

AGENCY REPORT

To Be Included in the Notes of the Water Forum

Date of Water Forum Meeting – February 13, 2018

Agency: Bureau of Reclamation, Wyoming Area Office

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

January 31, 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> |
|------------------|-------------------|---------------------|--|---------------|---------------------------------|
| Seminoe | 6345.79 | 808,875 | 80 | 153 | 527,800 |
| Pathfinder | 5841.09 | 830,842 | 78 | 153 | 543,700 |
| Alcova | 5488.35 | 156,831 | 85 | 101 | 155,800 |
| Glendo | 4611.88 | 266,485 | 54 | 89 | 298,000 |
| Guernsey | 4407.09 | 19,261 | 42 | 149 | 12,800 |

January 31, 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> |
|------------------|-------------------|---------------------|--|---------------|-------------------------------------|
| Seminoe | 6342.65 | 757,120 | 74 | 143 | 1,017,273 |
| Pathfinder | 5845.22 | 912,790 | 85 | 168 | 1,070,000 |
| Alcova | 5488.52 | 157,215 | 85 | 101 | 184,405 |
| Glendo | 4617.02 | 309,160 | 63 | 104 | 492,022 |
| Guernsey | 4370.10 | 0 | NA | NA | 45,612 |

January Water Year 2018 Inflows

| <u>Reservoir</u> | <u>Inflows(KAF)</u> | <u>% of Average</u> |
|-----------------------------|---------------------|---------------------|
| Seminoe | 30.8 | 122 |
| Pathfinder Gains from Korr. | 5.3 | 85 |
| Alcova to Glendo Gains | 13.1 | 130 |
| Glendo to Guernsey Gains | 1.6 | 126 |

January inflows were above average for Seminoe, Glendo, and Guernsey Reservoirs which were 122%, 130%, and 126% of average respectively. The Pathfinder Gains were below average at 85 %.

The Kendrick ownership was 1,132,900 AF on January 31, 2018, which was approximately 133% of average (851,700 AF), which compares to the 1,109,200 AF of Kendrick ownership on this date last year.

The North Platte ownership was 762,700 AF on January 31, 2018, which was approximately 144% of average (530,000 AF), which compares to the 816,400 AF of North Platte ownership on this date last year.

The Glendo ownership was 150,300 AF on January 31, 2018, which was approximately 119% of average (126,500 AF), which compares to the 161,400 AF of Glendo ownership on this date last year.

Flows in the Miracle Mile below Kortez Dam are approximately 530 cubic feet per second (cfs). Releases from Gray Reef Reservoir are approximately 500 cfs. The level of Alcova Reservoir is at the winter operating range of 5488 ± one foot.

2. The February 1, 2018, water supply forecast indicates below average April - July runoff can be expected at all forecast points 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 | February 1, 2018 Forecast of April-July Runoff | | | 30 Yr. April-July Runoff Avg. ² | Most Probable % of Avg. | Comparative Actual April – July Runoff | | | |
|---|--|---------------|---------------------------------|--|-------------------------|--|-------------|-------------|-------------|
| | Reasonable Maximum ¹ | Most Probable | Reasonable Minimum ¹ | | | W. Yr. 2017 | W. Yr. 2016 | W. Yr. 2015 | W. Yr. 2014 |
| Seminole Reservoir | 775 | 575 | 375 | 696 | 83 | 705 | 1030 | 654 | 1079 |
| Sweetwater River above Pathfinder Reservoir | 60 | 40 | 20 | 54 | 75 | 159 | 69 | 41 | 42 |
| Alcova to Glendo | 170 | 120 | 70 | 135 | 89 | 135 | 301 | 196 | 238 |

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

² Average is based on the 1988-2017 period.

3. Water Supply Conditions of the Big Horn Basin

January 31, 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 | 5788.71 | 104,302 | 69 | 137 | 76,200 |
| Boysen | 4719.38 | 637,475 | 86 | 115 | 557,300 |
| Buffalo Bill | 5372.36 | 485,048 | 75 | 113 | 428,700* |
| Pilot Butte | 5453.47 | 28,068 | 83 | 99 | 28,400 |

January 31, 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 | 5763.32 | 43,331 | 29 | 57 | 151,737 |
| Boysen | 4718.96 | 630,207 | 85 | 113 | 741,594 |
| Buffalo | 5371.89 | 481,645 | 74 | 112 | 646,565 |
| Pilot Butte | 5455.02 | 29,368 | 87 | 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.

January Water Year 2018 Inflows

| <u>Reservoir</u> | <u>Inflow</u> | <u>% of Average</u> |
|------------------|---------------|---------------------|
| Bull Lake | 2.9 | 138 |
| Boysen | 55.0 | 151 |
| Buffalo Bill | 25.4 | 172 |

Total monthly inflows to Bull Lake, Boysen, and Buffalo Bill Reservoirs were well above average at 138%, 151%, and 172% respectively.

The flow rate below Buffalo Bill Reservoir, as measured by the Cody River Gage, is approximately 560 cfs and is

scheduled to be increased to 810 cfs by February 14th. The release from Boysen Dam is approximately 1,250 cfs and will remain at this release to achieve desirable winter reservoir levels.

4. Snow Conditions (From NRCS January 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 | 2/12/18 | 2/5/18 | 1/29/18 | 2/12/17 | 2/12/16 |
|--------------------|---------|--------|---------|---------|---------|
| Wind River | 124 | 125 | 124 | 186 | 77 |
| Bighorn Basin | 139 | 136 | 123 | 117 | 70 |
| Shoshone | 167 | 161 | 150 | 174 | 86 |
| Upper North Platte | 85 | 86 | 81 | 133 | 95 |
| Sweetwater | 82 | 81 | 82 | 219 | 66 |
| Lower North Platte | 76 | 80 | 80 | 119 | 105 |
| Laramie | 107 | 105 | 104 | 126 | 106 |

5. The February 1, 2018, water supply forecast indicates above average April - July runoff can be expected at all forecast points 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 | February 1, 2018 Forecast of April-July Runoff | | | 30 Yr. April-July Runoff Avg. ² | Most Probable % of Avg. | Comparative Actual April - July Runoff | | | |
|----------------------------------|--|---------------|---------------------------------|--|-------------------------|--|-------------|-------------|-------------|
| | Reasonable Maximum ¹ | Most Probable | Reasonable Minimum ¹ | | | W. Yr. 2017 | W. Yr. 2016 | W. Yr. 2015 | W. Yr. 2014 |
| Bull Lake Reservoir | 140 | 180 | 200 | 140.4 | 121 | 263 | 145 | 138 | 148 |
| Wind River above Bull Lake Creek | 450 | 600 | 800 | 416.3 | 144 | 634 | 323 | 526 | 580 |
| Boysen Reservoir | 700 | 900 | 1200 | 577.7 | 156 | 1636 | 753 | 750 | 695 |
| Buffalo Bill Reservoir | 800 | 1000 | 1250 | 704.4 | 142 | 1262 | 592 | 696 | 1062 |

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

² Average is based on the 1988-2017 period.

6. Other.