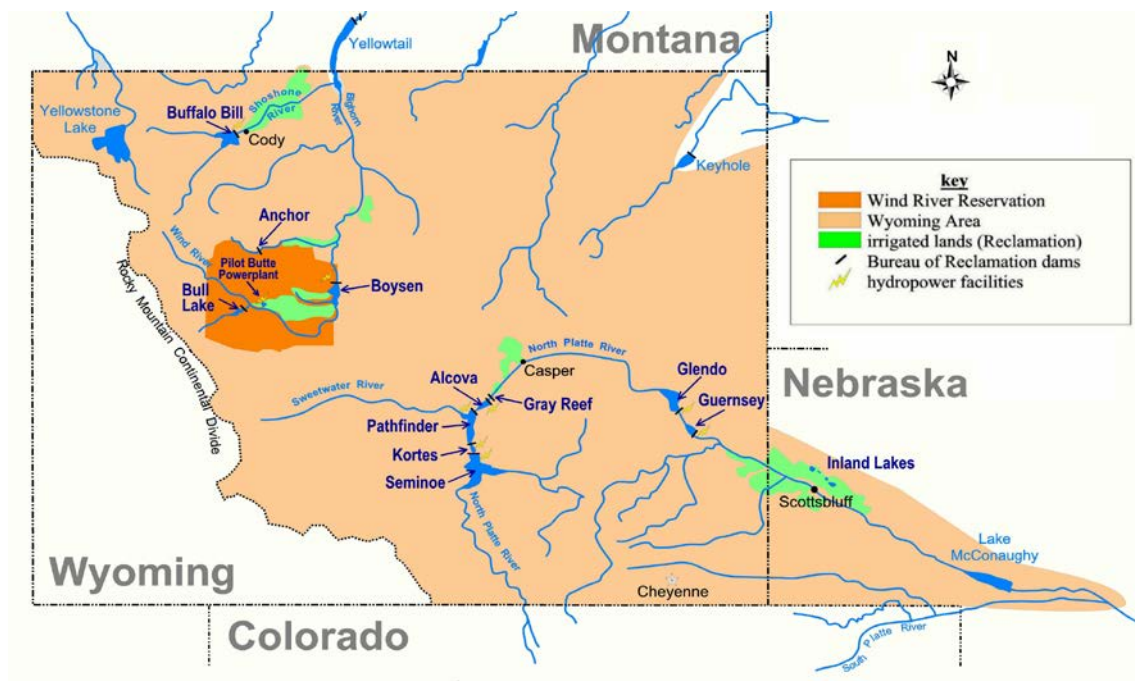


# RECLAMATION

*Managing Water in the West*

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

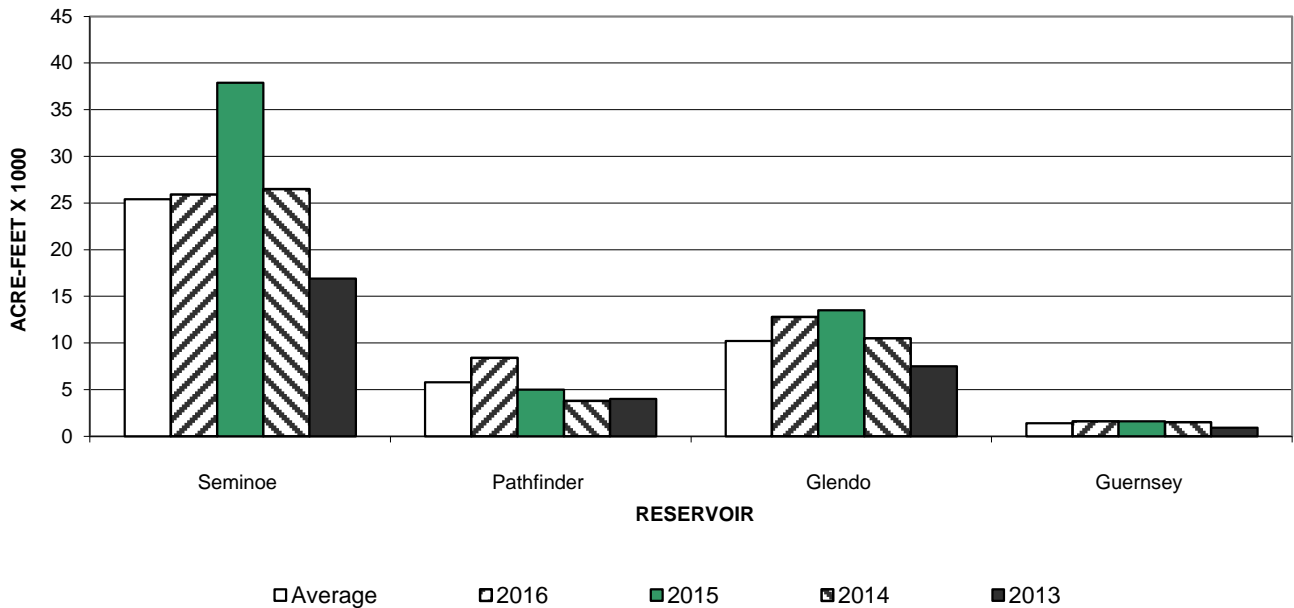
The January inflow was above average for Seminoe, Pathfinder, Glendo and Guernsey Reservoirs.

(1000 acre-feet)

Reservoir	January Inflow			January Historical Inflow			Accumulated Inflow (October-January)		
	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>Seminoe</b>	<b>25.9</b>	<b>25.4</b>	<b>102</b>	<b>37.9</b>	<b>26.5</b>	<b>16.9</b>	<b>96.5</b>	<b>110.6</b>	<b>87</b>
<b>Pathfinder</b> <sup>1,2</sup>	<b>8.4</b>	<b>5.8</b>	<b>145</b>	<b>5.0</b>	<b>3.8</b>	<b>4.0</b>	<b>16.6</b>	<b>19.0</b>	<b>87</b>
<b>Glendo</b> <sup>3</sup>	<b>12.8</b>	<b>10.2</b>	<b>125</b>	<b>13.5</b>	<b>10.5</b>	<b>7.5</b>	<b>24.5</b>	<b>39.4</b>	<b>62</b>
<b>Guernsey</b> <sup>4</sup>	<b>1.6</b>	<b>1.4</b>	<b>114</b>	<b>1.6</b>	<b>1.5</b>	<b>0.9</b>	<b>7.9</b>	<b>6.7</b>	<b>118</b>

- 1 It is assumed that there is no gain between Seminoe 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 January



## NORTH PLATTE RIVER BASIN OUTFLOW

The January outflow was above average for Seminoe and Kortes Reservoirs.

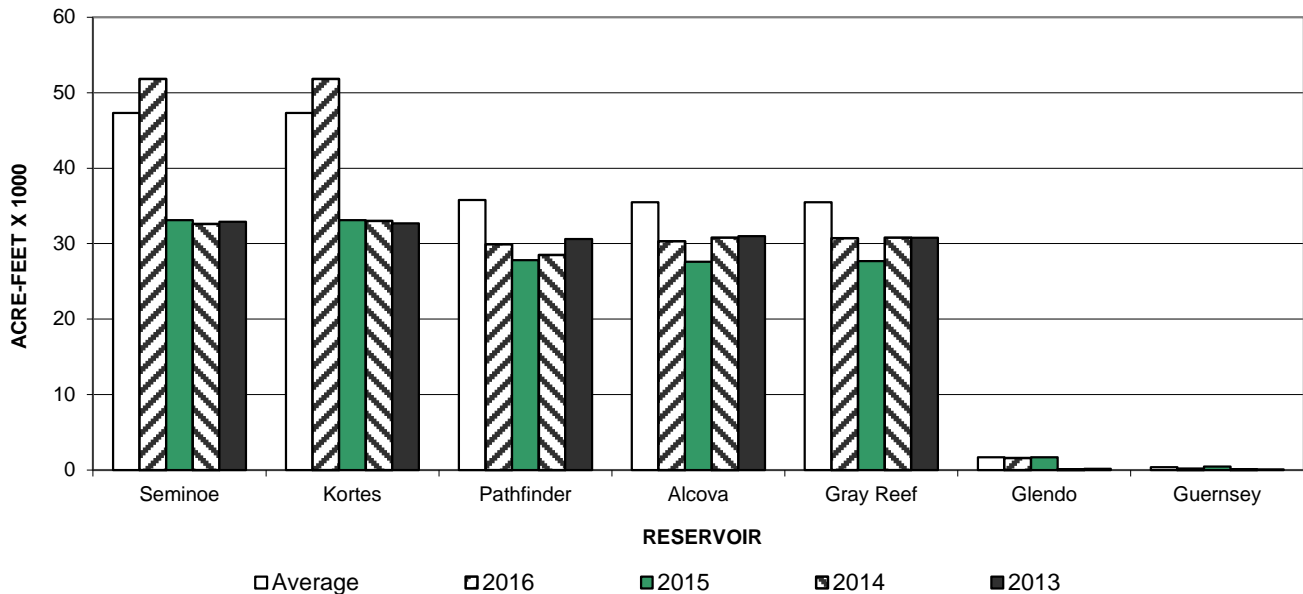
(1000 acre-feet)

Reservoir	January Outflow			January Historical Outflow			Accumulated Outflow (October-January)		
	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	51.8	47.3	110	33.1	32.6	32.9	185.0	174.4	106
Kortes	51.8	47.3	110	33.1	33.0	32.7	184.9	174.4	106
Pathfinder	29.9	35.8	84	27.8	28.5	30.6	100.5	126.6	79
Alcova	30.3	35.5	85	27.6	30.8	31.0	122.1	150.0	81
Gray Reef	30.7	35.5	86	27.7	30.8	30.8	122.2	150.0	81
Glendo <sup>1</sup>	1.6	1.7	94	1.7	0.1	0.2	6.4	6.9	93
Guernsey	0.2	0.4	50	0.5	0.1	0.1	0.9	9.6	9

1 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).

2 30 year average (1986-2015).

### NORTH PLATTE RIVER BASIN RESERVOIR OUTFLOW January



**NORTH PLATTE RIVER BASIN RESERVOIR STORAGE**

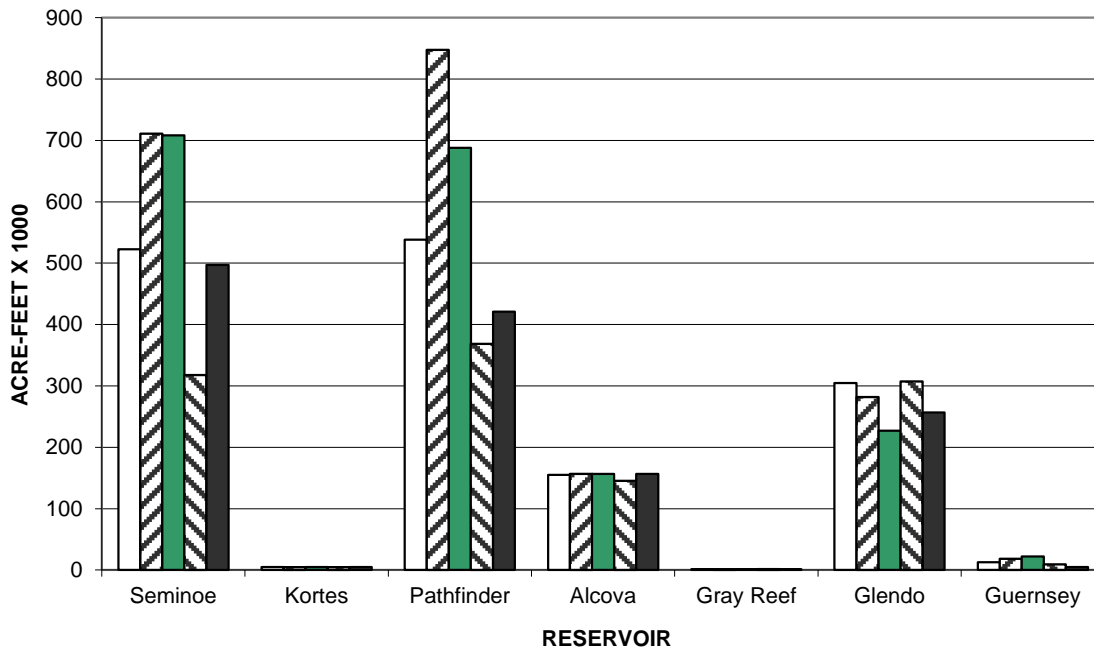
The January storage was below average for Gray Reef and Glendo Reservoirs.

(1000 acre-feet)

Reservoir	Total Storage End of January			End of January 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		
Seminoe	710.9	522.5	136	708.4	317.4	497.0	1017.3	70
Kortes	4.7	4.7	100	4.7	4.5	4.7	4.7	100
Pathfinder	847.5	538.3	157	688.1	368.3	421.0	1070.0	79
Alcova	156.7	155.0	101	156.7	145.0	156.9	184.4	85
Gray Reef	1.1	1.4	79	1.3	1.3	1.4	1.8	61
Glendo	281.8	304.6	93	226.8	306.9	256.8	492.0	57
Guernsey	18.2	12.6	144	22.4	9.2	5.1	45.6	40
<b>Total</b>	<b>2020.9</b>	<b>1539.1</b>	<b>131</b>	<b>1808.4</b>	<b>1152.6</b>	<b>1342.9</b>	<b>2815.8</b>	<b>72</b>

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

**NORTH PLATTE RIVER BASIN  
RESERVOIR STORAGE  
End of January**



**NORTH PLATTE RIVER BASIN RESERVOIR STORAGE OWNERSHIP**

The January ownership was below average for Inland Lakes.

(1000 acre-feet)

Ownership	Ownership of water End of January			End of January 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		
Kendrick	1092.4	851.4	128	880.4	777.3	951.6	1201.7	91
North Platte <sup>1</sup>	736.2	526.3	140	744.2	239.6	239.8	1115.6	66
Glendo	150.4	125.8	120	148.3	88.9	116.7	171.7	88
Inland Lakes <sup>2</sup>	14.6	21.3	69	15.7	38.6	15.7	46.0	32
Cheyenne <sup>3</sup>	8.6	6.4	134	5.5	3.4	6.6	10.0	N/A
PacifiCorp <sup>4</sup>	2.0	1.8	111	2.0	2.0	2.0	2.0	100
WWDC	0.0	N/A	N/A	0.0	0.0	0.0	N/A	N/A
Other <sup>6</sup>	16.9	6.1	277	12.3	2.8	10.5	N/A	N/A

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 that water currently stored in the Inland Lakes.

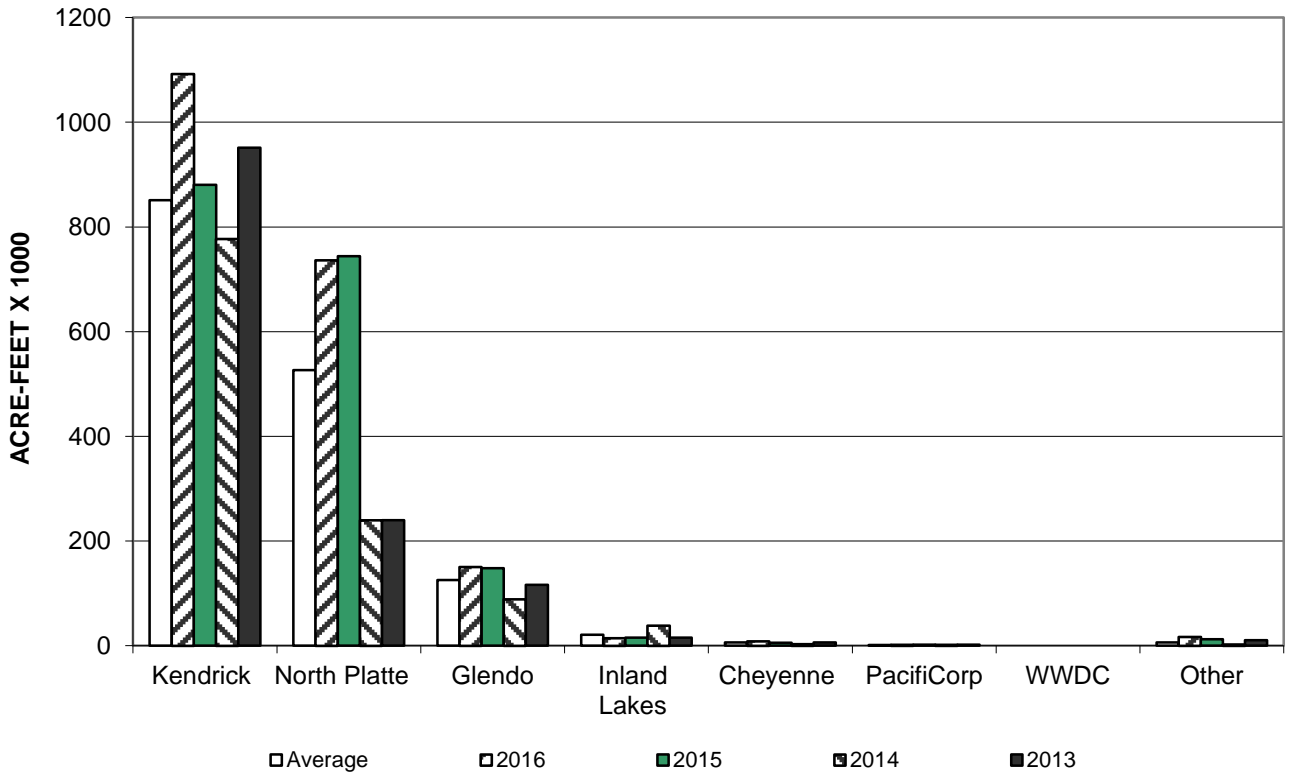
3 The City of Cheyenne has a storage contract to store water in Seminoe Reservoir by exchange of Upper North Platte Basin water through a system of trans-basin diversions

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 2014 Natural Flow and Ownership Procedures, the operational account may contain up to 15,000 acre-feet. On January 31, 2016, the Operational account contained 5,093 Acre-feet, and the Re-Regulation space contained 11,801 Acre-feet.

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



**INLAND LAKES RESERVOIR STORAGE**

Reservoir	Total Storage End of January	30 Year Average <sup>5</sup>	Percent of Average	Total Storage Capacity
Lake Alice	1,800	500	360	11,034 <sup>1</sup>
Little Lake Alice	100	100 <sup>6</sup>	100	1,166 <sup>2</sup>
Lake Winters Creek	1,000	600 <sup>6</sup>	167	1,746 <sup>3</sup>
Lake Minatare	31,700	26,200	121	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**

The January Power generation was above average for Seminoe and Kortes powerplants

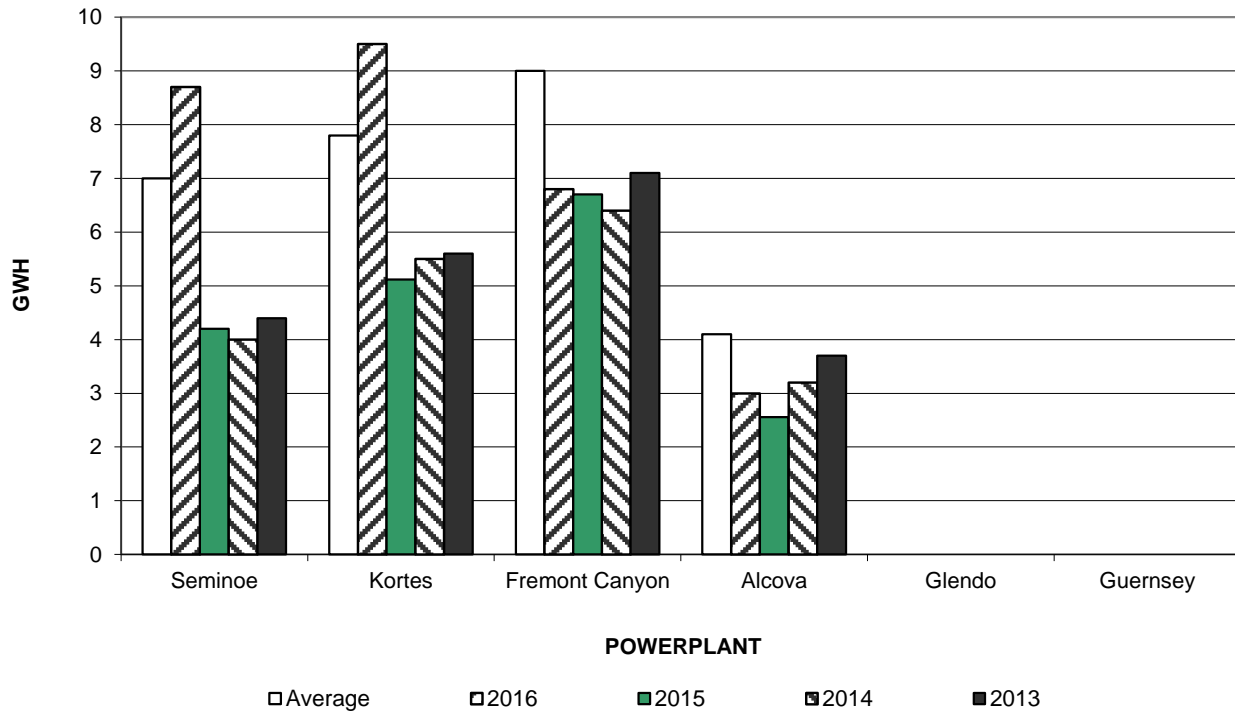
(Energy in giga-watt hours)

Powerplant	January Gross Generation			January Historical Generation			Accumulated Gross Gen. (October - January)		
	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	8.7	7.0	124	4.2	4.0	4.4	0.0	25.5	0
Kortes	9.5	7.8	122	5.1	5.5	5.6	0.0	28.3	0
Fremont Canyon <sup>1</sup>	6.8	9.0	76	6.7	6.4	7.1	0.0	30.8	0
Alcova	3.0	4.1	73	2.6	3.2	3.7	0.0	17.3	0
Glendo	0.0	0.0	N/A	0.0	0.0	0.0	0.0	0.3	0
Guernsey	0.0	0.0	N/A	0.0	0.0	0.0	0.0	0.4	0

1 The powerplant for Pathfinder Dam is Fremont Canyon.

2 Average is based on the 1986-2015 period.

**NORTH PLATTE RIVER BASIN  
GROSS GENERATION  
January**





**NORTH PLATTE ESTIMATED APRIL-JULY RUNOFF**

The February 1, 2016, water supply forecast indicates below average April - July runoff for the North Platte system. The forecast for the North Platte River system is shown in the tables below.

(1000 acre-feet)

Forecast Points	February 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	300	600	900	690	87	654	1100	328	268
Sweetwater River Above Pathfinder Reservoir	20	30	50	52.5	57	41	42	10	24
Alcova to Glendo	70	120	170	129.6	93	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	February 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	300	477	600	87	723	900	690
Sweetwater River Above Pathfinder Reservoir	20	26	30	57	38	50	52.5
Alcova to Glendo Gain	70	100	120	93	140	170	129.6

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

**NORTH PLATTE SNOWPACK WATER CONTENT**

The tables shown below display the Snotel Sites used in the development of the April-July snowmelt runoff forecasts displayed on page eight of this report.

SWE in inches <sup>1</sup>

WATERSHED	February 1, 2016 snow-water content			Comparative February 1 snow-water content		
	W. Yr. 2016	30 Yr. Median <sup>2</sup>	% of Median	W. Yr. 2015	W. Yr. 2014	W. Yr. 2013
Seminoe Reservoir	14.1	14.5	97	10.9	13.8	8.7
Pathfinder Reservoir	6.1	9.2	67	6.4	5.8	5.5
Glendo Reservoir	6.6	6.2	107	4.6	7.8	1.9

**Seminoe Reservoir Watershed**

SWE in inches <sup>1</sup>

Stations (Elevation)	Water Content	30 Yr. Median <sup>2</sup>
Brooklyn Lake (10,240)	13.5	12.0
Columbine (9,160)	14.9	14.7
Divide Peak (8,880)	12.5	12.3
Joe Wright (10,120)	10.2	13.0
North French (10,130)	16.2	16.0
Old Battle (10,000)	18.0	19.1
Sand Lake (10,050)	16.4	16.5
South Brush (8,440)	7.4	7.3
Tower (10,500)	23.0	27.5
Webber Springs (9,250)	13.5	13.7
Willow Creek Pass (9,540)	9.5	7.6
Watershed Median	14.1	14.5

**Pathfinder Reservoir Watershed**

SWE in inches <sup>1</sup>

Stations (Elevation)	Water Content	30 Yr. Median <sup>2</sup>
South Pass (9,040)	5.5	8.9
Deer Park (9,700)	6.7	9.4
Watershed Average	6.1	9.2

**Glendo Reservoir Watershed**

SWE in inches <sup>1</sup>

Stations (Elevation)	Water Content	30 Yr. Median <sup>2</sup>
Casper (7,900)	7.5	7.5
Laprele Creek (8,375)	5.5	5.4
Reno Hill (8,500)	8.4	7.7
Windy Peak (7,900)	5.1	4.2
Watershed Median	6.6	6.2

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