

United States Department of Agriculture

Wyoming Basin Outlook Report June 1, 2016

Natural Resources Conservation Service



Bald Mtn SNOTEL #309 (BigHorn Forest above Lovell, WY) ID O7E21S established 10/01/78

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

For more water supply and resource management information, contact:

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How forecasts are made

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snow courses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

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

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

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Wyoming Water Supply Outlook Report

General

The snow water equivalent (SWE) across Wyoming is above median on June 1st at 115%. Monthly precipitation for the basins was 31-223% of average for an overall average of 114%. The year-to-date precipitation average for Wyoming basins is now at 103% varying from 68-128% of average. Forecasted runoff varies from 60-154% of average across the Wyoming basins for an overall average of 97%. Basin reservoir levels for Wyoming vary from 104-172% of average for an overall average of 127%.

Snowpack

Snow water equivalent (SWE), across Wyoming is above median for June 1st at 115%. SWE in the Cheyenne & Belle Fourche River Basins of Wyoming are the lowest at 0%. While SWE in the Sweetwater River Basin is the highest at 428% of median? *See Appendix A for further information*.

Precipitation

Last month's precipitation was above average across the Wyoming Mountains at 114% of average. The Lower Green River Basin had the highest precipitation for the month at 223% of average. The Belle Fourche River Basin had the lowest precipitation amount at 31% of average. The following table displays the major river basins and their departure from average for last month.

	Departure		Departure
Basin	from average		from average
Snake River	+09%	Upper North Platte River	+33%
Madison-Gallatin	-25%	Sweetwater River	+47%
Yellowstone River	-17%	Lower North Platte River	-02%
Wind River	+51%	Laramie River	+14%
Bighorn River	-13%	South Platte River	-08%
Shoshone River	-20%	Little Snake River	+71%
Powder River	-25%	Upper Green River	+51%
Tongue River	-35%	Lower Green River	+123%
Belle Fourche River	-69%	Upper Bear River	+76%
Cheyenne River	-63%		

See Appendix B for further information.

Streams

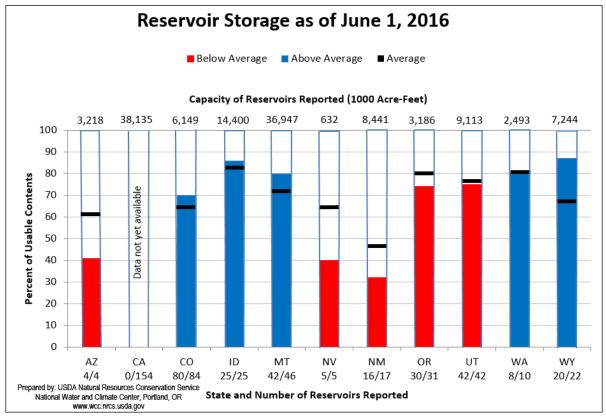
Stream flow yields for June thru September are forecast to be about average statewide over Wyoming at 97%. The Snake River, Madison, and Upper Yellowstone River Basins should yield about 71%, 75% and 78% of average, respectively. Yields from the Wind and Bighorn River Basins should be about 145% and 137% of average, respectively. Yields from the Shoshone and Clarks Fork River Basins of Wyoming should be about 95% and 77% of average, respectively. Yields from the Powder & Tongue River Basins should be about 79% and 60% of average, respectively. Yield for the Cheyenne River Basin should be about 64% of average. Yields for the Upper North Platte, Sweetwater, Lower North Platte, and Laramie Rivers of Wyoming should be about 139%, 119%, 154%, and 137% of average, respectively. Yields for the Little Snake, Green River, and Smith's Fork of Wyoming should be 115%, 100%, and 88% of average respectively. *See Appendix C for further information*.

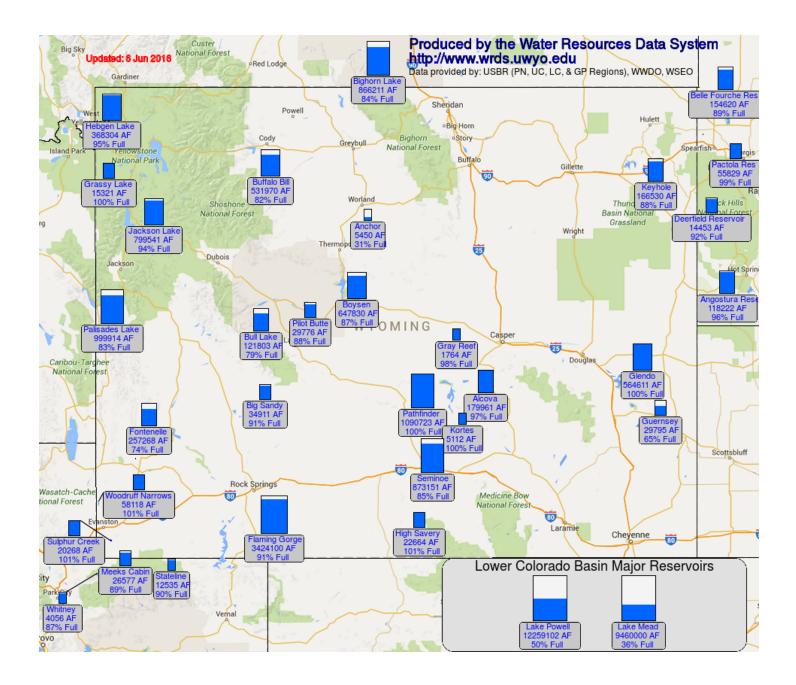
Reservoirs

Reservoir storage is above average at 127% for the entire state. Reservoirs in the Snake River Basin are above average at 121%. Reservoirs in the Madison-Gallatin Basin are above average at 105%. Reservoirs in the Wind River Basin are above average at 121%. Reservoirs on the Big Horn are above average at 106%. The Buffalo Bill Reservoir on the Shoshone is above average at 132%. The Tongue River Basin Reservoir is above average at -153%. 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 143% and 140% respectively. Reservoirs on the Laramie and Little Snake River basins are at 136% and 104% respectively. Reservoirs on the Upper Green River are above average at 147%. Reservoirs on the Lower Green River Basin are above average at 113%. Reservoir on the Upper Bear River Basin is above average at 130%. *See below for further info*.

Wyoming Reservoir Levels for May 1^{st} , 2016

WYOMING	Current	LastYear	-			Last Year%	-		
	(KAF)	(KAF)	(KAF)	(KAF)	Capacity	Capacity	Capacity	Average	Average
Alcova	179.6	180.0	178.9	184.3	97%				101%
Bighorn Lake	791.0	825.3	773.6	1356.0	58%	61%	57%	102%	107%
Big Sandy	22.5	25.9	23.1	38.3	59%	68%	60%	97%	112%
Boysen	572.0	607.4	476.4	596.0	96%	102%	80%	120%	127%
Buffalo Bill	449.3	497.4	336.3	646.6	69%	77%	52%	134%	148%
Bull Lake	76.4	108.6	75.1	151.8	50%	72%	49%	102%	145%
Fontenelle	152.8	184.5	125.0	344.8	44%	54%	36%	122%	148%
Glendo	462.4	410.8	434.5	506.4	91%	81%	86%	106%	95%
Grassy Lake	14.1	13.8	12.8	15.2	93%	91%	84%	110%	108%
Guernsey	35.6	29.6	29.9	45.6	78%	65%	66%	119%	99%
High Savery Reservoir	· 17.1	16.4	15.3	22.4	76%	73%	68%	112%	107%
Jackson Lake	628.9	707.8	445.7	847.0	74%	84%	53%	141%	159%
Kendrick Project	NoBOR	714.8	NOBOR	1201.7		59%			
Keyhole	168.8	172.8	98.1	193.8	87%	89%	51%	172%	176%
Meeks Cabin	14.0	30.5	16.5	32.5	43%	94%	51%	85%	185%
North Platte Project	NOBOR	959.2	NOBOR	1062.1		90%			
Pathfinder	925.1	657.5	617.9	1016.5	91%	65%	61%	150%	106%
Pilot Butte	27.6	26.3	26.1	31.6	87%	83%			101%
Seminoe	739.6	713.4	492.5	1016.7	73%				145%
Viva Naughton Res	38.1	42.2	31.6	42.4	90%	100%	75%		134%
Wheatland #2	86.2	90.7	55.6	98.9	87%	92%	56%		163%
Woodruff Narrows	57.4	54.5	45.5	57.3	100%				120%
Basin-wide Total		5395.5	4310.4	7244.1	75%				125%
# of reservoirs	20	20	20	20	20	20	20	20	20

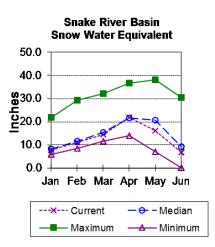




Snake River Basin

Snow

The Snake River Basin SWE above Palisades is 75% of median. SWE in the Snake River Basin above Jackson Lake is melted out. Pacific Creek Basin SWE is melted out. Buffalo Fork SWE is 79% of median. Gros Ventre River Basin SWE is 102% of median. SWE in the Hoback River drainage is 144% of median. SWE in the Greys River drainage is 127% of median. In the Salt River Basin SWE is melted out at all SNOTEL sites. *See Appendix & At the end of this report for a detailed listing of snow course information.*



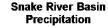
Precipitation

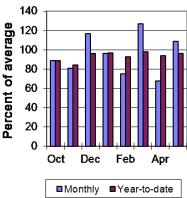
Last month's precipitation for the Snake River Basin was 109% of average (147% last year). Percentages range from 72-196% of average for the 28 reporting stations. Wateryear-to-date precipitation is 96% of average for the Snake River Basin (89% last year). Year-to-date percentages range from 77-115%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

Reservoirs

Current reservoir storage is 121% of average for the three storage reservoirs in the basin. Grassy Lake storage is about 107% of average (15,300 ac-ft compared to 15,400 last year). Jackson Lake storage is 131% of

average (791,700 ac-ft compared to 847,500 ac-ft last year). Palisades Reservoir storage is about 116% of average (1,187,400 ac-ft compared to 1,194,100 ac-ft last year). *Detailed reservoir data shown on the following page and in Appendix D.*





Streamflow

The 50% exceedance forecasts for June through September are

below average for this basin. The Snake near Moran yield is 255,000 ac-ft (50% of average). Snake River above Reservoir near Alpine will yield about 1,230,000 ac-ft (76% of average). The Snake near Irwin will yield about 1,560,000 ac-ft (71% of average). The Snake near Heise yield will be about 1,910,000 ac-ft (81% of average). Pacific Creek near Moran yield will be around 51,000 ac-ft (53% of average). Buffalo Fork above Lava near Moran yield will be around 168,000 ac-ft (68% of average). Greys River above Palisades Reservoir yield will be around 170,000 ac-ft (79% of average). Salt River near Etna yield will be around 160,000 ac-ft (76% of average). See the following page for further information.

	Stream		recasts -					-
		F			abilities for Ris		nt	
	L		Chance th	nat actual volu	ime will excee	d forecast		
SNAKE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Snake R nr Moran ^{,2}								
	JUN-JUL	110	163	200	47%	235	290	425
	JUN-SEP	148	210	255	50%	300	360	505
Snake R ab Reservoir nr Alpine ^{,2}								
	JUN-JUL	770	885	960	75%	1040	1150	1280
	JUN-SEP	1010	1140	1230	76%	1320	1460	1610
Snake R nr Irwin ^{,2}								
	JUN-JUL	940	1090	1190	70%	1290	1440	1700
	JUN-SEP	1260	1440	1560	71%	1680	1870	2190
Snake R nr Heise ²								
	JUN-JUL	1180	1330	1440	80%	1540	1690	1800
	JUN-SEP	1600	1790	1910	81%	2040	2230	2350
Pacific Ck at Moran								
	JUN-JUL	17.6	33	44	51%	55	70	86
	JUN-SEP	23	40	51	53%	62	79	96
Buffalo Fk ab Lava Ck nr Moran								
	JUN-JUL	100	122	138	67%	154	176	205
	JUN-SEP	117	144	163	68%	182	210	240
Greys R ab Reservoir nr Alpine								
	JUN-JUL	106	121	131	80%	141	156	164
	JUN-SEP	138	157	170	79%	183	200	215
Salt R ab Reservoir nr Etna								
	JUN-JUL	67	90	106	74%	122	145	143
	JUN-SEP	112	141	160	76%	179	210	210

Snake River Basin Streamflow Forecasts - June 1, 2016

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

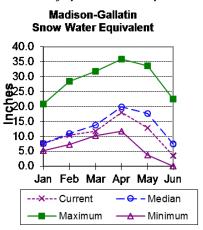
Reservoir Storage	Current	Last Year	Average	Capacity
End of May, 2016	(KAF)	(KAF)	(KAF)	(KAF)
Grassy Lake	15.3	15.4	14.3	15.2
Jackson Lake	791.7	847.5	605.7	847.0
Palisades Reservoir	1187.4	1194.1	1027.0	1400.0
Basin-wide Total	1994.4	2057.0	1647.0	2262.2
# of reservoirs	3	3	3	3

Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median
SNAKE above Jackson Lake	4	0%	0%
PACIFIC CREEK	1		
BUFFALO FORK	1	79%	76%
GROS VENTRE RIVER	3	102%	74%
HOBACK RIVER	3	144%	131%
GREYS RIVER	5	127%	114%
SALT RIVER	3	0%	0%
SNAKE RIVER BASIN	19	75%	54%

Madison-Gallatin Rivers Basin

Snow

SWE is 46% of median in the Madison-Gallatin drainage. 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. Wateryear-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 36,600 ac-ft of water (89% of capacity, 103% of average or 104% last year). Hebgen Lake is storing about 355,400 ac-ft of water (94%

of capacity, 106% of average, 112% last year). *Detailed reservoir data shown below & in Appendix D*.

Streamflow

The 50% exceedance forecast for June through September is below average for the basin. Hebgen Reservoir inflow is 210,000 ac-ft (75% of average). *See below for detailed runoff volumes.*

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Madison-Gallatin River Basins

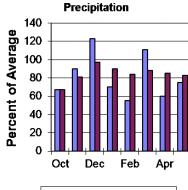
				edance Prob	abilities for Ris ime will excee		nt]
MADISON-GALLATIN RIVER BASINS	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% A∨g	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Hebgen Reservoir Inflow								
	JUN-JUL	83	109	126	71%	143	169	178
	JUN-SEP	158	189	210	75%	230	260	280

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 May, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Ennis Lake	36.6	36.9	35.6	41.0
Hebgen Lake	355.4	377.4	336.2	378.8
Basin-wide Total	392.0	414.4	371.8	419.8
#of reservoirs	2	2	2	2
Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median	
MADISON-GALLATIN RIVER BASINS	5	46%	3%	



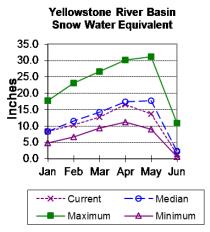
Madison-Gallatin

■Monthly ■Year-to-date

Yellowstone River Basin

Snow

SWE in the Yellowstone River Basin is 63% of median. SWE in the Yellowstone River Drainage in WY is 57% of median. SWE in the Clarks Fork Drainage of the Yellowstone River



Basin in Wyoming is 67% of median. 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-

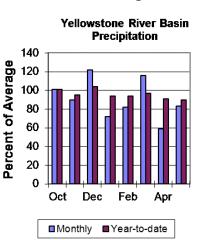
year-to-date precipitation is 90% of average, which was 94% last year. Year to date percentages range from 77-174%.

Reservoirs

No reservoir data

Streamflow

The 50% exceedance forecasts for June through September are below average for the basin. Yellowstone at Lake Outlet will yield around 525,000 ac-ft (80% of average). Yellowstone at Corwin Springs will yield around 1,040,000 ac-ft (78% of average). Yellowstone near Livingston will yield around 1,190,000 ac-ft (78% of average). Clarks



Fork of the Yellowstone near Belfry will yield around 305,000 ac-ft (77% of average). See the following for further information.

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Yellowstone River Basin Streamflow Forecasts - June 1, 2016

					abilities for Ris ime will excee		nt	
YELLOWSTONE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Yellowstone R at Yellowstone Lake Outle	t							
	JUN-JUL	300	345	375	81%	405	450	465
	JUN-SEP	415	480	525	80%	570	635	655
Yellowstone R at Corwin Springs								
	JUN-JUL	600	720	805	77%	890	1010	1040
	JUN-SEP	765	930	1040	78%	1150	1310	1330
Yellowstone R at Livingston								
-	JUN-JUL	670	820	920	78%	1020	1170	1180
	JUN-SEP	865	1060	1190	78%	1320	1520	1520
Clarks Fk Yellowstone R nr Belfry ²								
-	JUN-JUL	205	245	270	77%	295	335	350
	JUN-SEP	220	270	305	77%	340	390	395

1) 90% and 10% exceedance probabilities are actually 95% and 5%

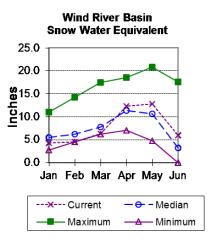
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median
YELLOWSTONE RIVER in WY	6	56%	44%
CLARKS FORK in WY	8	67%	65%

Wind River Basin

Snow

Wind River Basin above Boysen Reservoir SWE is 186% of median. SWE in the Wind River above Dubois is 79% of median. Little Wind SWE is 275% of median, and Popo Agie drainage SWE is 380% of median. *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.

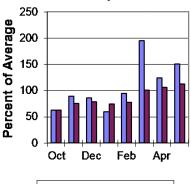
Reservoirs

Current storage in Bull Lake is 109,300 ac-ft (124% of average) (152% last year). Boysen Reservoir is storing (601,200 ac-ft) about 121% of average 137% last year). Pilot Butte is at 123% of average (27,400 ac-ft) (123% last year). *Detailed reservoir data shown on the following page and in Appendix D.*

Streamflow

The 50% exceedance forecasts for the June through September runoff period are above average. Dinwoody Creek near Burris should yield around 86,000 ac-ft (108% of average). The Wind River above Bull Lake Creek will yield around 395,000 ac-ft (108% of average). Bull Lake Creek near Lenore will yield around 172,000 ac-ft (124% of average). Wind River at Riverton will yield around 465,000 ac-ft (108% of average). Little Popo Agie River near Lander should yield around 52,000 ac-ft (158% 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 365,000 ac-ft (174% of average). Boysen Reservoir inflow will yield around 705,000 ac-ft (145% of average). *See the following page for detailed runofl volumes.*





■Monthly ■Year-to-date

Streamflow Forecasts - June 1, 2016								_
			Forecast Exce	edance Prob	abilities for Ris	sk Assessmer	nt	
	l		Chance th	nat actual volu	ime will excee	d forecast		
WIND RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Dinwoody Ck nr Burris								
	JUN-JUL	50	55	59	111%	63	68	53
	JUN-SEP	73	81	86	108%	91	99	80
Wind R Ab Bull Lake Ck								
	JUN-JUL	265	320	360	109%	400	455	330
	JUN-SEP	285	350	395	108%	440	505	365
Bull Lake Ck nr Lenore								
	JUN-JUL	114	128	137	127%	147	161	108
	JUN-SEP	140	159	172	124%	185	205	139
Wind R at Riverton								
	JUN-JUL	285	340	380	109%	420	475	350
	JUN-SEP	350	420	465	108%	510	580	430
Little Popo Agie R nr Lander								
	JUN-JUL	39	42	45	167%	48	51	27
	JUN-SEP	45	49	52	158%	55	59	33
Little Wind R nr Riverton								
	JUN-JUL	240	295	330	180%	365	420	183
	JUN-SEP	260	325	365	174%	405	470	210
Boysen Reservoir Inflow								
-	JUN-JUL	450	560	635	149%	710	820	425
	JUN-SEP	475	610	705	145%	800	935	485

Wind River Basin

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

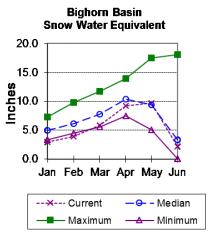
	Reservoir Storage End of May, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Bull Lake		109.3	134.2	88.3	151.8
Boysen		601.2	681.1	498.4	596.0
Pilot Butte		27.4	26.5	22.3	31.6
	Basin-wide Total	737.9	841.8	609.0	779.4
	# of reservoirs	3	3	3	3

Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median
WIND above Dubois	2	79%	76%
LITTLE WIND	2	275%	174%
POPO AGIE	4	380%	229%
WIND RIVER BASIN	9	186%	121%

Bighorn River Basin

Snow

The Bighorn River Basin SWE above Bighorn Reservoir is 65% of median. The Nowood River SWE is melted out. The Greybull River SWE is melted out. Shell Creek SWE is at 69% of median. *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

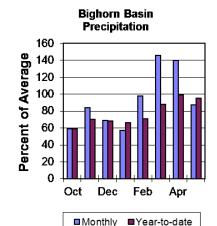
Boysen Reservoir is currently storing 601,200 ac-ft (121% of average). Bighorn Lake is now at 847,500 ac-ft (100% of average). Boysen was at 137% of average last year at this time and Big Horn Detailed reservoir data shown below and in

Lake was at 112% last year. 2 *Appendix D*.

Streamflow

The 50% exceedance forecasts for the June through September runoffs are above average. Boysen Reservoir inflow should yield 705,000 ac-ft (145% of average); the

Greybull River near Meeteetse should yield around 164,000 ac-ft (115% of average); Shell Creek near Shell should yield around 30,000 ac-ft (65% of average) and the Bighorn River at Kane should yield around 860,000 ac-ft (137% of average). See the following for detailed numoff.



Bighorn River Basin Streamflow Forecasts - June 1, 2016 Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast 30yr Avg Forecast 90% 70% 50% 30% 10% **BIGHORN RIVER BASIN** % Avq (KAF) (KAF) (KAF) (KAF) Period (KAF) (KAF) Boysen Reservoir Inflow JUN-JUL 450 560 635 149% 710 820 425 JUN-SEP 475 610 705 145% 800 935 485 Greybull R nr Meeteetse JUN-JUL 88 103 113 118% 123 138 96 JUN-SEP 131 151 164 115% 177 197 142 Shell Ck nr Shell JUN-JUL 11.5 17.1 21 60% 25 31 35 JUN-SEP 18.6 25 30 65% 35 41 46 Bighorn R at Kane 525 670 765 134% 860 1010 570 JUN-JUL JUN-SEP 560 740 137% 980 1160 630 860

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

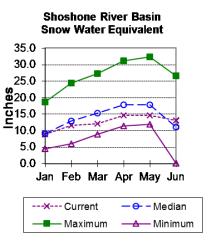
Data Current as of: 6/6/2016 2:45:11 PM

Reservoir S End of May	•	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Boysen	•	601.2	681.1	498.4	596.0
Bighorn Lake		847.5	950.2	848.0	1356.0
	Basin-wide Total	1448.7	1631.3	1346.4	1952.0
	#of reservoirs	2	2	2	2
Watershed Snowp June 1, 2	•	# of Sites	% Median	Last Year % Median	
NOWOOD RIVER		4			
GREYBULL RIVER		2	0%	0%	
SHELL CREEK		3	69%	62%	
BIGHORN RIVER BASI	N	10	65%	61%	

Shoshone River Basin

Snow

Snowpack in this basin is below median for this time of year. Snow Water Equivalent (SWE) is 73% of median 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 132% of average (147 last year) - the reservoir is at about 79% of capacity. Currently, about 509,100 ac-ft are stored in the

Shoshone River Basin Precipitation 140 Percent of Average 120 100 80 60 40 20 0 Oct Dec Feb Apr ■Monthly ■Year-to-date

reservoir compared to 566,900 ac-ft last year. Detailed reservoir data shown on the following page and in Appendix \mathcal{D} .

Streamflow

The 50% exceedance forecasts for the June through September period are slightly below average for the basin. The North Fork Shoshone River at Wapiti will yield around 325,000 ac-ft (90% of average). The South

Fork of the Shoshone River near Valley will yield around 187,000 ac-ft (99% of average), and the South Fork above Buffalo Bill Reservoir runoff will yield around 146,000 ac-ft (95% of average). The Buffalo Bill Reservoir inflow will yield around 510,000 ac-ft 95% of average). See the following for detailed runoff volumes.

Data Current as of: 6/6/2016 2:45:13 PM

		Shosho	ne River	Basin				
	Strear			edance Prob	2016 abilities for Ris ume will excee		nt]
SHOSHONE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
NF Shoshone R at Wapiti								
	JUN-JUL	215	250	275	90%	295	330	305
	JUN-SEP	250	295	325	90%	355	395	360
SF Shoshone R nr Valley								
	JUN-JUL	129	145	155	99%	165	181	157
	JUN-SEP	153	173	187	99%	200	220	189
SF Shoshone R ab Buffalo Bill Reservoir								
	JUN-JUL	95	121	138	95%	155	181	145
	JUN-SEP	96	126	146	95%	166	196	153
Buffalo Bill Reservoir Inflow ²		-						
	JUN-JUL	335	400	440	95%	480	545	465
	JUN-SEP	380	460	510	95%	565	640	535

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

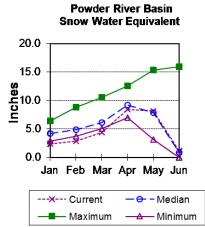
Reservoir Storage End of May, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Buffalo Bill	509.1	566.9	385.4	646.6
Basin-wide Total	509.1	566.9	385.4	646.6
# of reservoirs	1	1	1	1
Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median	
SHOSHONE RIVER BASIN	4	73%	48%	

Powder River Basin

Snow

Powder River SWE is 135% of median. Upper Powder River drainage is 0% of median. SWE in the Clear Creek drainage is 135% of median. Crazy Woman Creek drainage SWE is melted out.

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



Precipitation

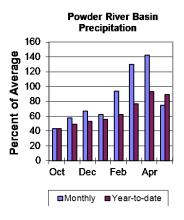
Last month's precipitation was 75% of average (199% last year) for the nine reporting stations. Monthly percentages range from 37-103% of average. Year-to-date precipitation is 89% of average in the basin (108% last year). Precipitation for the year ranges from 75-122% of average. **Reservoirs**

No reservoir data for the basin.

Streamflow

The 50% exceedance forecasts for the June through September period

are below average for the basin. The Middle Fork of the Powder River near Barnum should yield around 4,700 ac-ft (82% of average). The North Fork of the Powder River near Hazelton should yield around 3,400 ac-ft (65% of average). Rock Creek near Buffalo will yield about 14,100 ac-ft (94% of average), and Piney Creek at Kearny should yield about 23,000 ac-ft (82% of average). The Powder River at Moorhead will yield around 87,000 ac-ft (79% of average). The Powder River near Locate will yield around 95,000 ac-ft (78% of average). See the following Low detailed numel volumes.



Data Current as of: 6/6/2016 2:45:14 PM

		Powde	er River E	Basin				
	Stream	nflow Fo	recasts -	June 1. 2	2016			
	1		Forecast Exce			sk Assessmer	nt	1
	L		Chance th	nat actual volu	ime will excee	ed 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								
	JUN-JUL	0.2	2.3	4	83%	5.7	8.3	4.8
	JUN-SEP	0.26	2.9	4.7	82%	6.5	9.1	5.7
NF Powder R nr Hazelton								
	JUN-JUL	0.56	1.84	2.7	60%	3.6	4.9	4.5
	JUN-SEP	0.97	2.4	3.4	65%	4.3	5.8	5.2
Rock Ck nr Buffalo								
	JUN-JUL	6.2	8.8	10.5	93%	12.2	14.8	11.3
	JUN-SEP	9	12	14.1	94%	16.2	19.3	15
Piney Ck at Kearny								
	JUN-JUL	8.2	15	19.6	78%	24	31	25
	JUN-SEP	9.1	17.2	23	82%	28	36	28
Powder R at Moorehead								
	JUN-JUL	12.2	45	67	73%	89	121	92
	JUN-SEP	21	60	87	79%	114	153	110
Powder R nr Locate								
	JUN-JUL	2.3	45	74	73%	103	146	101
	JUN-SEP	4.3	58	95	78%	132	186	122

1) 90% and 10% exceedance probabilities are actually 95% and 5%

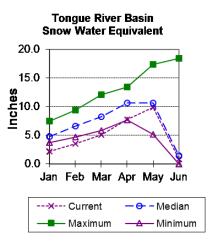
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median
UPPER POWDER RIVER	4		
CLEAR CREEK	2	135%	212%
CRAZY WOMAN CREEK	1		
POWDER RIVER BASIN	6	135%	231%

Tongue River Basin

Snow

Upper Tongue River drainage SWE is at 57% of median. The Goose Creek drainage SWE is melted out at the SNOTEL sites. *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.

80

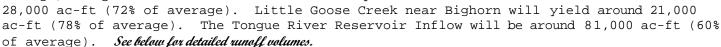
Reservoirs

The Tongue River Reservoir currently is storing 80,700 ac-ft, while last year's storage was 83,400 ac-ft. The Tongue River Reservoir is at 153% of average for this time of year

or 102% of capacity. Detailed reservoir data shown below and in Appendix D.

Streamflow

The 50% exceedance forecasts for the June through September period are below average for the basin. The yield for Tongue River near Dayton will be around 41,000 ac-ft (66% of average). Big Goose Creek near Sheridan will yield around



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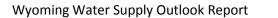
		Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast]
TONGUE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Tongue R nr Dayton								
	JUN-JUL	14	24	30	61%	36	46	49
	JUN-SEP	22	33	41	66%	49	60	62
Big Goose Ck nr Sheridan								
	JUN-JUL	11.5	16.9	21	68%	24	30	31
	JUN-SEP	18.5	24	28	72%	32	38	39
Little Goose Ck nr Bighom								
· ·	JUN-JUL	9.2	12	13.9	73%	15.8	18.5	19.1
	JUN-SEP	14.7	18.5	21	78%	24	28	27
Tongue River Reservoir Inflow								
•	JUN-JUL	18	45	63	57%	81	107	110
	JUN-SEP	25	59	81	60%	104	137	134

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 May, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Tongue River Res	80.7	83.4	52.6	79.1
Basin-wide Total	80.7	83.4	52.6	79.1
#of reservoirs	1	1	1	1
Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median	
GOOSE CREEK	2			
TONGUE RIVER BASIN	6	57%	108%	



 70
 60

 50
 50

 40
 50

 20
 10

 0
 Oct
 Dec

 Feb
 Apr

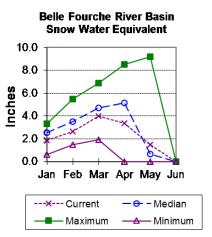
Tongue River Basin

Precipitation

Belle Fourche River Basin

Snow

Belle Fourche River Basin SWE is melted out at the SNOTEL sites. 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 101% of average (156,700 ac-ft), about 88% of capacity. Keyhole Reservoir is storing 165% of average (166,200 acft), about 86% of capacity. Shadehill Reservoir is

storing 81% of average (49,900 ac-ft), about 61% of capacity. *Detailed reservoir data shown below and in Appendix \mathcal{D}.*

Streamflow

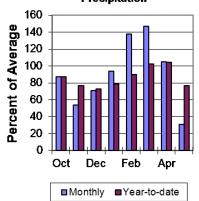
There are no streamflow forecast points for the basin.

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Belle Fourche River Basin - June 1, 2016

Reservoir Storage End of May, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Belle Fourche	156.7	162.9	155.1	178.4
Keyhole	166.2	183.6	100.9	193.8
Shadehill	49.9	63.4	61.4	81.4
Basin-wide Total	372.8	410.0	317.4	453.6
# of reservoirs	3	3	3	3
Watershed Snowpack Analysis June 1, 2016	#of Sites	% Median	Last Year % Median	
BELLE FOURCHE RIVER BASIN	1			

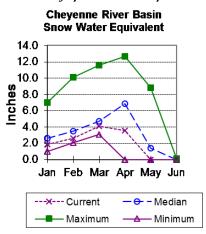
Belle Fourche River Basin Precipitation



Cheyenne River Basin

Snow

Cheyenne River Basin SWE is melted out at the SNOTEL sites. See Appendix A at the end of this report for a detailed listing of snow course information.



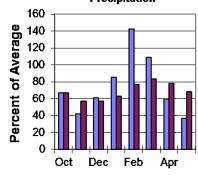
Precipitation

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 112% of average (113,900 ac-ft), about 93% of capacity. Deerfield reservoir is storing 99% of average (14,200 ac-ft), about 94% of capacity. Pactola Reservoir is Cheyenne River Basin Precipitation

■Monthly ■Year-to-date



Streamflow

capacity.

The following runoff values are the 50% exceedance

storing 112% of average (55,000 ac- ft), about 100% of

Detailed reservoir data shown below and in Appendix D.

forecasts for the June through July period. The Deerfield Reservoir Inflow yield is around 1,530 ac-ft (67% of average). Pactola Reservoir Inflow yield is around 6,700 ac-ft (64% of average). See the following for detailed runoff volumes.

Data Current as of: 6/6/2016 2:45:17 PM

Cheyenne River Basin Streamflow Forecasts - June 1, 2016

	[abilities for Ris ume will excee		nt]
CHEYENNE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Deerfield Reservoir Inflow								
De stale De service la farm	JUN-JUL	0.1	0.23	1.53	67%	2.8	4.7	2.3
Pactola Reservoir Inflow	JUN-JUL	0.1	1.8	6.7	64%	13.3	23	10.5

1) 90% and 10% exceedance probabilities are actually 95% and 5%

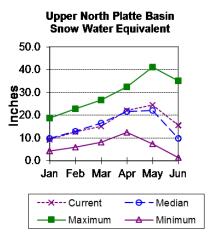
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

Reservoir Storage End of May, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Angostura	113.9	100.5	101.3	122.1
Deerfield	14.2	15.5	14.3	15.2
PactoLa	55.0	60.9	48.9	55.0
Basin-wide Total	183.1	176.9	164.5	192.3
#of reservoirs	3	3	3	3
Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median	
CHEYENNE RIVER BASIN	2			

Upper North Platte River Basin

Snow

The Upper North Platte River Basin above Seminoe Reservoir SWE is 161% of median. North Platte above Northgate SWE is 150% of median. Encampment River SWE is 224% of median.



Brush Creek SWE is 127% of median. Medicine Bow and Rock Creek SWE are 142% of median. 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.

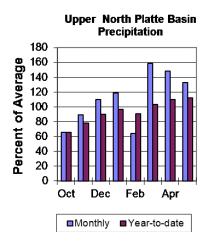
Reservoirs

Seminoe Reservoir is storing 867,600 ac- ft or 85% of

capacity. Seminoe Reservoir is at 143% of average and was at 133% of average last year. Detailed reservoir data shown on the following page and in Appendix \mathcal{D} .

Streamflow

The 50% exceedance forecasts for the June through September period are above average for the Upper North Platte River Basin. The yield for the North Platte River near Northgate will be around 157,000 ac-ft (128% of average). The Encampment River near Encampment yield will be around 115,000 ac-ft (137% of average). Rock Creek near Arlington yield will be around 45,000



ac-ft (129% of average). Sweetwater River near Pathfinder will yield about 37,000 ac-ft (119% of average). Seminoe Reservoir inflow should be around 620,000 ac-ft (139% of average). *See the following page for more detailed information on projected runoff.*

Upper North Platte River Basin

	Strear [edance Prob	2016 abilities for Ris ume will excee		nt]
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								
	JUN-JUL	113	139	157	128%	175	200	123
	JUN-SEP	132	164	186	127%	210	240	146
Encampment R nr Encampment ²								
	JUN-JUL	80	95	105	140%	115	130	75
	JUN-SEP	88	104	115	137%	126	142	84
Rock Ck nr Arlington								
9	JUN-JUL	35	39	42	131%	45	49	32
	JUN-SEP	37	42	45	129%	48	53	35
Sweetwater R nr Alcova								
	JUN-JUL	20	27	32	123%	37	44	26
	JUN-SEP	23	31	37	119%	43	51	31
Seminoe Reservoir Inflow								
	JUN-JUL	400	485	545	140%	605	690	390
	JUN-SEP	445	550	620	139%	690	795	445

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

UPPER NORTH PLATTE RIVER BASIN

Reservoir Storage End of May, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Seminoe	867.6	804.8	607.1	1016.7
Basin-wide Total	867.6	804.8	607.1	1016.7
# of reservoirs	1	1	1	1
Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median	
	# of Sites 9	% Median 150%		
June 1, 2016			% Median	
June 1, 2016 N PLATTE above Northgate	9	150%	% Median 104%	

17

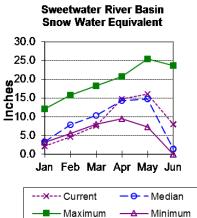
161%

102%

Sweetwater River Basin

Snow

Sweetwater River Basin SWE is 573% of median. See *Appendix A at the end of this report for a detailed listing of snow course information.*



Streamflow

The 50% exceedance forecast for the June through September period will be slightly above average. The Sweetwater River near Pathfinder will yield about 37,000 ac-ft (119% of average). *See below for detailed information on projected runoff.*

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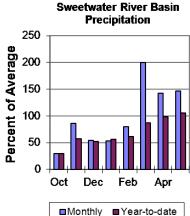
Precipitation

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-todate percentages range from 95-140% of average.

Reservoirs

Reservoir storage is as follows: Pathfinder 1,089,500 ac-ft (172% of average or 107% of capacity.



	Strear			edance Prob	2 016 abilities for Ris ime will excee		nt]
SWEETWATER RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% A∨g	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Sweetwater R nr Alcova	JUN-JUL	20	27	32	123%	37	44	26
	JUN-SEP	23	31	37	119%	43	51	31

Sweetwater River Basin

1) 90% and 10% exceedance probabilities are actually 95% and 5%

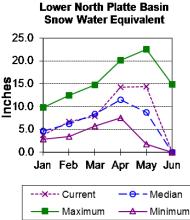
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

Reservoir Storage End of May, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Pathfinder	1089.5	724.4	633.8	1016.5
Basin-wide Total	1089.5	724.4	633.8	1016.5
#of reservoirs	1	1	1	1
Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median	
SWEETWATER RIVER BASIN	3	573%	330%	

Lower North Platte River Basin

Snow

Lower North Platte River Basin SWE is melted out at the SNOTEL sites. 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 180,000 ac-ft (100% of average) (98% of capacity); Glendo 551,200 ac-ft (116% of average) (109% of capacity); Guernsey

Maximum <u>A</u> Minimum (116% of average) (109% of capacity); Guernsey 30,300 ac-ft (88% of average) (66% of capacity); Pathfinder 1,089,500 ac-ft (172% of average) (107% of capacity) (114% of average last year). *Detailed reservoir data* shown on the following page and in *Appendix D*.

Streamflow

The 50% exceedance forecasts for the June 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 5,500 ac-ft (115% of average). North Platte River below Glendo Reservoir should yield around 575,000 ac-ft (142% of average), and below Guernsey Reservoir should yield around 615,000 ac-ft (154% of average). *See the following for more detailed information on projected runoff.*

Data Current as of: 6/6/2016 2:45:21 PM Lower North Platte River Basin Streamflow Forecasts - June 1, 2016 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								
	JUN-JUL	0.98	3.5	5.2	116%	6.9	9.4	4.5
	JUN-SEP	1.37	3.8	5.5	115%	7.2	9.6	4.8
North Platte R bl Glendo Reservoir								
	JUN-JUL	415	480	525	140%	570	635	375
	JUN-SEP	455	525	575	142%	625	695	405
North Platte R bl Guernsey Reservoir								
	JUN-JUL	420	495	550	149%	605	685	370
	JUN-SEP	465	555	615	154%	675	760	400

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 May, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Alcova	180.0	180.1	179.7	184.3
Glendo	551.2	535.3	475.0	506.4
Guernsey	30.3	31.3	34.3	45.6
Pathfinder	1089.5	724.4	633.8	1016.5
Basin-wide Total	1851.0	1471.1	1322.8	1752.8
# of reservoirs	4	4	4	4
Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median	
DEER & LaPRELE CREEKS	2			
LOWER NORTH PLATTE RIVER BASIN	4			

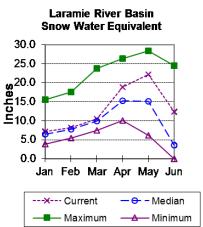
Lower North Platte Basin Precipitation

■Monthly ■Year-to-date

Laramie River Basin

Snow

SWE for the entire Laramie River Basin (above mouth entering North Platte) is 343% of SWE for the Laramie River above Laramie is 276% of median. SWE for the Little median.



Laramie River is 449% of median. SWE total for the entire North Platte River Basin above Torrington is 181% of median. 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.

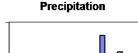
Reservoirs

Reservoir storage is as

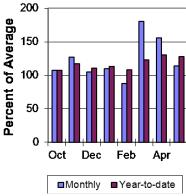
follows: Wheatland #2 75,600 ac-ft (136% of average) (76% of capacity) was (160% of average last year). Detailed reservoir data shown on the following page and in Appendix D.

Streamflow

The 50% exceedance forecasts for the June through September period will be above average. Laramie River near Woods Landing should yield around 112,000 ac-ft (137% of average). The Little Laramie near Filmore should produce about 50,000 ac-ft (128% of average). See



Laramie River Basin



below for detailed information on projected runoff. Data Current as of: 6/6/2016 2:45:22 PM

Laramie River Basin Streamflow Earocasta June 1, 2016

LARAMIE RIVER BASIN		Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast						
	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% A∨g	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Laramie R nr Woods								
	JUN-JUL	76	89	98	138%	107	120	71
	JUN-SEP	87	102	112	137%	122	137	82
Little Laramie R nr Filmore								
	JUN-JUL	36	41	45	129%	49	54	35
	JUN-SEP	39	46	50	128%	54	61	39

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

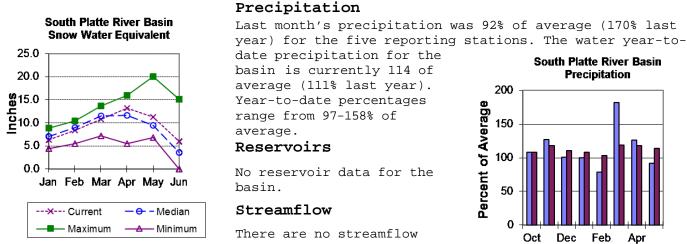
Reservoir Storage	Current	Last Year	Average	Capacity
End of May, 2016	(KAF)	(KAF)	(KAF)	(KAF)
Wheatland #2	75.6	89.0	55.7	98.9
Basin-wide Total	75.6	89.0	55.7	98.9
#of reservoirs	1	1	1	1

Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median
LARAMIE RIVER abv Laramie	4	276%	153%
LITTLE LARAMIE RIVER	2	449%	225%
LARAMIE RIVER BASIN	7	343%	181%
NORTH PLATTE TOTAL RIVER BASIN	26	181%	115%

South Platte River Basin (WY)

Snow

South Platte River Basin SWE in WY is 166% of median. See Appendix A at the end of this report for a detailed listing of snow course information.



forecast points for the basin.

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South Platte River Basin - June 1, 2016

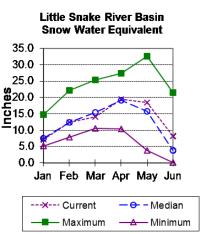
# of Sites	% Median	Last Year % Median
4	166%	185%
	# of Sites 4	# of Sites % Median 4 166%

■Monthly ■Year-to-date

Little Snake River Basin

Snow

Little Snake River drainage SWE is 214% of median. See *Appendix A at the end of this report for a detailed listing of snow course information.*



Streamflow

The 50% exceedance forecasts for the June through July period will be above average. The Little Snake River near Slater should yield around 80,000 ac-ft (121% of average). The Little Snake River near Dixon should yield around 155,000 ac-ft (115% of average). *See below for detailed information*

on projected runoff.

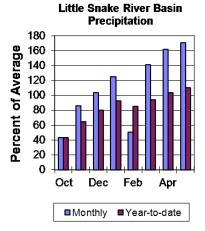
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Precipitation

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 - 22,500 acft (104% of average) (100% of capacity) (97% last year's average). See below for detailed information on reservoirs and in Appendix D.



Little Snake River Basin Streamflow Forecasts - June 1, 2016

		Streamflow Forecasts - June 1, 2016 Forecast Exceedance Probabilities for Risk Assessn 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 A∨g (KAF)
Little Snake R nr Slater ²								
	APR-JUL	169	183	193	124%	205	220	156
	JUN-JUL	56	70	80	121%	91	108	66
Little Snake R nr Dixon ²								
	APR-JUL	350	385	410	119%	440	485	345
	JUN-JUL	95	129	155	115%	183	230	135

1) 90% and 10% exceedance probabilities are actually 95% and 5%

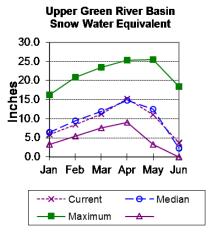
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

Reservoir Storage End of May, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
High Savery Reservoir	22.5	21.0	21.6	22.4
Basin-wide Total	22.5	21.0	21.6	22.4
#of reservoirs	1	1	1	1
Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median	
LITTLE SNAKE RIVER BASIN	8	214%	81%	

Upper Green River Basin

Snow

Upper Green River Basin above Fontenelle Reservoir SWE is 159% of median. Green River Basin above Warren Bridge SWE is 254% of median. West Side of Upper Green



River Basin SWE is 148% of median. New Fork River SWE is melted out at all SNOTEL sites. Big Sandy-Eden Valley Basin SWE is melted out at all SNOTEL sites. 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

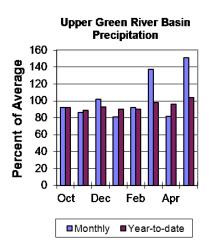
Storage in Big Sandy Reservoir is 33,000 ac-ft or 86% of capacity (113%

of average) (120% last year). Fontenelle Reservoir is 251,200 ac-ft (73% of capacity) (153% of average) (181% last year). Detailed reservoir data shown on the following page and in *Appendix* \mathcal{D} .

Streamflow

The 50% exceedance forecasts for the June through July period will be below average. The yield on the Green River at Warren Bridge is about 140,000 ac-ft (83% of average). Pine Creek above Fremont Lake yield will be about 63,000 ac-ft (83% of average). New Fork River

near Big Piney yield will be about 260,000 ac-ft (102% of average). Fontenelle Reservoir Inflow is estimated to be around 425,000 ac-ft (89% of average), and Big Sandy near Farson yield will be around 34,000 ac-ft (100% of average). *See the following for a more detailed forecast.*



Upper Green River Basin

Streamflow Forecasts - June 1, 2016

		I			abilities for Ris ume will excee		nt	
	L		onanoo a	iai aotaan voit				_
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	162	188	205	84%	225	260	245
	JUN-JUL	95	121	140	83%	160	193	168
Pine Creek ab Fremont Lake								
	APR-JUL	64	75	83	85%	92	105	98
	JUN-JUL	44	55	63	83%	72	85	76
New Fork R nr Big Piney								
	APR-JUL	285	325	350	99%	380	425	355
	JUN-JUL	195	235	260	102%	290	335	255
Fontenelle Reservoir Inflow								
	APR-JUL	555	640	700	97%	765	875	725
	JUN-JUL	280	365	425	89%	490	600	475
Big Sandy R nr Farson								
	APR-JUL	37	45	52	100%	59	70	52
	JUN-JUL	18.8	27	34	100%	41	52	34

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

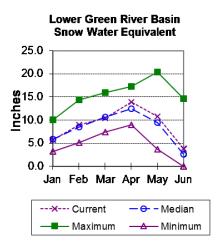
Reservoir Storage End of May, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Big Sandy	33.0	35.0	29.1	38.3
Fontenelle	251.2	297.2	164.0	344.8
Basin-wide Tota	d 284.2	332.2	193.1	383.1
# of reservoir	s 2	2	2	2

Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median
GREEN above Warren Bridge	5	254%	61%
UPPER GREEN - West Side	4	148%	133%
NEWFORK RIVER	2		
BIG SANDY-EDEN VALLEY	2		
GREEN above Fontenelle	12	159%	125%

Lower Green River Basin

Snow

Lower Green River Basin SWE is 145% of median. Hams Fork drainage SWE is 114% of median. Blacks Fork drainage SWE is 179% of median. Henrys Fork SWE is melted out at all SNOTEL



% of median. Henrys Fork SWE is melted out at all SNOTEL sites. SWE for the entire Green River Basin (above Flaming Gorge) is 153% of median. *See Appendix A at the end of this report for a*

detailed listing of snow course information.

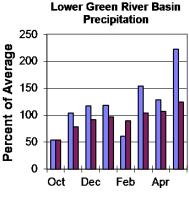
Precipitation

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 251,200 ac-ft; this is 153% of

average (181% last year) (73% of capacity). Flaming Gorge is currently storing 3,421,700 ac-ft; this is 111% of average (104% last year) (91% of capacity). Viva Naughton is currently storing 43,500 ac- ft; this is 105% of average (108% last year) (103% of capacity). *Detailed reservoir data shown* on the following page and in Appendix D.



■Monthly ■Year-to-date

Streamflow

The 50% exceedance forecasts for the June through July

period will be around average. The Green River near Green River will yield about 440,000 ac-ft (92% of average). The Blacks Fork near Robertson will yield about 85,000 ac-ft (155% of average). East Fork of Smiths Fork near Robertson will yield around 26,000 ac-ft (147% of average). Hams Fork below Pole Creek near Frontier will yield around 21,000 ac-ft (81% of average). The Hams Fork Inflow to Viva Naughton Reservoir will yield about 25,000 ac-ft (100% of average). See the following page for more detailed information on projected runoff.

		Forecast Exceedance Probabilities for Risk Assessment								
	l	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	605	685	740	101%	800	900	730		
	JUN-JUL	305	385	440	92%	500	600	480		
Blacks Fk nr Robertson										
	APR-JUL	97	109	117	136%	126	140	86		
	JUN-JUL	65	77	85	155%	94	108	55		
EF of Smiths Fork nr Robertson ²										
	APR-JUL	29	34	37	137%	41	47	27		
	JUN-JUL	17.9	23	26	147%	30	36	17.7		
Hams Fk bl Pole Ck nr Frontier										
	APR-JUL	52	56	59	109%	62	68	54		
	JUN-JUL	13.9	18	21	81%	24	30	26		
Viva Naughton Reservoir Inflow										
-	APR-JUL	63	69	75	101%	80	90	74		
	JUN-JUL	13.1	19.5	25	81%	30	40	31		
Flaming Gorge Reservoir Inflow ²										
	APR-JUL	910	1020	1100	112%	1190	1330	980		
	JUN-JUL	410	520	600	100%	685	825	600		

Lower Green River Basin Streamflow Forecasts - June 1, 2016

2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

1) 90% and 10% exceedance probabilities are actually 95% and 5%

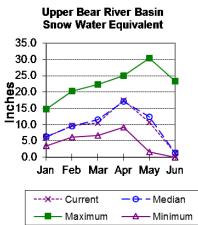
Reservoir Storage	Current	Last Year	Average	Capacity
End of May, 2016	(KAF)	(KAF)	(KAF)	(KAF)
Fontenelle	251.2	297.2	164.0	344.8
Flaming Gorge Reservoir	3421.7	3197.7	3070.0	3749.0
Viva Naughton Res	43.5	45.0	41.5	42.4
Basin-wide Total	3716.4	3539.8	3275.5	4136.2
# of reservoirs	3	3	3	3

Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median
HAMS FORK RIVER	3	114%	88%
BLACKS FORK	2	179%	76%
HENRYS FORK	2		
LOWER GREEN RIVER BASIN	7	145%	82%
GREEN above FLAMING GORGE	19	153%	107%

Upper Bear River Basin

Snow

Upper Bear River Basin in Utah SWE is 40% of median. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is melted out. Bear River Basin SWE, above



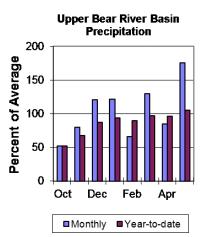
the Idaho State line, is 105% of median. See Appendix A at the end of this report for a detailed listing of snow course information. **Precipitation**

Precipitation for last month was 176% of average for the 9 reporting stations; this was 182% last year. The year-todate precipitation for the basin is 105% of average; this

was 80% last year. Year-todate percentages range from 93-165% of average.

Reservoirs

Storage in Woodruff Narrows Reservoir was 58,200 ac-ft about 102% of capacity (130% of average) (124% last year).



Detailed reservoir data shown below and in Appendix D. Streamflow

The following 50% exceedance forecasts for the June through September period will be below average. The Bear River near the Utah-Wyoming State Line should yield about 64,000 ac-ft (82% of average). The Bear River above Reservoir near Woodruff should yield around 49,000 ac-ft (77% of average). The Smiths Fork River near Border Jct. will yield around 57,000 ac-ft

(88% of average). See below for detailed information on projected runoff.

Upper Bear River Basin

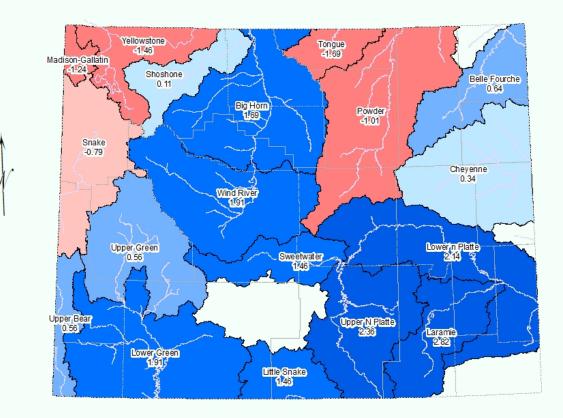
		Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast						
UPPER BEAR RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Bear R nr UT-WY State Line								
	APR-JUL	76	88	96	86%	104	116	112
	APR-SEP	82	96	106	86%	116	130	123
	JUN-JUL	37	47	54	82%	60	70	66
	JUN-SEP	45	57	64	82%	72	83	78
Bear R ab Resv nr Woodruff								
	APR-JUL	75	93	106	88%	119	137	121
	APR-SEP	77	96	108	84%	121	140	128
	JUN-JUL	26	39	47	82%	56	68	57
	JUN-SEP	27	40	49	77%	58	71	64
Smiths Fk nr Border								
	APR-JUL	74	83	88	99%	94	103	89
	APR-SEP	85	96	102	98%	110	120	104
	JUN-JUL	29	38	43	86%	49	58	50
	JUN-SEP	40	51	57	88%	65	75	65

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

Reservoir Storage End of May, 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Woodruff Narrows Reservoir	58.2	55.4	44.8	57.3
Basin-wide Total	58.2	55.4	44.8	57.3
# of reservoirs	1	1	1	1
Watershed Snowpack Analysis June 1, 2016	# of Sites	% Median	Last Year % Median	
UPPER BEAR RIVER in Utah	3	40%	0%	
SMITHS & THOMAS FORKS	2			
UPPER BEAR RIVER BASIN	7	105%	0%	

Wyoming Surface Water Supply Index





USDA

0

The Surface Water Supply Index (SWSI) is computed using only surface water supplies for the drainage. The computation includes reservoir storage, if applicable, plus the forecast runoff. The index is purposely created to resemble the Palmer Drought Index, with normal conditions centered near zero. Adequate and excessive supply has a positive number and deficit water supply has a negative value. Soil moisture and forecast precipitation are not considered as such, but the forecast runoff may consider these values.

Date: 6/7/2016

Appendix A In Word double click the object below to view entire document

Report Created: 6/6/2016 2:44:17 PM								
Basinwide Summary: Ju (Averages/Medians based on 1981-2		ce period)		Snow	pack Su	mmary fo	r June 1, 2	016
		Elevation	Depth	SWE	Median	%	Last Year	Last Year
SNAKE above Jackson Lake	Network	(ft)	(in)	(in)	(in)	Median	SWE (in)	
Aster Creek	SC	7750						
Glade Creek	SC	7040						
Grassy Lake	SNOTEL	7265	0	0.0	4.8	0%	0.0	0%
Huckleberry Divide	SC	7300						
Lewis Lake Divide	SNOTEL	7850	0	0.0	11.6	0%	0.0	0%
Moran	SC	6750						
Snake River Station Thumb Divide	SNOTEL	6920 7980	0				0.0	
Two Ocean Plateau	SNOTEL	9240		0.0	24.9		9.1	37%
Basin Index	SNUTEL	8240			24.8	0%		0%
# of sites						4		4
						-		
		Elevation	Depth	SWE	Median	%	Last Year	Last Year
PACIFIC CREEK	Network	(ft)	(in)	(in)	(in)	Median	SWE (in)	
Base Camp	SNOTEL	7030	0	0.0	0.0		0.0	
Moran	SC	6750						
Two Ocean Plateau	SNOTEL	9240			24.9		9.1	37%
Basin Index								
# of sites						1		1
BUFFALO FORK	Network	Elevation	Depth	SWE	Median	%		Last Year
		(ft)	(in)	(in)	(in)	Median	SWE (in)	% Median
Four Mile	SC	6900						
Togwotee Pass	SNOTEL	9580	31	15.1	19.0	79%	14.4	76%
Turpin Meadows	SC	6900	-					
Younts Peak Basin Index	SNOTEL	8350	0	0.0	3.2	0% 79%		76%
# of sites						1 1		1
# OF SILES								
		Elevation	Denth	SWE	Median	%	Last Vear	Last Year
GROS VENTRE RIVER	Network	(ft)	(in)	(in)	(in)			% Median
Elbo Ranch	SC	7100						
Gros Ventre Summit	SNOTEL	8750	0	0.0	0.0		0.0	
Gunsight Pass	SNOTEL	9820	14	7.1	2.8	254%	1.7	61%
Togwotee Pass	SNOTEL	9580	31	15.1	19.0	79%	14.4	76%
Basin Index						102%		74%
# of sites						3		3
HOBACK RIVER	Network	Elevation			Median			Last Year
		(ft)	(in)	(in)	(in)		SWE (in)	
Blind Bull Sum	SNOTEL	8650	-	16.6				131%
East Rim Divide	SNOTEL	7930	0				0.0	
Granite Creek	SNOTEL	6770 6664	0	0.0	0.0		0.0	
Hoback GS Snow King Mountain	SC SC	6664 7660						
Basin Index	30	7000				144%		131%
# of sites						3		3
								2
		Elevation	Depth	SWF	Median	%	Last Year	Last Year
GREYS RIVER	Network	(ft)	(in)	(in)	(in)		SWE (in)	
		1.1		1.11	1.4		7	

Appendix B In Word double click the object below to view entire document

Report Created: 6/6/2016 2:44:17 PM												
Basinwide Summary: J (Averages/Medians based on 1981-		ce period)	Mor	thly Total	Precipita	tion for May	2016	Water Year to Date Precipitation through May 2016				
		Elevation	Current	Average	%	Last Year	Last Year	Current	Average	%	Last Year	Last Year
SNAKE above Jackson Lake	Network	(ft)	(in)	(in)	Average	(in)	% Avg	(in)	(in)	Average	(in)	% Avg
Grassy Lake	SNOTEL	7265	4.8	4.4	109%	3.9	89%	41.7	43.7	95%	33.7	77%
Lewis Lake Divide Snake River Station	SNOTEL SNOTEL	7850 6920	2.7 2.6	4.2		4.8	114% 140%	36 26.1	42.7 27.8	84% 94%	32 23.1	75% 83%
Thumb Divide	SNOTEL	7980	2.0	2.9		3.8	131%	18.4	27.8	77%	16.3	68%
Two Ocean Plateau	SNOTEL	9240	2.0	4.3	0070	2.9	67%		34.4		27.2	79%
Basin Index					87%		115%			89%		76%
# of sites					4		4			4		4
PACIFIC CREEK		Elevation	Current	Average	%	Last Year	Last Year	Current	Average	%	Last Year	Last Year
PACIFIC CREEK	Network	(ft)	(in)	(in)	Average	(in)	% Avg	(in)	(in)	Average	(in)	% Avg
Base Camp	SNOTEL	7030	2.1	2.9		3.5	121%	23.3	25.7	91%	21.7	84%
Two Ocean Plateau Basin Index	SNOTEL	9240		4.3	72%	2.9	67% 121%		34.4	91%	27.2	79%
# of sites					1		1			1		1
		Elevation	Current	Average	%	Last Year	Last Year	Current	Average	%	Last Year	Last Year
BUFFALO FORK	Network	(ft)	(in)	(in)	Average	(in)	% Avg	(in)	(in)	Average	(in)	% Avg
Togwotee Pass	SNOTEL	9580	3.6	3.8	95%	3.9	103%	30.5	31	98%	30.2	97%
Younts Peak Basin Index	SNOTEL	8350	2.8	3.1	90% 95%		103%	17.4	20.7	84% 98%		97%
# of sites					90%		103%			38%		97%
GROS VENTRE RIVER	Network	Elevation (#)	Current (in)	Average (in)	% Average	Last Year	Last Year % Avg	Current	Average (in)	% Average	Last Year	Last Year % Avg
Gros Ventre Summit	SNOTEL	(ft) 8750	(in)	(in) 24	Average 92%	(in) 3.8	% Avg 158%	(in) 14.2	(in) 17	Average 84%	(in) 13.8	% Avg 81%
Gunsight Pass	SNOTEL	9820	3.2	2.7	119%	3.9	144%	19.5	18.7	104%	17.1	91%
Togwotee Pass	SNOTEL	9580	3.6	3.8	95%	3.9	103%	30.5	31	98%	30.2	97%
Basin Index					101%		130%			96%		92%
# of sites					3		3			3		3
HOBACK RIVER	Network	Elevation		Average	%	Last Year		Current	Average	%	Last Year	
Blind Bull Sum	SNOTEL	(ft)	(in)	(in)	Average	(in)	% Avg	(in)	(in)	Average	(in)	% Avg
East Rim Divide	SNOTEL	8650 7930	3.1 2.2	3.1 2.1	100% 105%	5	161% 190%	20.7 14.7	24.4 15	85% 98%	22.5 15.6	92% 104%
Granite Creek	SNOTEL	6770	2.9	2.8	104%	4.7	168%	21.7	24.1	90%	22.4	93%
Basin Index					103%		171%			90%		95%
# of sites					3		3			3		3
		Elevation	Current	Average	%	Last Year	Last Voor	Current	Average	%	Last Year	Last Vear
GREYS RIVER	Network	(ft)	(in)	(in)	Average	(in)	% Avg	(in)	(in)	Average	(in)	% Avg
Blind Bull Sum	SNOTEL	8650	3.1	3.1	100%	5	161%	20.7	24.4	85%	22.5	92%
Cottonwood Creek	SNOTEL	7670	5.8	4	145%	5.2	130%	34.8	31.4	111%	31.7	101%
Spring Creek Divide	SNOTEL	9000 8500	5.7 4.7	3 3.6		4.6 5.4	153% 150%	31.1 33.6	29.2 31.5	107% 107%	29.7 32.1	102% 102%
Triple Peak Willow Creek	SNOTEL	8380	4.7	3.0		5.5	110%	33.0 42.1	42.6	99%	32.1	83%
Basin Index	ONOTEE	0000	0.0		133%	0.0	137%	14.1	12.0	102%	00.0	95%
# of sites					5		5			5		5
		Elevation	Current	Average	%	Last Year	Last Vear	Current	Average	%	Last Year	Last Year
SALT RIVER	Network	(ft)	(in)	(in)	Average	(in)	% Avg	(in)	(in)	Average	(in)	% Avg
Cottonwood Creek	SNOTEL	7670	5.8	4	145%	5.2	130%	34.8	31.4	111%	31.7	101%
Salt River Summit Willow Creek	SNOTEL SNOTEL	7760 8380	4.7 5.6	2.4 5		5.1 5.5	213% 110%	22 42.1	20.8 42.6	106%	19.4 35.5	93% 83%
Basin Index	SHOTEL	0300	0.0	0	112%	0.0	139%	42.1	42.0	104%	30.0	<u>83%</u> 91%
# of sites					3		3			3		3
		Elevation	Current	Average	%	Last Year	Last Year	Current	Average	%	Last Year	Last Year
SNAKE RIVER BASIN	Network	(ft)	(in)	(in)	Average	(in)	% Avg	(in)	(in)	Average	(in)	% Avg
Afton	COOP	6210	3.8	2.26			214%	13.04	12.05	108%	12.08	100%
Alta 1 NW	COOP	6430	2.71	3.37	80%	4.73	140%	18.81	18.33	103%	15.97	87%
Base Camp Bedford 3 SE	SNOTEL COOP	7030 6430	2.1 4.48	2.9 2.61	72% 172%	3.5 4.56	121% 175%	23.3 17.54	25.7 15.52	91% 113%	21.7 17.17	84% 111%
Black Bear	SNOTEL	8170	3.9	4.7		4.6	98%	41.1	46.4	89%	33.1	71%
Blind Bull Sum	SNOTEL	8650	3.1	3.1	100%	5	161%	20.7	24.4	85%	22.5	92%
Bondurant	COOP	6620	2.54	1.68		4.28	255%	13.33	13.32	100%	15.25	114%
Cottonwood Creek	SNOTEL	7670	5.8	4			130%	34.8	31.4	111%	31.7	101%
Darwin Ranch East Rim Divide	COOP SNOTEL	8160 7930	1.76 2.2	1.74	101% 105%	2.5	144% 190%	9.24 14.7	9.91 15	93% 98%	8.63 15.6	87% 104%
	STOLES I SEE			4			163%	38.9	38.6	101%	37.4	97%
	SNOTEL	9260	4.4									
Grand Targhee Granite Creek	SNOTEL SNOTEL	9260 6770	4.4	2.8		4.7	168%	21.7	24.1	90%	22.4	93%
Grand Targhee Granite Creek Grassy Lake	SNOTEL SNOTEL	6770 7265	2.9 4.8	2.8 4.4	104% 109%	3.9	89%	41.7	43.7	95%	33.7	77%
Grand Targhee Granite Creek Grassy Lake Gros Ventre Summit	SNOTEL SNOTEL SNOTEL	6770 7265 8750	2.9 4.8 2.2	2.8 4.4 2.4	104% 109% 92%	3.9 3.8	89% 158%	41.7 14.2	43.7 17	95% 84%	33.7 13.8	77% 81%
Grand Targhee Granite Creek Grassy Lake Gros Ventre Summit Gunsight Pass	SNOTEL SNOTEL SNOTEL SNOTEL	6770 7265 8750 9820	2.9 4.8 2.2 3.2	2.8 4.4 2.4 2.7	104% 109% 92% 119%	3.9 3.8 3.9	89% 158% 144%	41.7 14.2 19.5	43.7 17 18.7	95% 84% 104%	33.7 13.8 17.1	77% 81% 91%
Grand Targhee Granite Creek Grassy Lake Gross Ventre Summit Gunsight Pass Jackson	SNOTEL SNOTEL SNOTEL SNOTEL COOP	6770 7265 8750 9820 6230	2.9 4.8 2.2 3.2 2.4	2.8 4.4 2.4 2.7 1.98	104% 109% 92% 119% 121%	3.9 3.8 3.9 3.53	89% 158% 144% 178%	41.7 14.2 19.5 12.79	43.7 17 18.7 11.14	95% 84% 104% 115%	33.7 13.8 17.1 11.41	77% 81% 91% 102%
Grand Targhee Granite Creek Grassy Lake Gros Ventre Summit Gunsight Pass	SNOTEL SNOTEL SNOTEL SNOTEL	6770 7265 8750 9820	2.9 4.8 2.2 3.2	2.8 4.4 2.4 2.7	104% 109% 92% 119% 121% 64%	3.9 3.8 3.9 3.53 4.8	89% 158% 144%	41.7 14.2 19.5	43.7 17 18.7	95% 84% 104%	33.7 13.8 17.1	77% 81% 91%
Grand Targhee Granite Creek Grassy Lake Gros Ventre Summit Gunsight Pass Jackson Lewis Lake Divide	SNOTEL SNOTEL SNOTEL SNOTEL COOP SNOTEL	6770 7265 8750 9820 6230 7850	2.9 4.8 2.2 3.2 2.4 2.7	2.8 4.4 2.4 2.7 1.98 4.2	104% 109% 92% 119% 121% 64% 98%	3.9 3.8 3.9 3.53 4.8 5.2	89% 158% 144% 178% 114%	41.7 14.2 19.5 12.79 36	43.7 17 18.7 11.14 42.7	95% 84% 104% 115% 84%	33.7 13.8 17.1 11.41 32	77% 81% 91% 102% 75%

Appendix C In Word double click the object below to view entire document

Basinwide Summary: June 1, 2016 (averages based on 1981-2010 reference period)			Res	ervoir Stor	age Summa	ary for the end	of May 2016	3	
SNAKE RIVER BASIN						Last Year %			
Grassy Lake	(KAF) 15.3	(KAF) 15.4	(KAF) 14.3	(KAF) 15.2	Capacity 101%	Capacity 101%	Capacity 94%	Average 107%	Average 108%
Jackson Lake	791.7	847.5	605.7	847.0	93%	100%	72%	131%	140%
Palisades Reservoir	1187.4	1194.1	1027.0	1400.0	85%	85%	73%	116%	116%
Basin-wide Total # of reservoirs	1994.4 3	2057.0 3	1647.0 3		88% 3	91% 3	73% 3	121% 3	125% 3
MADISON-GALLATIN RIVER BASINS	Current	Last Year	Average	Capacity	Current %	Last Year %	Average %	Current %	Last Year %
MADISON-GALLATIN RIVER BASINS	(KAF)	(KAF)	(KAF)	(KAF)	Capacity	Capacity	Capacity	Average	Average
Ennis Lake	36.6	36.9	35.6	41.0	89%	90%	87%	103%	104%
Hebgen Lake Basin-wide Total	355.4 392.0	377.4	336.2 371.8	378.8	94% 93%	100%	89%	106%	112%
# of reservoirs	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	109.3	134.2	88.3	151.8	72%	88%	58%	124%	Average 152%
Boysen	601.2	681.1	498.4	596.0	101%	114%	84%	121%	137%
Pilot Butte	27.4	26.5	22.3	31.6	87%	84%	71%	123%	119%
Basin-wide Total	737.9	841.8	609.0		95%	108%	78%	121%	138%
# of reservoirs	3	3	3		3	3	3	3	3
BIGHORN RIVER BASIN			_			Last Year %	-		
P	(KAF)	(KAF) 681.1	(KAF) 498.4	(KAF)	Capacity	Capacity	Capacity	Average	Average
Boysen Bighorn Lake	601.2 847.5	950.2	848.0	596.0 1356.0	101% 63%	114% 70%	84% 63%	121% 100%	137%
Basin-wide Total	1448.7	1631.3	1346.4	1952.0	74%	84%	69%	108%	121%
# 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	509.1	566.9	385.4	646.6	79%	88%	60%	132%	147%
Basin-wide Total	509.1	566.9	385.4	646.6	79%	88%	60%	132%	147%
# 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	80.7	83.4	52.6	79.1	102%	105%	66%	153%	159%
Basin-wide Total	80.7	83.4	52.6	79.1	102%	105%	66%	153%	159%
# of reservoirs	1	1	1	1	1	1	1	1	1
BELLE FOURCHE RIVER BASIN					Current %	Last Year %	Average %	Current %	Last Year %
	(KAF)	(KAF)	(KAF)	(KAF)	Capacity	Capacity	Capacity	Average	Average
Belle Fourche	156.7	162.9	155.1	178.4	88%	91%	87%	101%	105%
Keyhole	166.2								182%
	40.0	183.6	100.9	193.8	86%	95%	52%	165%	
Shadehill Basin-wide Total	49.9	63.4	61.4	81.4	61%	78%	75%	81%	103%
Shadehill Basin-wide Total # of reservoirs	49.9 372.8 3			81.4 453.6					103%
Basin-wide Total	372.8 3	63.4 410.0 3	61.4 317.4 3	81.4 453.6 3	61% 82% 3	78% 90% 3 Last Year %	75% 70% 3	81% 117% 3 Current %	103% 129% 3 Last Year %
Basin-wide Total # of reservoirs CHEYENNE RIVER BASIN	372.8 3 Current	63.4 410.0 3 Last Year	61.4 317.4 3 Average	81.4 453.6 3 Capacity (KAF)	61% 82% 3 Current %	78% 90% 3	75% 70% 3 Average %	81% 117% 3	103% 129% 3 Last Year % Average
Basin-wide Total # of reservoirs	372.8 3 Current (KAF)	63.4 410.0 3 Last Year (KAF)	61.4 317.4 3 Average (KAF)	81.4 453.6 3 Capacity (KAF)	61% 82% 3 Current % Capacity	78% 90% 3 Last Year % Capacity	75% 70% 3 Average % Capacity	81% 117% 3 Current % Average	103% 129% 3 Last Year % Average 99%
Basin-wide Total # of reservoirs CHEYENNE RIVER BASIN Angostura Deerfield PactoLa	372.8 3 Current (KAF) 113.9 14.2 55.0	63.4 410.0 3 Last Year (KAF) 100.5 15.5 60.9	61.4 317.4 3 Average (KAF) 101.3 14.3 48.9	81.4 453.6 3 Capacity (KAF) 122.1 15.2 55.0	61% 82% 3 Current % Capacity 93% 94% 100%	78% 90% 3 Last Year % Capacity 82% 102% 111%	75% 70% 3 Average % Capacity 83% 94% 89%	81% 117% 3 Current % Average 112% 99% 112%	103% 129% 3 Last Year % Average 99% 108% 124%
Basin-wide Total # of reservoirs CHEYENNE RIVER BASIN Angostura Deerfield	372.8 3 Current (KAF) 113.9 14.2	63.4 410.0 3 Last Year (KAF) 100.5 15.5	61.4 317.4 3 Average (KAF) 101.3 14.3	81.4 453.6 3 Capacity (KAF) 122.1 15.2 55.0 192.3	61% 82% 3 Current % Capacity 93% 94% 100% 95%	78% 90% 3 Last Year % Capacity 82% 102% 111% 92%	75% 70% 3 Average % Capacity 83% 94% 89% 88%	81% 117% 3 Current % Average 112% 98%	103% 129% 3 Last Year % Average 99% 108% 124%
Basin-wide Total # of reservoirs CHEYENNE RIVER BASIN Angostura Deerfield PactoLa Basin-wide Total	372.8 3 Current (KAF) 113.9 14.2 55.0 183.1 3 Current	63.4 410.0 3 Last Year (KAF) 100.5 15.5 60.9 176.9 3 Last Year	61.4 317.4 3 Average (KAF) 101.3 14.3 14.3 164.5 3 Average	81.4 453.6 3 (KAF) 122.1 15.2 55.0 192.3 3 Capacity	61% 82% 3 Current % Capacity 93% 94% 100% 95% 3 Current %	78% 90% 3 Last Year % Capacity 82% 102% 111% 92% 3 Last Year %	75% 70% 3 Average % Capacity 83% 94% 88% 88% 3 Average %	81% 117% 3 Current % Average 112% 99% 112% 111% 3 Current %	103% 129% 3 Last Year % Average 99% 108% 124% 108% 3 Last Year %
Basin-wide Total # of reservoirs CHEYENNE RIVER BASIN Angostura Deerfield PactoLa Basin-wide Total # of reservoirs UPPER NORTH PLATTE RIVER BASIN	372.8 3 Current (KAF) 113.9 14.2 55.0 183.1 3 Current (KAF)	63.4 410.0 3 Last Year (KAF) 100.5 15.5 60.9 176.9 3 Last Year (KAF)	61.4 317.4 3 (KAF) 101.3 14.3 48.9 164.5 3 Average (KAF)	81.4 453.6 3 Capacity (KAF) 122.1 15.2 55.0 192.3 Capacity (KAF)	61% 82% 3 Current % Capacity 93% 94% 100% 95% 3 Current % Capacity	78% 90% 3 Last Year % Capacity 82% 102% 3 111% 92% 3 Last Year % Capacity	75% 70% 3 Average % Capacity 83% 94% 80% 80% 3 Average % Capacity	81% 117% 3 Current % Average 112% 99% 112% 111% 3 Current % Average	103% 129% 3 Last Year % Average 99% 108% 108% 108% 3 Last Year % Average
Basin-wide Total # of reservoirs CHEYENNE RIVER BASIN Angostura Deerfield PactoLa Basin-wide Total # of reservoirs UPPER NORTH PLATTE RIVER BASIN Seminoe	372.8 3 Current (KAF) 113.9 14.2 55.0 183.1 3 Current (KAF) 867.6	63.4 410.0 3 Last Year (KAF) 100.5 15.5 60.9 176.9 3 Last Year (KAF) 804.8	61.4 317.4 3 (KAF) 101.3 14.3 48.9 164.5 3 Average (KAF) 607.1	81.4 453.6 3 Capacity (KAF) 122.1 15.2 55.0 192.3 3 Capacity (KAF) 1016.7	61% 82% 3 Current % Capacity 93% 94% 100% 05% 3 Current % Capacity 85%	78% 90% 3 Last Year % Capacity 82% 102% 111% 92% 3 Last Year % Capacity 79%	75% 70% 3 Average % Capacity 83% 94% 89% 89% 88% 3 Average % Capacity 60%	81% 117% 3 Current % Average 112% 99% 112% 111% 3 Current % Average 143%	103% 129% 3 Last Year % Average 99% 108% 108% 3 Last Year % Average 133%
Basin-wide Total # of reservoirs CHEYENNE RIVER BASIN Angostura Deerfield PactoLa Basin-wide Total # of reservoirs UPPER NORTH PLATTE RIVER BASIN	372.8 3 Current (KAF) 113.9 14.2 55.0 183.1 3 Current (KAF)	63.4 410.0 3 Last Year (KAF) 100.5 15.5 60.9 176.9 3 Last Year (KAF)	61.4 317.4 3 (KAF) 101.3 14.3 48.9 164.5 3 Average (KAF)	81.4 453.6 3 Capacity (KAF) 122.1 15.2 55.0 192.3 3 Capacity (KAF) 1016.7	61% 82% 3 Current % Capacity 93% 94% 100% 95% 3 Current % Capacity	78% 90% 3 Last Year % Capacity 82% 102% 3 111% 92% 3 Last Year % Capacity	75% 70% 3 Average % Capacity 83% 94% 80% 80% 3 Average % Capacity	81% 117% 3 Current % Average 112% 99% 112% 111% 3 Current % Average	103% 129% 3 Last Year % Average 99% 108% 124% 108% 3 Last Year % Average 133% 133%
Basin-wide Total # of reservoirs CHEYENNE RIVER BASIN Angostura Deerfield PactoLa Basin-wide Total # of reservoirs UPPER NORTH PLATTE RIVER BASIN Seminoe Basin-wide Total	372.8 3 Current (KAF) 113.9 14.2 55.0 183.1 3 Current (KAF) 867.6 867.6 1 Current	63.4 410.0 3 Last Year (KAF) 100.5 15.5 60.9 176.9 3 Last Year (KAF) 804.8 804.8 1 Last Year	61.4 317.4 3 Average (KAF) 101.3 14.3 48.9 164.5 3 Average (KAF) 607.1 1 407.1 407.1 407.1 407.1 407.1	81.4 453.6 3 Capacity (KAF) 122.1 15.2 55.0 192.3 3 Capacity (KAF) 1016.7 1016.7 1 1016.7 1 Capacity	61% 82% 3 Current % Capacity 93% 94% 100% 95% 3 Current % Capacity 85% 1 Current %	78% 90% 3 Last Year % Capacity 82% 102% 111% 92% 3 Last Year % Capacity 79% 79% 1 Last Year %	75% 70% 3 Average % Capacity 83% 94% 88% 88% 3 Average % Capacity 60% 1 Average %	81% 117% 3 Current % Average 112% 99% 112% 111% 3 Current % Average 143% 143% 1 Current %	103% 129% 3 Last Year % Average 99% 108% 108% 3 Last Year % Average 133% 133% 133%
Basin-wide Total # of reservoirs CHEYENNE RIVER BASIN Angostura Deerfield PactoLa Basin-wide Total # of reservoirs UPPER NORTH PLATTE RIVER BASIN Seminoe Basin-wide Total # of reservoirs SWEETWATER RIVER BASIN	372.8 3 Current (KAF) 113.9 14.2 55.0 183.1 3 Current (KAF) 867.6 867.6 1 Current (KAF)	63.4 410.0 3 Last Year (KAF) 100.5 15.5 60.9 176.9 3 Last Year (KAF) 804.8 804.8 1 Last Year (KAF)	61.4 317.4 3 4verage (KAF) 101.3 14.3 48.9 164.5 3 Average (KAF) 607.1 1 807.1 1 407.1	81.4 453.6 3 Capacity (KAF) 122.1 15.2 55.0 192.3 3 Capacity (KAF) 1016.7 1016.7 1016.7 1 Capacity (KAF)	61% 82% 3 Current % Capacity 93% 94% 100% 85% 3 Current % Capacity 1 Current % Capacity	78% 90% 3 Last Year % Capacity 82% 102% 111% 92% 3 Last Year % Capacity 79% 1 Last Year % Capacity	75% 70% 3 Average % Capacity 83% 94% 88% 88% 3 Average % Capacity 1 Average % Capacity	81% 117% 3 Current % Average 112% 99% 112% 111% Average 143% 143% 143% 143% 143% 143%	103% 129% 3 Last Year % Average 99% 108% 108% 3 Last Year % Average 133% 133% 133% 1 Last Year % Average
Basin-wide Total # of reservoirs CHEYENNE RIVER BASIN Angostura Deerfield PactoLa Basin-wide Total # of reservoirs UPPER NORTH PLATTE RIVER BASIN Seminoe Basin-wide Total # of reservoirs	372.8 3 Current (KAF) 113.9 14.2 55.0 183.1 3 Current (KAF) 867.6 867.6 1 Current	63.4 410.0 3 Last Year (KAF) 100.5 15.5 60.9 176.9 3 Last Year (KAF) 804.8 804.8 1 Last Year	61.4 317.4 3 Average (KAF) 101.3 14.3 48.9 164.5 3 Average (KAF) 607.1 1 407.1 407.1 407.1 407.1 407.1	81.4 453.6 3 Capacity (KAF) 122.1 15.2 55.0 192.3 3 Capacity (KAF) 1018.7 1 018.7 1 018.5	61% 82% 3 Current % Capacity 93% 94% 100% 95% 3 Current % Capacity 85% 1 Current %	78% 90% 3 Last Year % Capacity 82% 102% 111% 92% 3 Last Year % Capacity 79% 79% 1 Last Year %	75% 70% 3 Average % Capacity 83% 94% 88% 88% 3 Average % Capacity 60% 1 Average %	81% 117% 3 Current % Average 112% 99% 112% 111% 3 Current % Average 143% 143% 1 Current %	103% 129% 3 Last Year % Average 99% 108% 108% 3 108% 3 108% 108% 108% 108% 108% 108% 108% 108%

Appendix D In Word double click the object below to view entire document

Report Created:					Summary: Ju			
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SNAKE RIVER BASIN	Forecast	90%	70%	50%	% Avg	30%	10%	30yr Avg
Snake R nr Moran ⁴	Period	(KAF)	(KAF)	(KAF)	_	(KAF)	(KAF)	(KAF)
Snake R nr Moran"								
	JUN-JUL	110	163	200	47%	235	290	425
	JUN-SEP	148	210	255	50%	300	360	505
Snake R ab Reservoir nr	Alpine*							
	JUN-JUL	770	885	960	75%	1040	1150	1280
	JUN-SEP	1010	1140	1230	76%	1320	1460	1610
Snake R nr Irwin ^{,2}								
	JUN-JUL	940	1090	1190	70%	1290	1440	1700
	JUN-SEP	1260	1440	1560	71%	1680	1870	2190
Snake R nr Heise ²								
	JUN-JUL	1180	1330	1440	80%	1540	1690	1800
	JUN-SEP	1600	1790	1910	81%	2040	2230	2350
Pacific Ck at Moran								
	JUN-JUL	17.6	33	44	51%	55	70	86
	JUN-SEP	23	40	51	53%	62	79	96
Buffalo Fk ab Lava Ck nr	Moran							
	JUN-JUL	100	122	138	67%	154	176	205
	JUN-SEP	117	144	163	68%	182	210	240
Greys R ab Reservoir nr A	Alpine							
-	JUN-JUL	106	121	131	80%	141	156	164
	JUN-SEP	138	157	170	79%	183	200	215
Salt R ab Reservoir nr Etr	na							
	JUN-JUL	67	90	106	74%	122	145	143
	JUN-SEP	112	141	160	76%	179	210	210

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

	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										
	JUN-JUL	83	109	126	71%	143	169	178		
	JUN-SEP	158	189	210	75%	230	260	280		

1) 90% and 10% exceedance probabilities are actually 95% and 5%

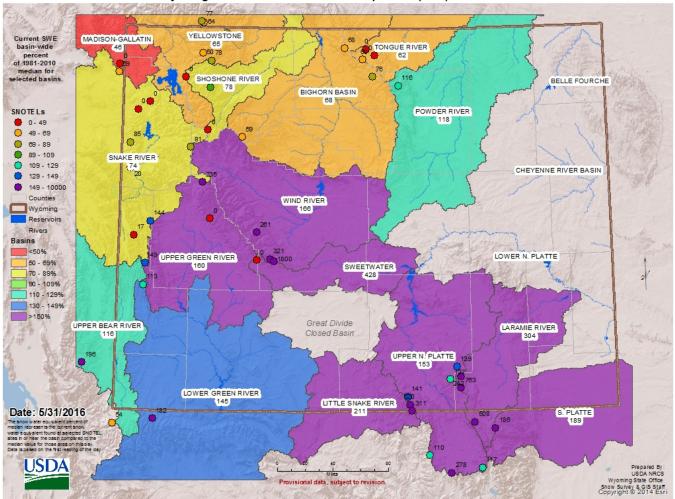
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
 3) Median value used in place of average

	[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 Yellow	stone Lake Out	let							
	JUN-JUL	300	345	375	81%	405	450	465	
	JUN-SEP	415	480	525	80%	570	635	655	
Yellowstone R at Corwin	Springs								
	JUN-JUL	600	720	805	77%	890	1010	1040	
	JUN-SEP	765	930	1040	78%	1150	1310	1330	
Yellowstone R at Livings	ton								
_	JUN-JUL	670	820	920	78%	1020	1170	1180	
	JUN-SEP	865	1060	1190	78%	1320	1520	1520	

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

Astrid Martinez
State Con.
NRCS
Casper, Wyoming

June 1st, 2016 Statewide SWE @ 115% of median



Wyoming SNOTEL Current Snow Water Equivalent (SWE) % 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:

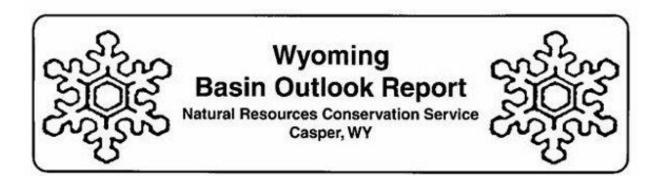
The Wyoming State Engineer's Office

The University of Wyoming

Local:

The City of Cheyenne

The City of Rawlins





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

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