

AGENCY REPORT

To Be Included in the Notes of the Water Forum

Date of Water Forum Meeting – May 8, 2018

Agency: Bureau of Reclamation, Wyoming Area Office

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1. Water Supply Conditions of the North Platte River Basin.

April 30, 2018 Reservoir Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>% Full Conservation Storage</u>	<u>% Avg.</u>	<u>30 Year Average (AF)</u>
Seminole	6339.74	711,694	70	147	485,740
Pathfinder	5845.46	917,718	86	174	525,941
Alcova	5498.48	179,912	98	100	179,524
Glendo	4626.93	402,780	95	112	417,788
Guernsey	4412.19	28,537	63	105	27,265

April 30, 2017 Water Supply Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>% Full Conservation Storage</u>	<u>% Avg.</u>	<u>Top of Conservation (AF)</u>
Seminole	6341.35	736,526	72	152	1,017,273
Pathfinder	5849.73	1,008,385	94	192	1,070,000
Alcova	5498.48	180,669	98	101	184,405
Glendo	4632.81	466,321	95	112	492,022
Guernsey	4312.04	28,240	NA	NA	45,612

April Water Year 2018 Inflows

<u>Reservoir</u>	<u>Inflows(KAF)</u>	<u>% of Average</u>
Seminole	63.5	64
Pathfinder Gains from Korr.	14.1	84
Alcova to Glendo Gains	18.4	45
Glendo to Guernsey Gains	1.1	26

April inflows were well below average for Seminole, Pathfinder, Alcova to Glendo Gains, and Guernsey Reservoir which were 64%, 84%, 45%, and 26% of average respectively.

The Kendrick ownership was 1,124,431 AF on April 30, 2018, which was approximately 135% of average (836,000 AF), which compares to the 1,075,300 AF of Kendrick ownership on this date last year.

The North Platte ownership was 914,608 AF on April 30, 2018, which was approximately 125% of average (731,900 AF), which compares to the 1,106,900 AF of North Platte ownership on this date last year.

The Glendo ownership was 161,564 AF on April 30, 2018, which was approximately 114% of average (141,700 AF), which compares to the 166,300 AF of Glendo ownership on this date last year.

Flows in the Miracle Mile below Kortez Dam are approximately 2,700 cubic feet per second (cfs). Releases from Gray Reef Reservoir are currently at 1,000 cfs and will be increased to 2,000 by May 3<sup>rd</sup>. The level of Alcova Reservoir is at the summer operating range of 5498 ± one foot.

2. The May 1, 2018, water supply forecast indicates below average April - July runoff can be expected at all forecast Point's in the North Platte River Basin. The water supply forecasts are based on the snowpack at the Snotel stations, along with precipitation.

North Platte Water Supply Forecast

Forecast Points	May 1, 2018 Forecast of April-July Runoff with actual April Inflows			30 Yr. April-July Runoff Avg. <sup>2</sup>	Most Probable % of Avg.	Comparative Actual April – July Runoff			
	Reasonable Maximum <sup>1</sup>	Most Probable	Reasonable Minimum <sup>1</sup>			W. Yr. 2017	W. Yr. 2016	W. Yr. 2015	W. Yr. 2014
Seminole Reservoir	725	525	325	696	75	705	1030	654	1079
Sweetwater River above Pathfinder Reservoir	40	30	25	54	56	159	69	41	42
Alcova to Glendo	70	50	40	135	37	135	301	196	238

<sup>1</sup> The probability is estimated to be 9 chances in 10 that the actual volume will fall between the reasonable minimum and reasonable maximum.

<sup>2</sup> Average is based on the 1988-2017 period.

3. Water Supply Conditions of the Big Horn Basin

April 30, 2018 Reservoir Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>% Full Conservation Storage</u>	<u>% Avg.</u>	<u>30 Year Average (AF)</u>
Bull Lake	5788.01	102,383	67	135	75,802
Boysen	4707.49	458,934	62	89	515,201
Buffalo Bill	5352.02	349,551	54	89	392,850*
Pilot Butte	5454.74	29,132	86	101	27,508

April 30, 2017 Water Supply Conditions

<u>Reservoir</u>	<u>Elev. (Ft)</u>	<u>Content (AF)</u>	<u>% Full Conservation Storage</u>	<u>% Avg.</u>	<u>Top of Conservation (AF)</u>
Bull Lake	5771.45	60,863	40	79	151,737
Boysen	4707.95	464,983	63	90	741,594
Buffalo	5353.29	357,368	55	91	646,565
Pilot Butte	5455.46	29,742	88	103	33,721

\* The average used for Buffalo Bill Reservoir reflects data from 1993 through 2017. In 1992, the capacity of the reservoir was increased to approximately 646,565 AF as a result of raising the dam.

April Water Year 2018 Inflows

<u>Reservoir</u>	<u>Inflow</u>	<u>% of Average</u>
Bull Lake	5.6	133
Boysen	62.2	127
Buffalo Bill	76.5	167

Total monthly inflows to Bull Lake, Boysen, and Buffalo Bill Reservoirs were well above average at 133%, 127%, and 167% respectively.

The flow rate below Buffalo Bill Reservoir, as measured by the Cody River Gage, is approximately 2,993 cfs. The release from Boysen Dam is approximately 3,000 cfs

4. Snow Conditions (From NRCS April 8th Report). The following table shows the current and preceding weeks' percentage of average snow water equivalent amounts for Wyoming basins. Average is based on all reporting Snotel sites in the basin. The reference period for average comparison is 1981-2010. The table does not include manually read snow courses.

Snow Pack

Drainage Basin	4/30/18	4/24/18	4/16/18	4/30/17	4/30/16
Wind River	104	114	121	234	120
Bighorn Basin	121	131	133	155	102
Shoshone	155	165	168	151	75
Upper North Platte	82	94	97	96	112
Sweetwater	53	74	85	211	103
Lower North Platte	41	66	75	100	150
Laramie	94	112	114	93	134

5. The May 1, 2018, water supply forecast indicates above average April - July runoff can be expected at all forecast Point's in the Bighorn Basin. The water supply forecasts are based on the snowpack at the Snotel stations, along with precipitation.

Bighorn Water Supply Forecast

Forecast Points	May 1, 2018 Forecast of April-July Runoff with actual April Inflows			30 Yr. April-July Runoff Avg. <sup>2</sup>	Most Probable % of Avg.	Comparative Actual April - July Runoff			
	Reasonable Maximum <sup>1</sup>	Most Probable	Reasonable Minimum <sup>1</sup>			W. Yr. 2017	W. Yr. 2016	W. Yr. 2015	W. Yr. 2014
Bull Lake Reservoir	140	160	180	140.4	114	263	145	138	148
Wind River above Bull Lake Creek	450	550	700	416.3	132	634	323	526	580
Boysen Reservoir	600	750	950	577.7	130	1636	753	750	695
Buffalo Bill Reservoir	850	1100	1250	704.4	156	1262	592	696	1062

<sup>1</sup> The probability is estimated to be 9 chances in 10 that the actual volume will fall between the reasonable minimum and reasonable maximum.

<sup>2</sup> Average is based on the 1988-2017 period.

6. Other.