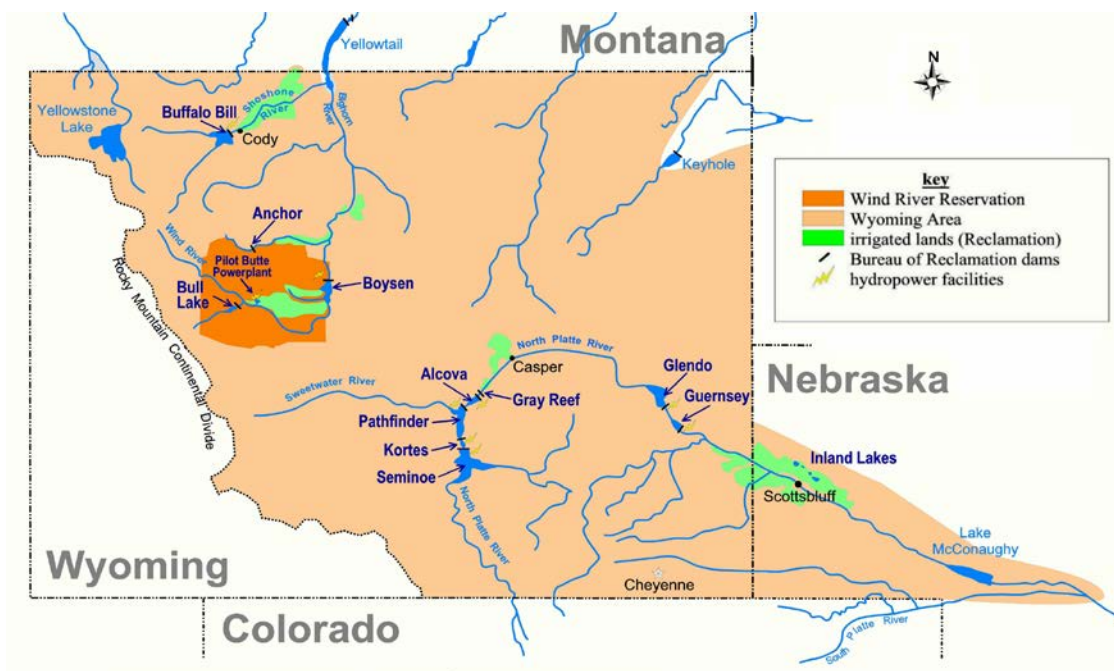


# RECLAMATION

*Managing Water in the West*

North Platte River Basin  
Water Supply and Utilization Report  
Wyoming Area Office  
Report for March 2016



The Wyoming Area Office of the Bureau of Reclamation is responsible for the operation of Reclamation reservoirs in Wyoming east of the Continental Divide except for Keyhole Reservoir. Four off-stream reservoirs in Nebraska commonly referred to as the Inland Lakes also fall within the Wyoming Area. The North Platte River Basin Reservoirs have a combined storage capacity of 2,800,000 acre-feet. The major reservoirs in the Shoshone and Wind/Bighorn Basins have a combined storage capacity of 1,600,000 acre-feet.



United States of America  
Department of the Interior  
Bureau of Reclamation  
P.O. Box 1630  
Mills, Wyoming 82644-1630

**Report for March 2016  
WATER SUPPLY AND UTILIZATION REPORT  
NORTH PLATTE RIVER BASIN  
WYOMING AREA OFFICE**

**This report concerns the operation of Reclamation facilities in the North Platte River Basin.**

**Reclamation defines a water year as the time period of October 1 through September 30. Water year is abbreviated in this report as W. Yr.**

**Other organizations furnished information for the Water Supply and Utilization Report. Their cooperation is greatly appreciated.**

This report is available on the Internet and can be accessed by following these steps:

1. Log on to the Great Plains Home Page at: <http://www.usbr.gov/gp>
2. On left side of page Select [Water Operations](#).
3. Under Water Operations Select [Water Management Information](#).
4. Under Water Management Select [Water Supply Report](#).
5. Under North Platte River Basin, select [Current Month or reports from the previous 12 months](#).

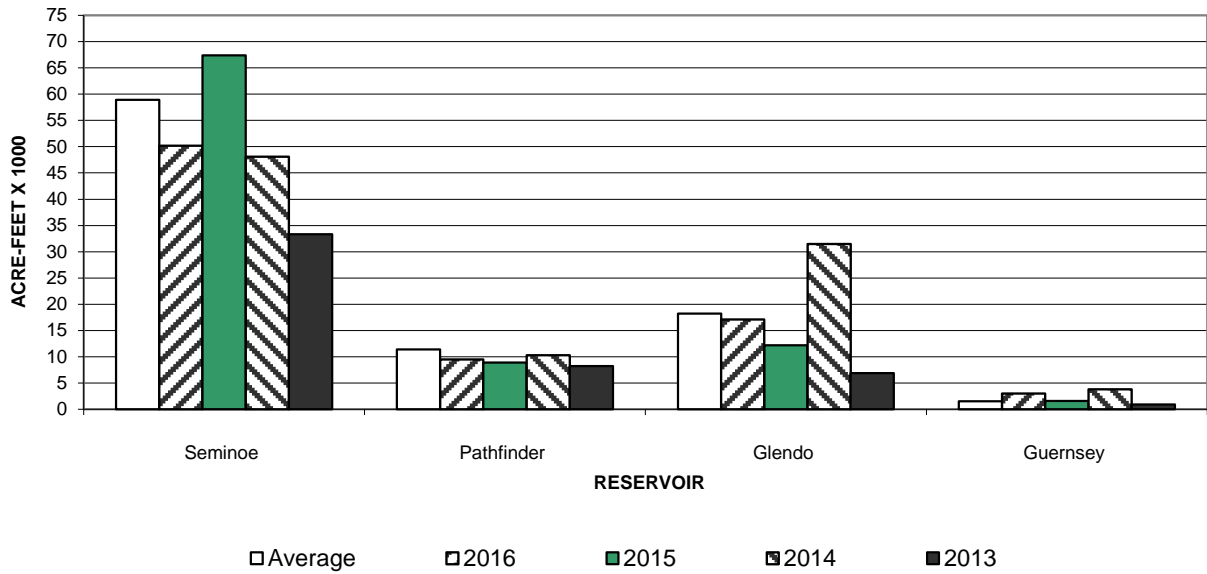
**NORTH PLATTE RIVER BASIN INFLOW**

(1000 acre-feet)

Reservoir	March Inflow			March Historical Inflow			Accumulated Inflow (October - March)		
	W. Yr. 2016	30 Yr. Avg. <sup>5</sup>	% of Avg.	W. Yr. 2015	W. Yr. 2014	W. Yr. 2013	W. Yr. 2016	30 Yr. Avg. <sup>5</sup>	% of Avg.
<b>Seminole</b>	<b>50.2</b>	<b>58.9</b>	<b>85</b>	<b>67.4</b>	<b>48.1</b>	<b>33.3</b>	<b>179.8</b>	<b>196.5</b>	<b>92</b>
<b>Pathfinder</b> <sup>1,2</sup>	<b>9.5</b>	<b>11.4</b>	<b>83</b>	<b>8.9</b>	<b>10.3</b>	<b>8.2</b>	<b>32.6</b>	<b>34.8</b>	<b>94</b>
<b>Glendo</b> <sup>3</sup>	<b>17.1</b>	<b>18.2</b>	<b>94</b>	<b>12.2</b>	<b>31.5</b>	<b>6.9</b>	<b>55.0</b>	<b>70.5</b>	<b>78</b>
<b>Guernsey</b> <sup>4</sup>	<b>3.0</b>	<b>1.5</b>	<b>200</b>	<b>1.6</b>	<b>3.8</b>	<b>0.9</b>	<b>13.2</b>	<b>9.7</b>	<b>136</b>
<b>System Total</b>	<b>79.8</b>	<b>90.0</b>	<b>89</b>	<b>90.1</b>	<b>93.7</b>	<b>49.3</b>	<b>280.6</b>	<b>311.5</b>	<b>399</b>

- 1 It is assumed that there is no gain between Seminole and Kortes Dams.
- 2 River gain between Kortes and Pathfinder Dams.
- 3 River gain between Pathfinder and Glendo Dams.
- 4 River gain between Glendo and Guernsey Dams.
- 5 30 year average. (1986-2015)

**NORTH PLATTE RIVER BASIN  
RESERVOIR INFLOW  
March**



## NORTH PLATTE RIVER BASIN OUTFLOW

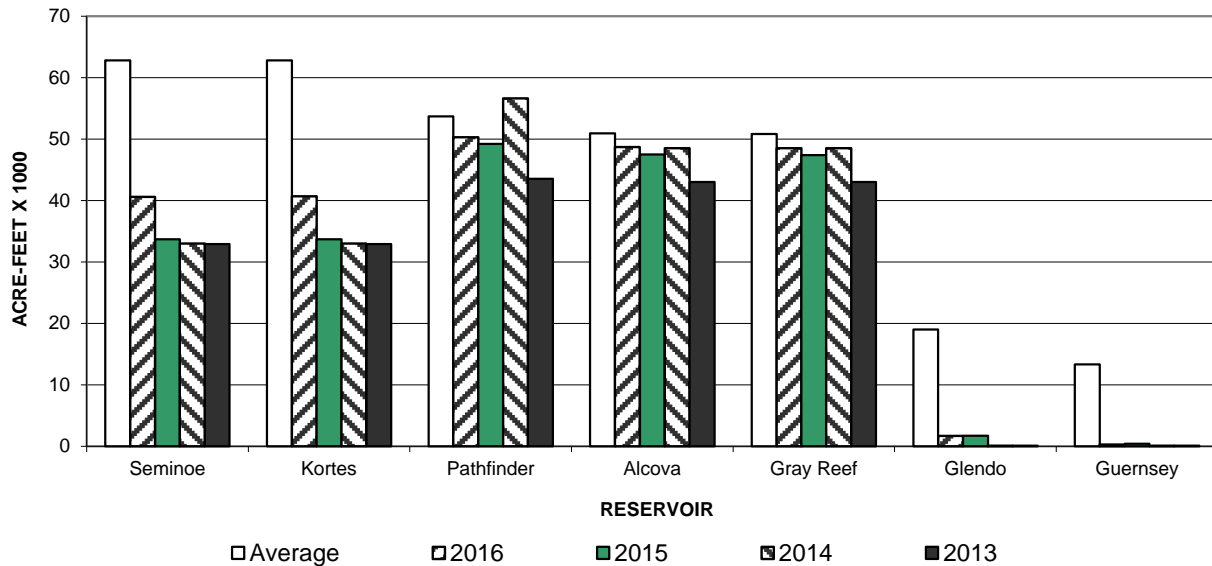
(1000 acre-feet)

Reservoir	March Outflow			March Historical Outflow			Accumulated Outflow (October - March)		
	W. Yr. 2016	30 Yr. Avg. <sup>2</sup>	% of Avg.	W. Yr. 2015	W. Yr. 2014	W. Yr. 2013	W. Yr. 2016	30 Yr. Avg. <sup>2</sup>	% of Avg.
Seminole	40.6	62.8	65	33.7	33.0	32.9	269.2	285.7	94
Kortes	40.7	62.8	65	33.7	33.0	32.9	269.1	285.7	94
Pathfinder	50.3	53.7	94	49.2	56.6	43.5	180.0	213.2	84
Alcova	48.7	50.9	96	47.5	48.5	43.0	199.7	232.8	86
Gray Reef	48.5	50.8	95	47.4	48.5	43.0	199.4	232.7	86
Glendo <sup>1</sup>	1.7	19.0 <sup>1</sup>	9	1.7	0.1	0.1	9.1	28.0	33
Guernsey	0.3	13.3	2	0.4	0.1	0.1	1.4	23.4	6

<sup>1</sup> In 1993 an outlet was constructed at Glendo Dam which is used to provide a flow of approximately 25 cubic feet per second, 22 year average (1994-2015).

<sup>2</sup> 30 year average (1986-2015).

### NORTH PLATTE RIVER BASIN RESERVOIR OUTFLOW March



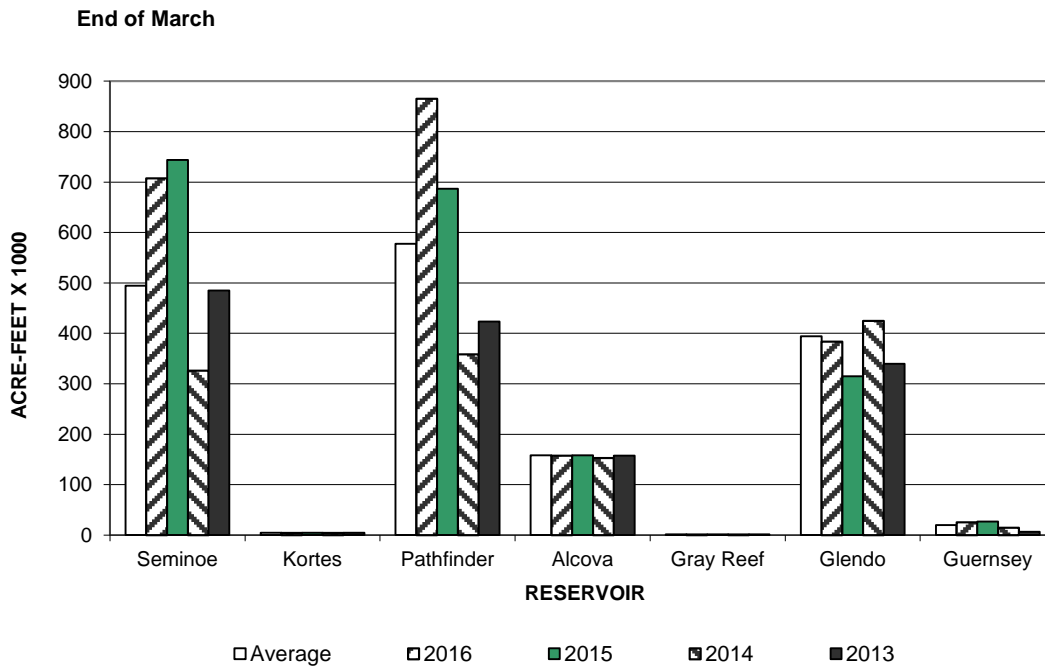
**NORTH PLATTE RIVER BASIN RESERVOIR STORAGE**

(1000 acre-feet)

Reservoir	Total Storage End of March			End of March Historical Storage			Total Conservation Storage Capacity	Percent of Capacity
	W. Yr. 2016	30 Yr. Avg. <sup>1</sup>	% of Avg.	W. Yr. 2015	W. Yr. 2014	W. Yr. 2013		
Seminole	707.6	494.6	143	743.8	326.3	485.0	1017.3	70
Kortes	4.7	4.7	100	4.7	4.5	4.7	4.7	100
Pathfinder	865.1	577.9	150	687.0	358.4	423.6	1070.0	81
Alcova	157.8	158.2	100	158.4	153.1	157.3	184.4	86
Gray Reef	1.4	1.4	100	1.6	1.3	1.5	1.8	78
Glendo	383.5	394.4	97	315.2	424.6	340.0	492.0	78
Guernsey	25.6	19.8	129	27.2	14.8	6.7	45.6	56
<b>Total</b>	<b>2145.7</b>	<b>1651.0</b>	<b>130</b>	<b>1937.9</b>	<b>1283.0</b>	<b>1418.8</b>	<b>2815.8</b>	<b>76</b>

<sup>1</sup> Average is based on the 1986-2015 period.

**NORTH PLATTE RIVER BASIN  
RESERVOIR STORAGE**



**NORTH PLATTE RIVER BASIN RESERVOIR STORAGE OWNERSHIP**

(1000 acre-feet)

Ownership	Ownership of water End of March			End of March Historical Ownership			Total Storage Capacity	Percent of Capacity
	W. Yr. 2016	30 Yr. Avg. <sup>5</sup>	% of Avg.	W. Yr. 2015	W. Yr. 2014	W. Yr. 2013		
<b>Kendrick</b>	<b>1089.0</b>	<b>834.6</b>	<b>130</b>	<b>874.6</b>	<b>775.1</b>	<b>948.1</b>	<b>1201.7</b>	<b>91</b>
<b>North Platte</b> <sup>1</sup>	<b>857.6</b>	<b>637.6</b>	<b>135</b>	<b>879.2</b>	<b>346.8</b>	<b>318.5</b>	<b>1115.6</b>	<b>77</b>
<b>Glendo</b>	<b>154.9</b>	<b>133.4</b>	<b>116</b>	<b>148.0</b>	<b>110.8</b>	<b>115.7</b>	<b>171.7</b>	<b>90</b>
<b>Inland Lakes</b> <sup>2</sup>	<b>14.6</b>	<b>21.2</b>	<b>69</b>	<b>15.6</b>	<b>38.6</b>	<b>15.6</b>	<b>46.0</b>	<b>32</b>
<b>Cheyenne</b> <sup>3</sup>	<b>9.7</b>	<b>7.9</b>	<b>123</b>	<b>6.4</b>	<b>4.4</b>	<b>8.6</b>	<b>10.0</b>	<b>97</b>
<b>PacifiCorp</b> <sup>4</sup>	<b>2.0</b>	<b>1.7</b>	<b>118</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>100</b>
<b>WWDC</b>	<b>0.0</b>	<b>N/A</b>	<b>N/A</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>N/A</b>	<b>N/A</b>
<b>Other</b> <sup>6</sup>	<b>18.0</b>	<b>14.6</b>	<b>123</b>	<b>12.2</b>	<b>5.3</b>	<b>10.3</b>	<b>N/A</b>	<b>N/A</b>

1 This includes North Platte Guernsey and North Platte Pathfinder.

2 Water stored temporarily in mainstem facilities for later transfer to the Inland Lakes. This table does not reflect water currently stored in the Inland Lakes.

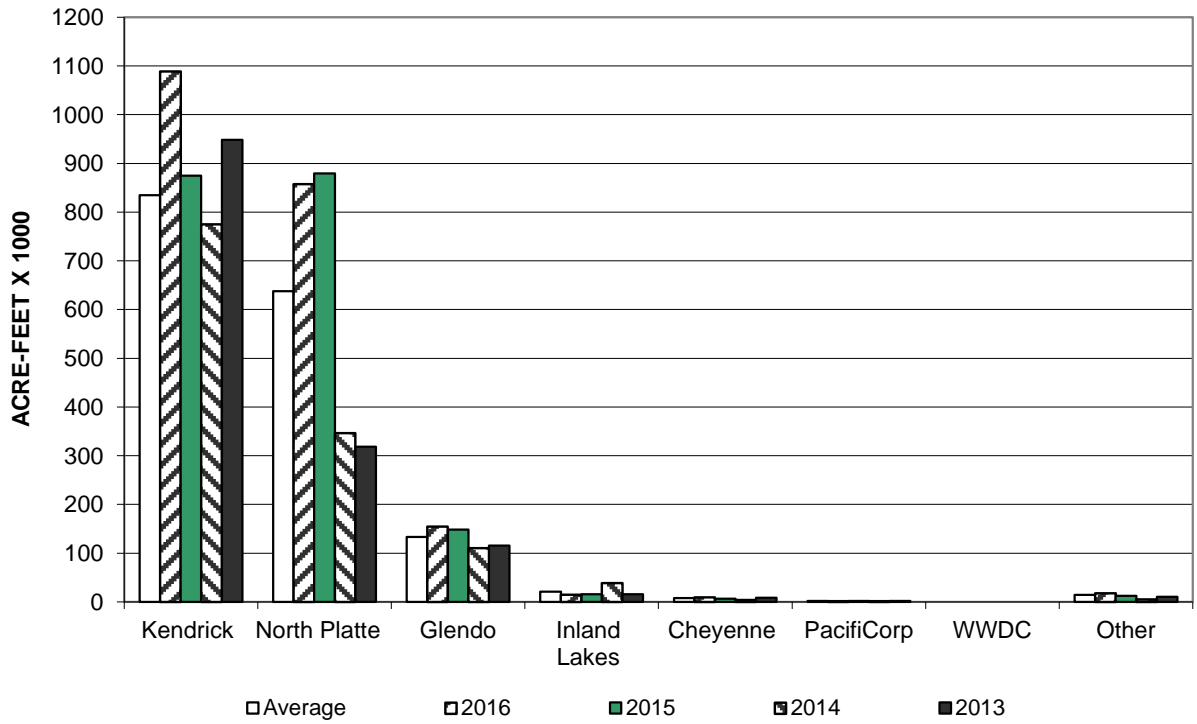
3 The City of Cheyenne has a storage contract to store water in Seminole Reservoir by exchange of Upper North Platte Basin water through a system of trans-basin diversions.

4 PacifiCorp has a storage contract to store water in Glendo Reservoir for Dave Johnston Powerplant.

5 Average is based on the 1986-2015 period.

6 Water which is captured in the re-regulation space of Glendo in addition to storage rights, operational water account, and replacement of evaporation losses is labeled as "Re-regulation of Natural Flow" per Wyoming Board of Control Order Docket Number I-2000-3-8 in water Division Number One. In accordance with 2015 Natural Flow and Ownership Procedures, the operational account may contain up to 15,000 acre-feet. On March 31, 2016, the Operational account contained 6,166 Acre-feet, the Re-Regulation space contained 11,788 Acre-feet.

**NORTH PLATTE RIVER BASIN  
OWNERSHIP OF WATER  
End of March**



**INLAND LAKES RESERVOIR STORAGE**

( acre-feet)

Reservoir	Total Storage End of March	30 Year Average <sup>5</sup>	Percent of Average	Total Storage Capacity
Lake Alice	1,593	300	531	11,034 <sup>1</sup>
Little Lake Alice	102	0 <sup>6</sup>	N/A	1,166 <sup>2</sup>
Lake Winters Creek	814	500 <sup>6</sup>	163	1,746 <sup>3</sup>
Lake Minatare	31,322	25,600	122	58,795 <sup>4</sup>

1 At Elevation 4182.0  
2 At Elevation 4139.0  
3 At Elevation 4125.0  
4 At Elevation 4125.0  
5 30 year average. (1986-2015)  
6 25 year average. (1991-2015)

**NORTH PLATTE RIVER BASIN GROSS GENERATION**

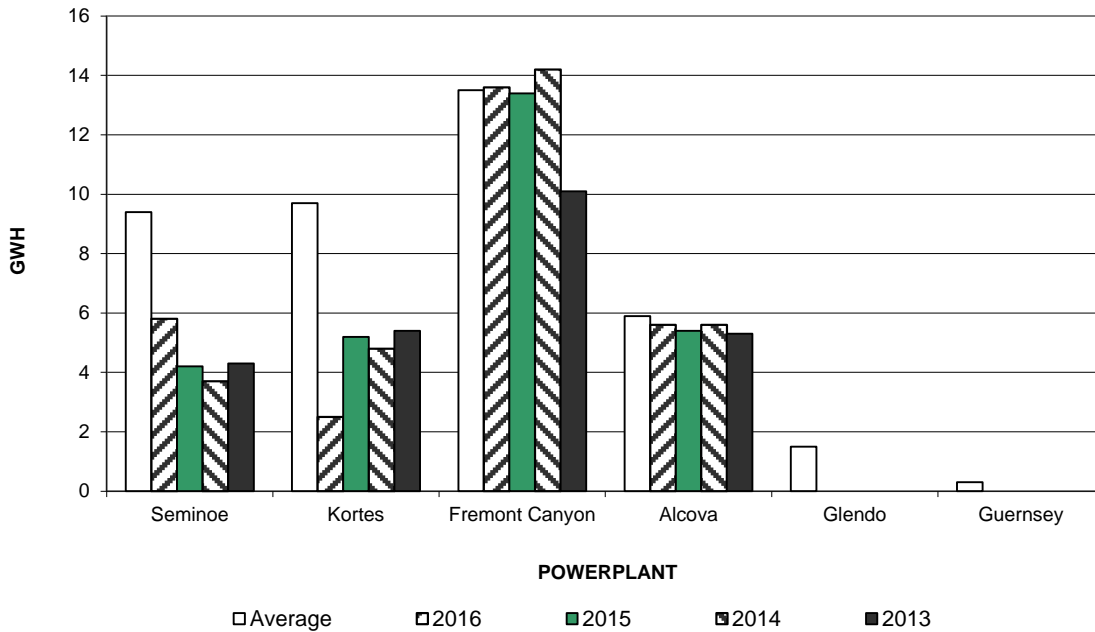
(Energy in giga-watt hours)

Powerplant	March Gross Generation			March Historical Generation			Accumulated Gross Gen. (October - March)		
	W. Yr. 2016	30 Yr. Avg. <sup>2</sup>	% of Avg.	W. Yr. 2015	W. Yr. 2014	W. Yr. 2013	W. Yr. 2016	30 Yr. Avg. <sup>2</sup>	% of Avg.
Seminoe	5.8	9.4	62	4.2	3.7	4.3	35.4	42.1	84
Kortes	2.5	9.7	26	5.2	4.8	5.4	39.7	45.9	86
Fremont Canyon <sup>1</sup>	13.6	13.5	101	13.4	14.2	10.1	43.4	52.2	83
Alcova	5.6	5.9	95	5.4	5.6	5.3	19.8	26.8	74
Glendo	0.0	1.5	N/A	0.0	0.0	0.0	0.0	1.8	N/A
Guernsey	0.0	0.3	N/A	0.0	0.0	0.0	0.0	0.7	N/A

<sup>1</sup> The powerplant for Pathfinder Dam is Fremont Canyon.

<sup>2</sup> Average is based on the 1986-2015 period.

**NORTH PLATTE RIVER BASIN  
GROSS GENERATION  
March**





**NORTH PLATTE ESTIMATED APRIL-JULY RUNOFF**

The forecast for the North Platte River system is shown in the two tables below.

(1000 acre-feet)

Forecast Points	April 1, 2016 Forecast of April-July Runoff			30 Yr. April-July Runoff Avg. <sup>2</sup>	Expected % of Avg.	Comparative Actual April - July Runoff			
	Reasonable Minimum <sup>1</sup>	Expected	Reasonable Maximum <sup>1</sup>			W. Yr. 2015	W. Yr. 2014	W. Yr. 2013	W. Yr. 2012
Seminole Reservoir	380	680	980	690	99	654	1079	328	268
Sweetwater River Above Pathfinder Reservoir									
Alcova to Glendo	40	60	80	53	113	41	42	10	24
	100	150	200	130	115	196	238	50	47

<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 1986-2015 period.

(1000 acre-feet)

Forecast Points	April 1, 2016 Forecast of April-July Runoff						30 Yr. April-July Runoff Avg. <sup>1</sup>
	Chance of Exceeding						
	95%	75%	50%	% of Avg	25%	5%	
Seminole Reservoir	380	557	680	99	803	980	690
Sweetwater River Above Pathfinder Reservoir							
Alcova to Glendo Gain	40	52	60	113	68	80	53
	100	130	150	115	170	200	130

<sup>1</sup> Average is based on the 1986-2015 period.

**NORTH PLATTE SNOWPACK WATER CONTENT**

SWE in inches <sup>1</sup>

WATERSHED	April 1, 2016 snow-water content			Comparative April 1 snow-water content		
	W. Yr. 2016	30 Yr. Median <sup>2</sup>	% of Median	W. Yr. 2015	W. Yr. 2014	W. Yr. 2013
Seminole Reservoir	23.2	23.5	99	17.5	24.2	15.6
Pathfinder Reservoir	15.4	14.8	104	9.3	14.5	7.6
Glendo Reservoir	13.2	11.0	120	6.7	14.1	7.3

**Seminole Reservoir Watershed**

SWE in inches <sup>1</sup>

Stations (Elevation)	Water Content	30 Yr. Median <sup>2</sup>
Brooklyn Lake (10,240)	23.8	20.0
Columbine (9,160)	24.4	22.8
Divide Peak (8,880)	19.3	19.5
Joe Wright (10,120)	17.6	20.2
North French (10,130)	26.0	28.0
Old Battle (10,000)	28.6	29.6
Sand Lake (10,050)	26.3	27.5
South Brush (8,440)	12.7	12.2
Tower (10,500)	38.4	44.0
Webber Springs (9,250)	21.9	23.0
Willow Creek Pass (9,540)	15.9	11.8
<b>Watershed Median</b>	<b>23.2</b>	<b>23.5</b>

**Pathfinder Reservoir Watershed**

SWE in inches <sup>1</sup>

Stations (Elevation)	Water Content	30 Yr. Median <sup>2</sup>
South Pass (9,040)	14.3	14.9
Deer Park (9,700)	16.4	14.7
<b>Watershed Average</b>	<b>15.4</b>	<b>14.8</b>

**Glendo Reservoir Watershed**

SWE in inches <sup>1</sup>

Stations (Elevation)	Water Content	30 Yr. Median <sup>2</sup>
Casper (7,900) <sup>4</sup>	16.8	13.4
Laprele Creek (8,375) <sup>4</sup>	10.1	9.5
Reno Hill (8,500) <sup>4</sup>	15.9	13.2
Windy Peak (7,900) <sup>4</sup>	9.8	7.8
<b>Watershed Average</b>	<b>13.2</b>	<b>11.0</b>

<sup>1</sup> SWE (Snow Water Equivalent) is the amount of water in the snowpack expressed in inches)

<sup>2</sup> Median for the 1981-2010 period

<sup>3</sup> Represents a Natural Resources Conservation Service (NRCS) Snow Course Site.

<sup>4</sup> Represents a NRCS Snowpack Telemetry Network (SNOTEL) Site.