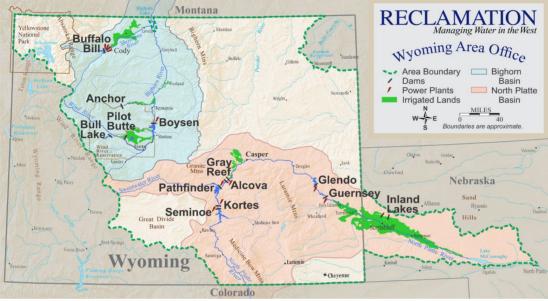


North Platte River Basin Water Supply and Utilization Report Wyoming Area Office

Report for December 2023



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 December 2023 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

December	Inflow and H	Inflow and Historical Inflows, values in 1,000 acre-feet							
Reservoir	W. Yr. 2024	30 Yr. Avg. 5		W. Yr. 2023	W. Yr. 2022	W. Yr. 2021			
Seminoe	24.9	26.0	96%	20.4	24.1	20.1			
Pathfinder ^{1,2}	4.9	4.6	107%	2.3	-2.3	-1.4			
Glendo ³	9.3	7.0	134%	3.9	6.4	7.0			
Guernsey ⁴	1.2	1.4	91%	1.1	1.1	1.3			
System Total	40.3	38.9	104%	27.8	29.3	27.0			

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.

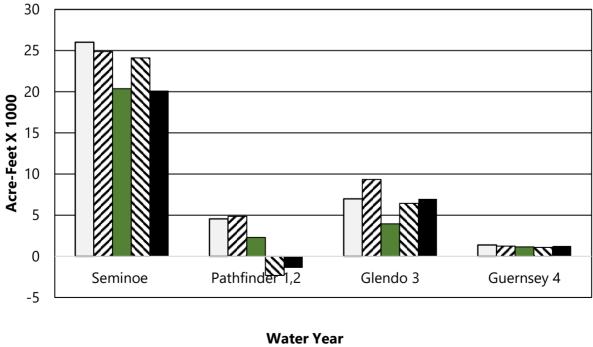
5 30 year average. (1994-2023)

□ 30 YR AVG

December	Accumulated	Accumulated Water Year Inflows, values in 1,000 acre-feet						
Reservoir	W. Yr. 2024	30 Yr. Avg.	% of Avg.					
Seminoe	70.6	83.0	85%					
Pathfinder	9.5	12.8	74%					

Pathfinder	9.5	12.8	74%
Glendo	32.1	26.4	121%
Guernsey	4.9	5.3	92%
System Total	117.1	127.5	92%

NORTH PLATTE RIVER BASIN RESERVOIR INFLOW



2023

2022

2021

2024

December

December	cember Outflow and Historical Outflows, values in 1,000 acre-feet								
		30 Yr. Avg.							
Reservoir	W. Yr. 2024	1	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021			
Seminoe	33.2	39.6	84%	32.9	35.5	50.2			
Kortes	33.2	39.6	84%	32.9	35.4	50.2			
Pathfinder	31.3	34.0	92%	28.3	28.1	82.6			
Alcova	30.8	32.7	94%	27.6	27.7	37.0			
Gray Reef	30.8	32.7	94%	27.7	27.7	37.0			
Glendo	1.7	1.6	107%	1.4	0.1	1.5			
Guernsey	0.2	0.4	37%	0.1	1.1	0.1			

NORTH PLATTE RIVER BASIN OUTFLOW ~

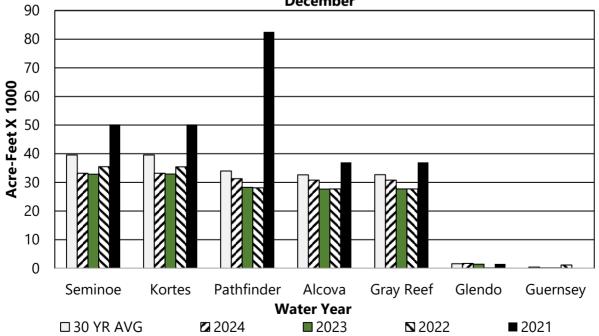
1. 30 year average is based on the 1994-2023 period.

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December	Accumulated Water Year Outflows, values in 1,000 acre-feet
	recumulated water rear outflows, variaes in 1,000 acto feet

Reservoir	W. Yr. 2024	30 Yr. Avg. ²	% of Avg.
Seminoe	100.1	113.6	88%
Kortes	100.0	113.6	88%
Pathfinder	68.4	78.4	87%
Alcova	91.5	101.6	90%
Gray Reef	91.3	101.5	90%
Glendo	5.5	5.0	110%
Guernsey	0.4	3.1	13%

NORTH PLATTE RIVER BASIN RESERVOIR OUTFLOW

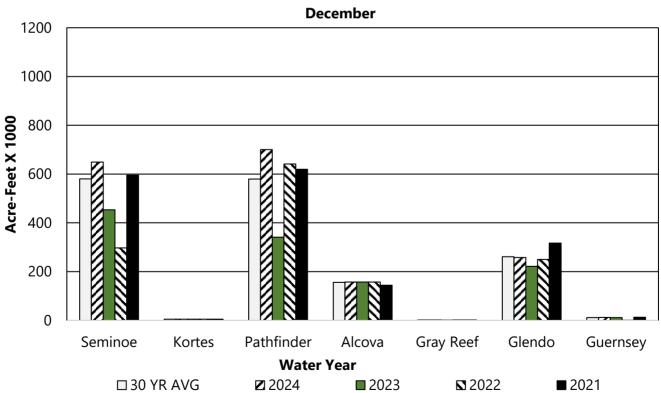


December

December	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	649.3	580.5	112%	453.4	296.9	595.2	1017.3	64%
Kortes	4.7	4.7	101%	4.7	4.7	4.7	4.7	100%
Pathfinder	700.1	579.7	121%	341.2	641.3	619.4	1070.0	65%
Alcova	157.3	155.8	101%	157.5	157.3	144.0	184.4	85%
Gray Reef	1.5	1.4	108%	1.2	1.6	1.8	1.8	84%
Glendo	258.0	260.9	99%	221.9	249.8	317.1	492.0	52%
Guernsey	12.2	11.5	107%	11.2	0.6	12.8	45.6	27%
Total	1783.2	1594.5	112%	1191.1	1352.1	1695.0	2815.8	63%

NORTH PLATTE RIVER BASIN RESERVOIR STORAGE

1 Average is based on the 1994-2023 period.



NORTH PLATTE RIVER BASIN RESERVOIR STORAGE

December 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	910.5	884.2	103%	824.2	944.9	1067.0	1201.7	76%
North Platte ¹	681.4	541.5	126%	223.1	237.6	455.8	1115.6	61%
Glendo	143.75	129.2	111%	116.3	131.2	128.4	171.7	84%
Inland Lakes ²	25.99	21.3	122%	16.5	16.0	22.9	46.0	57%
Cheyenne ^{3,4}	9.3	6.7	138%	9.0	8.7	11.1	15.7	59%
PacifiCorp ⁵	2.0	2.0	100%	2.0	2.0	2.0	2.0	100%
Other ⁶	10.3	9.5	108%	0.1	11.2	7.8	N/A	N/A

NORTH PLATTE RIVER BASIN RESERVOIR STORAGE OWNERSHIP . .

1 This includes North Platte Guernsey and North Platte Pathfinder.

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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.

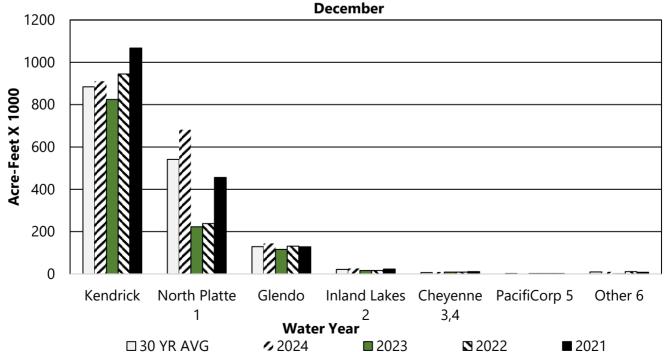
4 Cheyenne ownership was increased to 15,700 AF on March 13, 2009 as a result of Amendment No. 1 to Contract No. 06XX6A0062.

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 November 30, 2023, the Operational account contained 10,315 Acre-feet, the Re-Regulation space contained 0 Acre-feet.

7 Average is based on the 1994-2023 period.

OWNERSHIP OF WATER



December End of Month Storage, and Storage Capacity in acre-feet									
Reservoir	30 Yr. W. Yr. 2024 Avg. ⁵		% of Avg.	Total Storage Capacity					
Lake Alice	646	500	1	11,034					
Little Lake Alice	123	117	105%	1,166					
Lake Winters Creek	1,555	779	200%	1,746					
Lake Minatare	31,121	25,693	121%	58,795					

1 At Elevation 4182.0

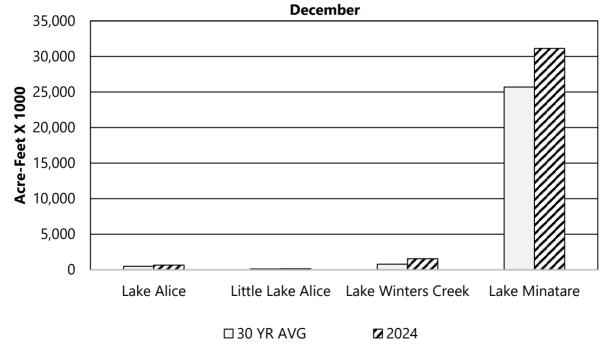
2 At Elevation 4139.0

3 At Elevation 4129.0

4 At Elevation 4125.0

5 30 year average. (1994-2023)





NORTH PLATTE RIVER BASIN GROSS GENERATION

December	Gross Generation and Historical Generation in Giga Watt Hours						
		30 Yr. Avg.					
Powerplant	W. Yr. 2024	2	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021	
Seminoe	4.6	5.6	82%	3.9	1.7	6.5	
Kortes	5.5	6.4	86%	5.3	5.2	7.7	
Fremont Canyon ¹	7.5	7.3	103%	5.7	7.8	0.0	
Alcova	3.1	3.5	88%	2.5	2.7	3.7	
Glendo	0.0	0.0	n/a	0.0	0.0	0.0	
Guernsey	0.0	0.0	n/a	0.0	0.0	0.0	

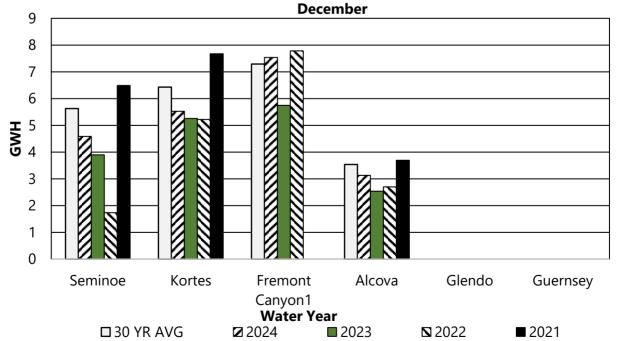
1 The powerplant for Pathfinder Dam is Fremont Canyon.

2 Average is based on the 1994-2023 period.

December	December Accumulated Gross Generation Water Year in Giga V							
		30 Yr. Avg.						
Powerplant	W. Yr. 2024	2	% of Avg.					
Seminoe	13.5	15.8	86%					
Kortes	16.3	18.2	90%					
Fremont Canyon ¹	15.3	16.2	94%					
Alcova	9.4	11.0	85%					
Glendo	0.0	0.0	n/a					
Guernsey	0.0	0.0	n/a					

tt Hours

NORTH PLATTE RIVER BASIN GROSS GENERATION



NORTH PLATTE SNOWPACK WATER CONTENT

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

December 1st Snow Water Equivalent						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	5.7	8.8	65%	10.6	10.1	6.9
Pathfinder Reservoir	5.0	6.1	82%	10.0	6.1	4.8
Glendo Reservoir	2.0	4.5	44%	4.2	2.6	2.2

Seminoe Reservoir Watershed

SWE in inches				
Snotel Stations (Elevation)	Water Content ³	30 Yr. Median ²		
Arapaho Ridge (10,960)	6.6	10		
Columbine (9,160)	6.7	8.8		
Divide Peak (8,880)	4.9	7.6		
Joe Wright (10,120)	5.4	8.5		
Laprele Creek (8,375)	1.3	3.7		
North French (10,130)	6.8	11.6		
Never Summer (10,280)	6.3	8.4		
Old Battle (10,000)	7.6	12.4		
Rawah (9,020)	3.7	4.8		
Sage Creek Basin (7,850)	2.6	5.7		
Sand Lake (10,050)	7.7	11.4		
South Brush (8,440)	1.8	4.7		
Tower (10,500)	12.4	16.8		
Webber Springs (9,250)	5.8	9.2		
Willow Creek Pass (9,540)	5.1	5.8		
Zirkel (9,340) ⁴	6.4	10.6		
Watershed Average	5.7	8.8		

Sweetwater River / Pathfinder Reservoir

watersned				
SWE in inches ¹				
Snotel Stations (Elevation)	Water Content ³	30 Yr. Median ²		
South Pass (9,040)	4.6	6		
Deer Park (9,700)	5.4	6.2		
Watershed Average	5.0	6.1		

Glendo Reservoir Watershed

	SWE in inches ¹		
Snotel Stations	Water	30 Yr.	
(Elevation)	Content ³	Median ²	
Casper (7,900)	2.6	5.4	
Laprele Creek (8,375)	1.3	3.7	
Reno Hill (8,500)	2.4	5.8	
Windy Peak (7,900)	1.6	3	
Watershed Average	2.0	4.5	

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.