#### AGENCY REPORT

To Be Included in the Notes of the Water Forum

Date of Water Forum Meeting – March 13, 2018

Agency: Bureau of Reclamation, Wyoming Area Office

Name of Representative: Art Hill phone 307-261-5633

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

#### February 28, 2018 Reservoir Conditions

			% Full		<u>30 Year</u>
Reservoir	Elev. (Ft)	Content (AF)	Conservation Storage	% Avg.	Average (AF)
Seminoe	6345.59	805,494	79	170	472,594
Pathfinder	5841.52	839,120	78	166	506,749
Alcova	5488.03	156,110	85	100	156,043
Glendo	4615.69	297,753	71	110	319,721
Guernsey	4408.63	21,867	48	160	13,638

#### February 28, 2017 Water Supply Conditions

			% Full		Top of
Reservoir	Elev. (Ft)	Content (AF)	Conservation Storage	% Avg.	Conservation (AF)
Seminoe	6342.44	753,760	74	161	1,017,273
Pathfinder	5846.63	942,001	88	186	1,070,000
Alcova	5488.51	157,193	85	101	184,405
Glendo	4617.02	309,160	71	110	492,022
Guernsey	4370.10	0	NA	NA	45,612

## February Water Year 2018 Inflows

Reservoir	Inflows(KAF)	% of Average
Seminoe	27.5	109
Pathfinder Gains from Korr.	6.5	105
Alcova to Glendo Gains	8.2	81
Glendo to Guernsey Gains	1.4	104

February inflows were above average for Seminoe, Pathfinder, and Guernsey Reservoirs which were 109%, 105%, and 104% of average respectively. The Alcova to Glendo Gains were below average at 81%.

The Kendrick ownership was 1,131,679 AF on February 28, 2018, which was approximately 133% of average (851,000 AF), which compares to the 1,108,300 AF of Kendrick ownership on this date last year.

The North Platte ownership was 803,597 AF on February 28, 2018, which was approximately 140% of average (572,200 AF), which compares to the 885,200 AF of North Platte ownership on this date last year.

The Glendo ownership was 149,903 AF on February 28, 2018, which was approximately 118% of average (126,900 AF), which compares to the 161,200 AF of Glendo ownership on this date last year.

Flows in the Miracle Mile below Kortes 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  $5488 \pm 0$  one foot.

2. The March 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		n 1, 2018 Fo April-July Ru		30 Yr. April-July	Most Probable	Comparative Actual April – July Runoff			
	Reasonable Maximum <sup>1</sup>	Most Probable	Reasonable Minimum <sup>1</sup>	Runoff Avg. <sup>2</sup>	% of Avg.	W. Yr. 2017	W. Yr. 2016	W. Yr. 2015	W. Yr. 2014
Seminoe 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	150	100	50	135	74	135	301	196	238

<sup>&</sup>lt;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.

## 3. Water Supply Conditions of the Big Horn Basin

## February 28, 2018 Reservoir Conditions

			<u>% Full</u>		<u>30 Year</u>
Reservoir	Elev. (Ft)	Content (AF)	Conservation Storage	% Avg.	Average (AF)
Bull Lake	5788.72	104,330	69	139	74,979
Boysen	4718.08	615,243	83	116	531,434
Buffalo Bill	5369.76	466,358	72	112	417,645*
Pilot Butte	5453.42	28,067	83	102	27,508

## February 28, 2017 Water Supply Conditions

		% Full		Top of
Elev. (Ft)	Content (AF)	Conservation Storage	% Avg.	Conservation (AF)
5765.04	46,875	31	61	151,737
4720.65	659,936	89	125	741,594
5371.94	482,012	75	116	646,565
5455.05	29,393	87	107	33,721
	5765.04 4720.65 5371.94	5765.04 46,875   4720.65 659,936   5371.94 482,012	Elev. (Ft)   Content (AF)   Conservation Storage     5765.04   46,875   31     4720.65   659,936   89     5371.94   482,012   75	Elev. (Ft)   Content (AF)   Conservation Storage   % Avg.     5765.04   46,875   31   61     4720.65   659,936   89   125     5371.94   482,012   75   116

<sup>\*</sup> 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.

## February Water Year 2018 Inflows

Reservoir	<u>Inflow</u>	% of Average
Bull Lake	2.3	135
Boysen	47.5	126
Buffalo Bill	17.9	137

Total monthly inflows to Bull Lake, Boysen, and Buffalo Bill Reservoirs were well above average at 135%, 126%, and 137% respectively.

The flow rate below Buffalo Bill Reservoir, as measured by the Cody River Gage, is approximately 1,014 cfs. The

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

release from Boysen Dam is approximately 1,250 cfs through the winter, but will be increased to 2,000 cfs on March 14

4. <u>Snow Conditions (From NRCS February 8th Report)</u>. 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	3/12/18	3/5/18	2/26/18	3/12/17	3/12/16
Wind River	118	123	123	187	79
Bighorn Basin	128	130	138	114	73
Shoshone	162	167	169	178	91
Upper North Platte	84	87	89	123	89
Sweetwater	81	85	79	209	69
Lower North Platte	65	69	74	113	90
Laramie	101	104	108	120	101

5. The March 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		h 1, 2018 Fo April-July Ru		30 Yr. April-July	Most Probable	Comparative Actual April – July Runoff			
	Reasonable Maximum <sup>1</sup>	Most Probable	Reasonable Minimum <sup>1</sup>	Runoff Avg. <sup>2</sup>	% of Avg.	W. Yr. 2017	W. Yr. 2016	W. Yr. 2015	W. Yr. 2014
Bull Lake Reservoir	140	170	200	140.4	121	263	145	138	148
Wind River above Bull Lake Creek	500	600	700	416.3	144	634	323	526	580
Boysen Reservoir	750	950	1250	577.7	164	1636	753	750	695
Buffalo Bill Reservoir	850	1050	1250	704.4	149	1262	592	696	1062

<sup>&</sup>lt;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.

## 6. Other.

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