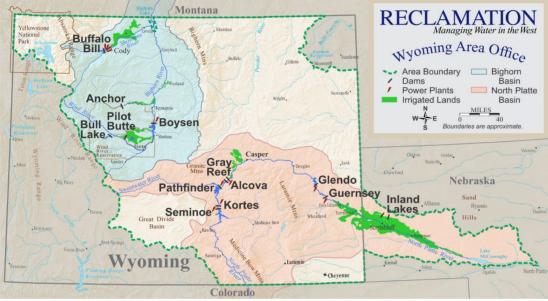


North Platte River Basin Water Supply and Utilization Report Wyoming Area Office

Report for March 2024



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.

Bureau of Reclamation Missouri Basin Region Wyoming Area Office Mills, Wyoming

Report for March 2024 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 Basins.

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 Missouri Basin and Arkansas-Rio Grande-Texas Gulf Regions Home Page at <u>http://www.usbr.gov/gp</u>

- 2. Select Water Operations.
- 3. Select Water Management Information.
- 4. Select Water Supply Report.

5. Under North Platte River Basin, select the current report or reports from the previous 12 months.

NORTH PLATTE RIVER BASIN INFLOW

March	Inflow and H	Inflow and Historical Inflows, values in 1,000 acre-feet					
		30 Yr. Avg.					
Reservoir	W. Yr. 2024	5	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021	
Seminoe	43.1	56.4	77%	29.3	44.9	42.2	
Pathfinder ^{1,2}	7.0	11.2	63%	7.3	7.4	4.9	
Glendo ³	18.4	17.5	105%	15.4	16.6	20.8	
Guernsey ⁴	2.6	1.7	156%	1.8	1.4	2.2	
System Total	71.1	86.7	82%	53.8	70.3	70.1	

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.

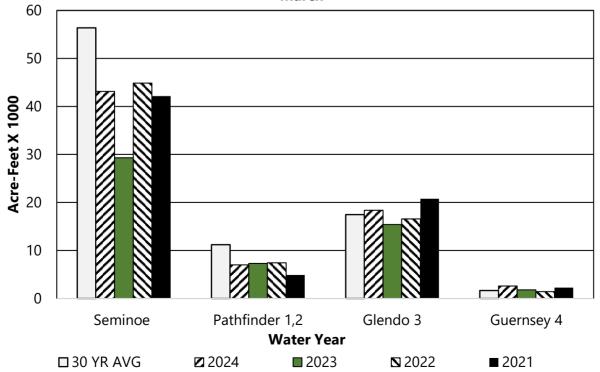
4 River gain between Glendo and Guernsey Dams.

5 30 year average. (1994-2023)

March	Accumulated	Water Year In	iflows, values	1n 1,0
Reservoir	W. Yr. 2024	30 Yr. Avg.	% of Avg.	
Seminoe	166.2	193.1	86%	
Pathfinder	28.9	37.1	78%	
Glendo	72.2	64.7	112%	
Guernsey	10.1	9.7	104%	
System Total	277.5	304.6	91%	

March Accumulated Water Year Inflows, values in 1,000 acre-feet

NORTH PLATTE RIVER BASIN RESERVOIR INFLOW



March

March	Outflow and	Outflow and Historical Outflows, values in 1,000 acre-feet						
Reservoir	W. Yr. 2024	30 Yr. Avg.		W. Yr. 2023	W. Yr. 2022	W. Yr. 2021		
Seminoe	33.6	59.8	56%	31.9	33.3	33.1		
Kortes	33.6	59.8	56%	31.9	33.3	33.1		
Pathfinder	43.4	53.9	81%	46.2	29.3	27.3		
Alcova	42.7	52.5	81%	45.5	29.8	26.2		
Gray Reef	42.2	52.4	81%	45.2	29.5	26.2		
Glendo	1.8	14.6	12%	1.5	0.9	1.7		
Guernsey	0.2	12.8	1%	0.1	0.7	0.2		

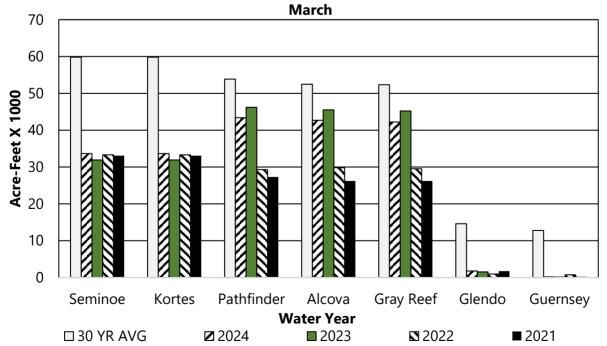
NORTH PLATTE RIVER BASIN OUTFLOW

1. 30 year average is based on the 1994-2023 period.

March	Accumulated	Water Year C	utflows, value	es in 1,0
Reservoir	W. Yr. 2024	30 Yr. Avg. ²	% of Avg.	
Seminoe	197.6	253.7	78%	
Kortes	197.6	253.7	78%	
Pathfinder	171.1	195.2	88%	
Alcova	193.6	216.1	90%	
Gray Reef	193.1	215.9	89%	
Glendo	10.6	22.9	46%	
Guernsey	0.9	17.0	5%	

March Accumulated Water Year Outflows, values in 1,000 acre-feet

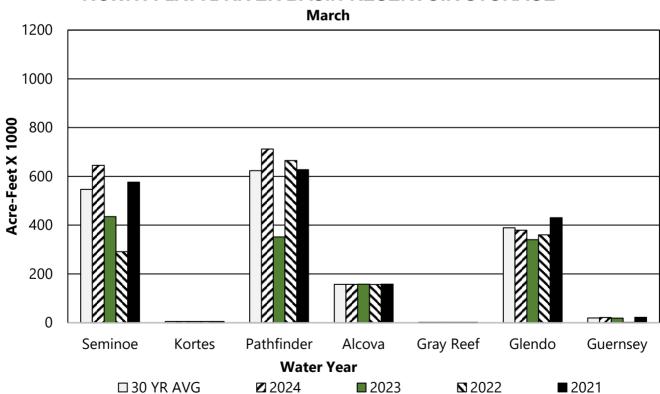




March	Storage, Historical Storage, and Storage Capacity in 1,000 acre-feet							
Reservoir	W. Yr. 2024	30 Yr. Avg. ¹	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021	Total Conservation Storage Capacity	Percent of Capacity
Seminoe	645.4	547.0	118%	434.9	291.1	576.6	1017.3	63%
Kortes	4.7	4.7	101%	4.7	4.7	4.7	4.7	101%
Pathfinder	712.0	623.3	114%	351.7	665.2	627.8	1070.0	67%
Alcova	157.5	157.4	100%	157.8	156.7	157.7	184.4	85%
Gray Reef	1.8	1.5	121%	1.4	1.8	1.8	1.8	102%
Glendo	379.5	388.9	98%	340.8	360.4	430.8	492.0	77%
Guernsey	21.7	19.5	111%	18.9	1.6	21.8	45.6	47%
Total	1922.6	1742.4	110%	1310.2	1481.4	1821.1	2815.8	68%

NORTH PLATTE RIVER BASIN RESERVOIR STORAGE

1 Average is based on the 1994-2023 period.



NORTH PLATTE RIVER BASIN RESERVOIR STORAGE

March Storage, Historical Storage, and Storage Capacity in 1,000 acre-feet								
Reservoir	W. Yr. 2024	30 Yr. Avg. ⁷	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021	Total Conservation Storage Capacity	Percent of Capacity
Kendrick	907.9	866.0	105%	821.7	941.3	1060.7	1201.7	76%
North Platte ¹	814.9	692.1	118%	342.8	368.5	584.0	1115.6	73%
Glendo	150.9	133.7	113%	114.8	129.1	130.7	171.7	88%
Inland Lakes ²	25.8	21.1	122%	16.3	15.8	22.8	46.0	56%
Cheyenne ^{3,4}	10.3	8.9	116%	12.6	13.7	13.0	15.7	66%
PacifiCorp ⁵	2.0	2.0	101%	2.0	2.0	2.0	2.0	100%
Other ⁶	10.9	18.6	59%	0.1	11.1	8.0	N/A	N/A

NORTH PLATTE RIVER BASIN RESERVOIR STORAGE OWNERSHIP

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 Seminoe Reservoir by exchange of Upper North Platte Basin water through a system of trans-basin diversions.

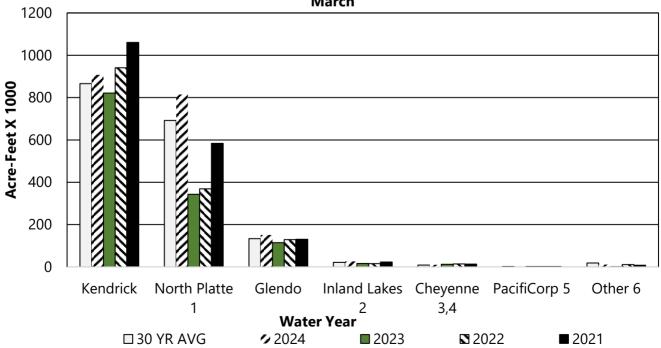
4 Cheyenne ownership was increased to 15,700 AF on March 13, 2009 as a result of Amendment No. 1 to Contract No. 06XX6A0062.

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

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 2022 Natural Flow and Ownership Procedures, the operational account can contain up to 15,000 acre-feet. On March 31, 2024, the Operational account contained 10,898 Acre-feet, the Re-Regulation space contained 0 Acrefeet.

7 Average is based on the 1994-2023 period.

OWNERSHIP OF WATER



INLAND	LAKES	RESERVOII	R STORAGE
--------	-------	-----------	-----------

March	End of Month Storage, and Storage Capacity in acre-feet						
Reservoir	W. Yr. 2024	30 Yr. Avg. ⁵	% of Avg.	Total Storage Capacity			
Lake Alice	45	277	16%	11,034			
Little Lake Alice	124	77	161%	1,166			
Lake Winters Creek	1,092	558	196%	1,746			
Lake Minatare	31,422	24,958	126%	58,795			

1 At Elevation 4182.0

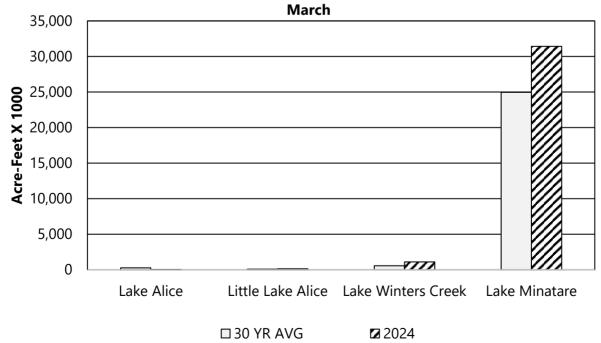
2 At Elevation 4139.0

3 At Elevation 4129.0

4 At Elevation 4125.0

5 30 year average. (1994-2023)





NORTH PLATTE RIVER BASIN GROSS GENERATION

March	Gross Generation and Historical Generation in Giga Watt Hours						
Powerplant	W. Yr. 2024	30 Yr. Avg. 2	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021	
Seminoe	4.1	8.9	46%	4.2	3.5	3.6	
Kortes	5.4	9.1	60%	5.4	5.1	4.9	
Fremont Canyon ¹	11.6	13.3	87%	11.2	7.0	6.4	
Alcova	5.0	5.9	85%	5.2	0.9	2.6	
Glendo	0.0	1.2	n/a	0.0	0.0	0.0	
Guernsey	0.0	0.3	n/a	0.0	0.0	0.0	

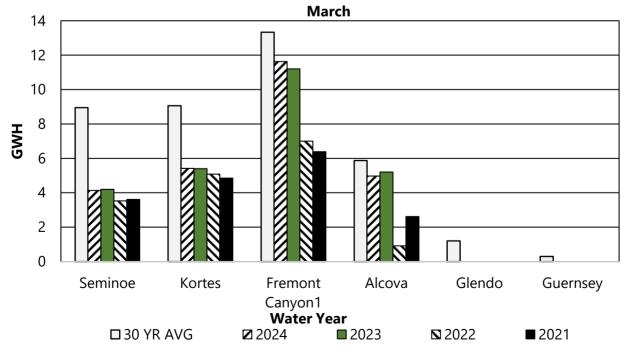
1 The powerplant for Pathfinder Dam is Fremont Canyon.

2 Average is based on the 1994-2023 period.

March	Accumulated	Accumulated Gross Generation Water Year in G					
		30 Yr. Avg.					
Powerplant	W. Yr. 2024	2	% of Avg.				
Seminoe	25.8	36.4	71%				
Kortes	32.6	40.1	81%				
Fremont Canyon ¹	40.9	43.8	93%				
Alcova	18.9	23.4	81%				
Glendo	0.0	1.3	n/a				
Guernsey	0.0	0.3	n/a				

Giga Watt Hours





NORTH PLATTE SNOWPACK WATER CONTENT

The tables shown below display the Snotel Sites used in the development of the April-July snowmelt runoff forecasts

April 1st Snow Water Equiva	SV	VE in inches				
	W. Yr.	30 Yr.	% of		W. Yr.	W. Yr.
WATERSHED	2024 ³	Median ²	Median	W. Yr. 2023	2022	2021
Seminoe Reservoir	21.6	20.9	103%	27.2	18.0	19.9
Pathfinder Reservoir	17.5	14.3	123%	20.5	10.3	12.2
Glendo Reservoir	8.7	11.0	79%	12.5	9.9	12.8

Seminoe Reservoir Watershed

	SWE	t in inches ¹
Snotel Stations (Elevation)	Water Content ³	30 Yr. Median ²
Arapaho Ridge (10,960)	21.1	21.0
Columbine (9,160)	27.0	22.0
Divide Peak (8,880)	21.6	19.4
Joe Wright (10,120)	18.6	19.6
Laprele Creek (8,375)	7.2	9.4
Never Summer (10,280)	18.7	19.7
North French (10,130)	26.4	27.6
Old Battle (10,000)	32.5	29.7
Rawah (9,020)	12.5	10.6
Sage Creek Basin (7,850)	16	13.2
Sand Lake (10,050)	29.2	26.6
South Brush (8,440)	10.7	11.9
Tower (10,500)	40.3	42.0
Webber Springs (9,250)	24.1	21.8
Willow Creek Pass (9,540)	14	12.6
Zirkel (9,340) ⁴	26.1	27.6
Watershed Average	21.6	20.9

Sweetwater River / Pathfinder Reservoir Watershed

	SWE in inches				
Snotel Stations (Elevation)	Water Content ³	30 Yr. Median ²			
Deer Park (9,700)	18.9	14.0			
South Pass (9,040)	16.1	14.5			
Watershed Average	17.5	14.3			

Glendo Reservoir Watershed

	SWE in inches ¹				
Snotel Stations	Water	30 Yr.			
(Elevation)	Content ³	Median ²			
Casper (7,900)	9.8	13			
Laprele Creek (8,375)	7.2	9.4			
Reno Hill (8,500)	9.4	13.8			
Windy Peak (7,900)	8.4	7.8			
Watershed Average	8.7	11.0			

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

² Median for the 1991-2020 period

³ Data from NRCS Snowpack Telemetry Network (SNOTEL) Sites.

⁴ Zirkel is a newer gage starting WY 2003, NRCS median is 17 years of data within 1991-2020 time period.

NORTH PLATTE ESTIMATED APRIL-JULY RUNOFF

								(100	0 acre-feet)
Forecast	April 1, 2024 Forecast of April-July Runoff			30 Yr. April-July	Expected	Comparative Actual April - July Runoff			
Points	Reasonable Maximum ¹	Expected	Reasonable Minimum ¹	Runoff Avg. ²	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021	W. Yr. 2020
Seminoe Reservoir	1050	800	600	721	111	969	547	339	632
Sweetwater River Above Pathfinder Reservoir	110	80	50	55	146	112	17	17	25
Alcova to Glendo	200	120	60	146	82	227	81	110	134

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 1994-2023 period.

	(100						00 acre-feet)
							30 Yr.
Forecast	April 1, 2024 Forecast of April-July Runoff						Apr - Jul
Points	Chance of Exceeding				Runoff		
	95%	75%	50%	% of Avg	25%	5%	Avg. 1
Seminoe							
Reservoir	600	718	800	111	902	1050	721
Sweetwater River							
Above Pathfinder							
Reservoir	50	68	80	146	92	110	55
Alcova to Glendo							
Gain	60	95	120	82	153	200	146

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