010 reference period)

Reservoir Storage Summary for the end of December 2016

SNAKE RIVER BASIN	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
Grassy Lake	13.8	12.8	11.6	15.2	91%	84%	76%	119%	110%
Jackson Lake	533.8	556.0	424.1	847.0	63%	66%	50%	126%	131%
Palisades Reservoir	552.9	704.3	882.5	1400.0	39%	50%	63%	63%	80%
Basin-wide Total	1100.5	1273.1	1318.2	2262.2	49%	56%	58%	83%	97%
# of reservoirs	3	3	3	3	3	3	3	3	3

MADISON-GALLATIN RIVER BASINS	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
Ennis Lake	28.5	28.5	30.0	41.0	70%	70%	73%	95%	95%
Hebgen Lake	316.7	318.5	283.2	378.8	84%	84%	75%	112%	112%
Basin-wide Total	345.2	347.0	313.2	419.8	82%	83%	75%	110%	111%
# of reservoirs	2	2	2	2	2	2	2	2	2

WIND RIVER BASIN	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
Bull Lake	39.8	70.5	75.2	151.8	26%	46%	50%	53%	94%
Boysen	604.6	561.9	521.7	596.0	101%	94%	88%	116%	108%
Pilot Butte	25.6	23.8	23.1	31.6	81%	75%	73%	111%	103%
Basin-wide Total	670.0	656.2	620.0	779.4	86%	84%	80%	108%	106%
# of reservoirs	3	3	3	3	3	3	3	3	3

BIGHORN RIVER BASIN	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
Boysen	604.6	561.9	521.7	596.0	101%	94%	88%	116%	108%
Bighorn Lake	919.1	883.6	871.2	1356.0	68%	65%	64%	105%	101%
Basin-wide Total	1523.7	1445.5	1392.9	1952.0	78%	74%	71%	109%	104%
# of reservoirs	2	2	2	2	2	2	2	2	2

SHOSHONE RIVER BASIN	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
Buffalo Bill	475.9	424.7	355.5	646.6	74%	66%	55%	134%	119%
Basin-wide Total	475.9	424.7	355.5	646.6	74%	66%	55%	134%	119%
# of reservoirs	1	1	1	1	1	1	1	1	1

TONGUE RIVER BASIN	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
Tongue River Res	49.9	49.0	26.4	79.1	63%	62%	33%	189%	185%
Basin-wide Total	49.9	49.0	26.4	79.1	63%	62%	33%	189%	185%
# of reservoirs	1	1	1	1	1	1	1	1	1

BELLE FOURCHE RIVER BASIN	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
Belle Fourche	92.0	141.8	101.2	178.4	52%	79%	57%	91%	140%
Keyhole	143.3	166.1	87.4	193.8	74%	86%	45%	164%	190%
Shadehill	37.2	53.4	44.1	81.4	46%	66%	54%	84%	121%
Basin-wide Total	272.5	361.3	232.7	453.6	60%	80%	51%	117%	155%
# of reservoirs	3	3	3	3	3	3	3	3	3

CHEYENNE RIVER BASIN	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
Angostura	89.2	103.0	81.1	122.1	73%	84%	66%	110%	127%
Deerfield	15.0	14.3	13.5	15.2	99%	94%	89%	111%	106%
Pactola	51.7	49.8	45.6	55.0	94%	91%	83%	113%	109%
Basin-wide Total	155.9	167.1	140.2	192.3	81%	87%	73%	111%	119%
# of reservoirs	3	3	3	3	3	3	3	3	3

UPPER NORTH PLATTE RIVER BASIN	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
Seminoe	762.7	740.1	553.7	1016.7	75%	73%	54%	138%	134%
Basin-wide Total	762.7	740.1	553.7	1016.7	75%	73%	54%	138%	134%
# of reservoirs	1	1	1	1	1	1	1	1	1

SWEETWATER RIVER BASIN	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
Pathfinder	903.2	818.6	536.1	1016.5	89%	81%	53%	168%	153%
Basin-wide Total	903.2	818.6	536.1	1016.5	89%	81%	53%	168%	153%
# of reservoirs	1	1	1	1	1	1	1	1	1

Appendix D

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Streamflow Forecast Summary: January 1, 2017
(averages based on 1981-2010 reference period)

SNAKE RIVER BASIN	Forecast Period	Forecast Exceedance Probabilities for Risk Assessment: Chance that actual volume will exceed forecast — 90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Snake R nr Moran[2]								
	APR-JUL	725	850	930	122%	1020	1140	765
	APR-SEP	810	945	1040	123%	1130	1260	845
Snake R ab Reservoir nr Alpine[2]								
	APR-JUL	2210	2590	2850	131%	3110	3490	2170
	APR-SEP	2560	2980	3270	131%	3560	3990	2500
Snake R nr Irwin [2]								
	APR-JUL	2930	3470	3840	128%	4200	4750	3010
	APR-SEP	3390	4010	4430	127%	4860	5480	3500
Snake R nr Heise[2]								
	APR-JUL	3160	3730	4120	127%	4520	5090	3240
	APR-SEP	3680	4330	4780	126%	5230	5890	3780
Pacific Ck at Moran								
	APR-JUL	180	215	240	146%	265	300	164
	APR-SEP	191	225	250	145%	275	315	173
Buffalo Fk ab Lava Ck nr Moran								
	APR-JUL	295	345	380	136%	415	465	280
	APR-SEP	340	395	435	136%	475	530	320
Greys R ab Reservoir nr Alpine								
	APR-JUL	285	340	385	126%	425	480	305
	APR-SEP	330	400	445	124%	490	560	360
Salt R ab Reservoir nr Etna								
	APR-JUL	250	335	390	130%	445	525	300
	APR-SEP	315	410	470	127%	535	630	370

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

MADISON-GALLATIN RIVER BASINS	Forecast Period	Forecast Exceedance Probabilities for Risk Assessment: Chance that actual volume will exceed forecast — 90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Hebgen Reservoir Inflow								
	APR-JUL	290	350	390	105%	425	485	370
	APR-SEP	375	445	495	105%	540	610	470

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

YELLOWSTONE RIVER BASIN	Forecast Period	Forecast Exceedance Probabilities for Risk Assessment: Chance that actual volume will exceed forecast — 90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Yellowstone R at Yellowstone Lake Outlet								
	APR-JUL	585	685	750	130%	820	915	575
	APR-SEP	790	920	1010	131%	1100	1240	770
Yellowstone R at Corwin Springs								
	APR-JUL	1660	1890	2050	129%	2200	2430	1590
	APR-SEP	1970	2250	2430	129%	2620	2890	1880
Yellowstone R at Livingston								
	APR-JUL	1890	2160	2350	131%	2540	2820	1800
	APR-SEP	2240	2570	2790	130%	3010	3330	2140

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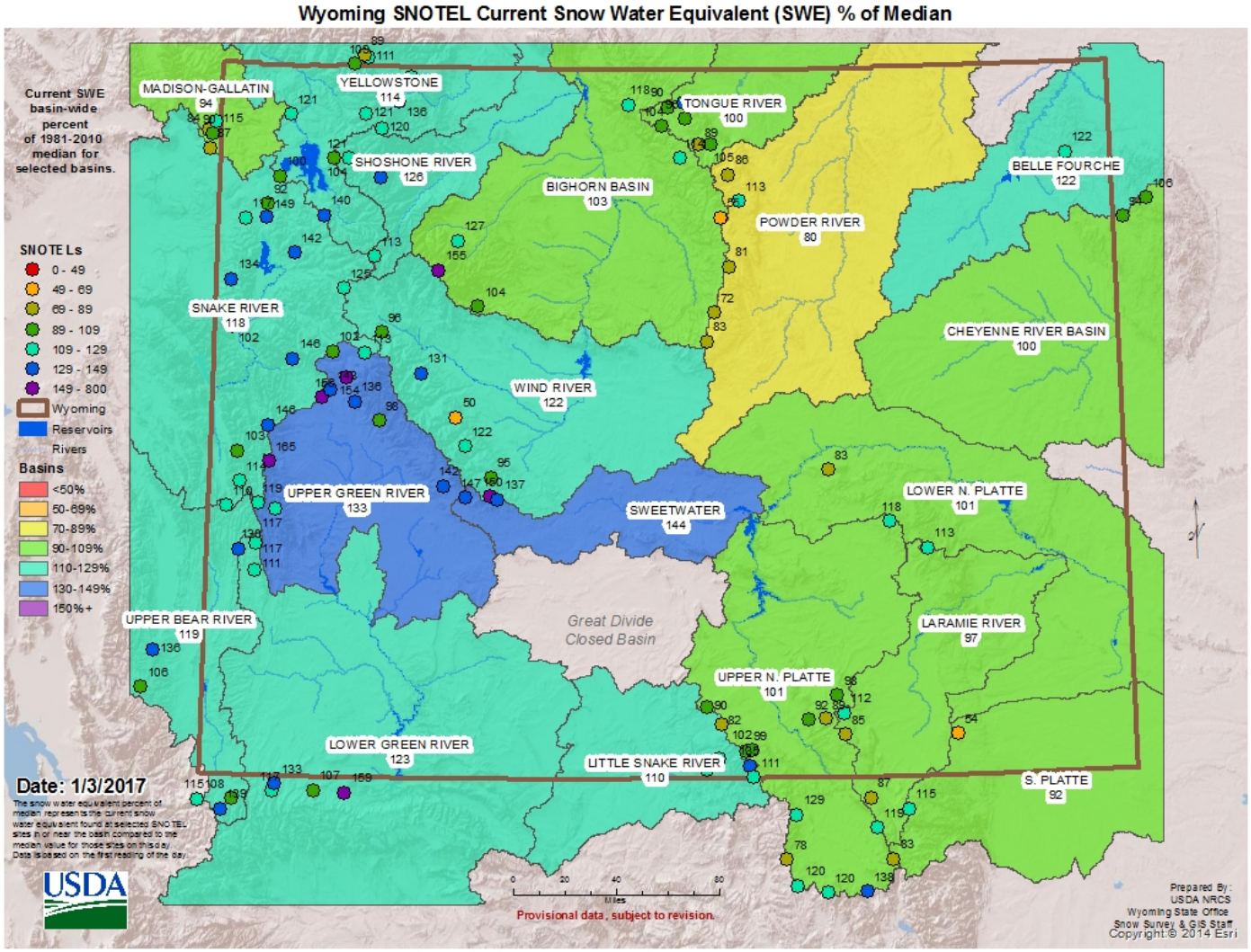
Casper, Wyoming

Jan. 3rd, 2017 Statewide SWE @ 109% of median



The above map is only for SNOTELS and does not include snow courses. The Outlook Report includes the snow courses.

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»

«MailingListID»