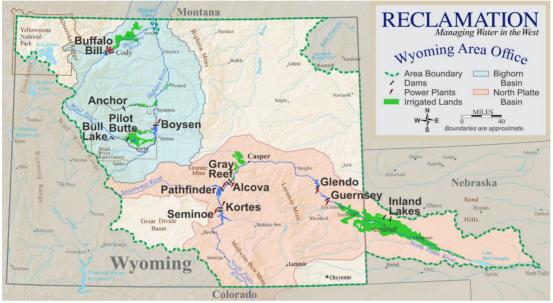


# North Platte River Basin Water Supply and Utilization Report Wyoming Area Office

**Report for January 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.

# Report for January 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 <a href="http://www.usbr.gov/gp">http://www.usbr.gov/gp</a>
- 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**

January Inflow and Historical Inflows, values in 1,000 acre-feet

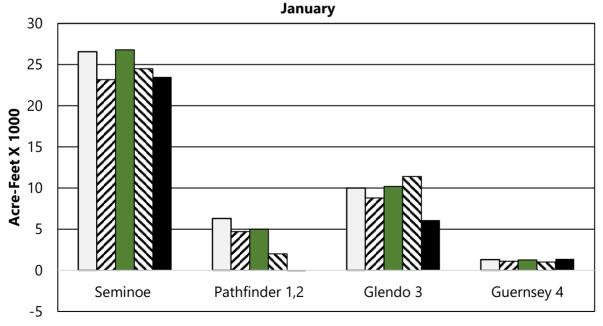
		<b>30 Yr. Avg.</b>				
Reservoir	W. Yr. 2024	5	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021
Seminoe	23.2	26.6	87%	26.8	24.5	23.5
Pathfinder <sup>1,2</sup>	4.7	6.3	75%	5.0	2.0	-0.1
Glendo <sup>3</sup>	8.8	10.0	88%	10.2	11.4	6.1
Guernsey 4	1.1	1.3	84%	1.3	1.0	1.4
System Total	37.8	44.2	86%	43.3	38.9	30.9

- 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)

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

Reservoir	W. Yr. 2024	30 Yr. Avg.	% of Avg.
Seminoe	92.8	109.6	85%
Pathfinder	14.2	19.0	75%
Glendo	40.9	36.4	112%
Guernsey	6.0	6.7	90%
System Total	153.9	171.7	90%

# NORTH PLATTE RIVER BASIN RESERVOIR INFLOW



# **Water Year**

□ 30 YR AVG

**2**024

**2023** 

■ 2022

**2021** 

# NORTH PLATTE RIVER BASIN OUTFLOW

January Outflow and Historical Outflows, values in 1,000 acre-feet

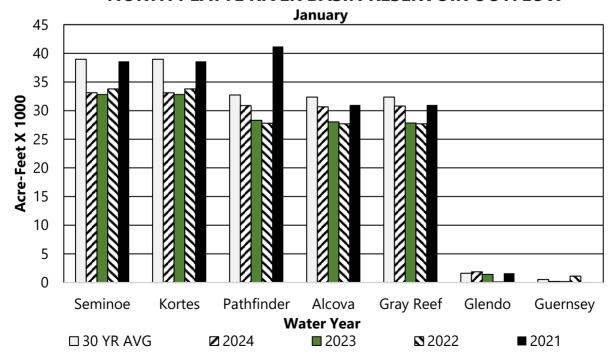
		30 Yr. Avg.				
Reservoir	W. Yr. 2024	1	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021
Seminoe	33.1	39.0	85%	32.8	33.8	38.6
Kortes	33.1	39.0	85%	32.8	33.8	38.6
Pathfinder	30.9	32.7	94%	28.3	27.8	41.2
Alcova	30.7	32.4	95%	28.0	27.7	31.0
Gray Reef	30.8	32.4	95%	27.8	27.7	31.0
Glendo	1.9	1.6	116%	1.4	0.1	1.6
Guernsey	0.2	0.5	33%	0.1	1.1	0.1

<sup>1. 30</sup> year average is based on the 1994-2023 period.

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

Reservoir	W. Yr. 2024	30 Yr. Avg. <sup>2</sup>	% of Avg.
Seminoe	133.2	152.6	87%
Kortes	133.2	152.6	87%
Pathfinder	99.3	111.1	89%
Alcova	122.1	134.0	91%
Gray Reef	122.1	133.9	91%
Glendo	7.3	6.6	111%
Guernsey	0.6	3.7	16%

# NORTH PLATTE RIVER BASIN RESERVOIR OUTFLOW



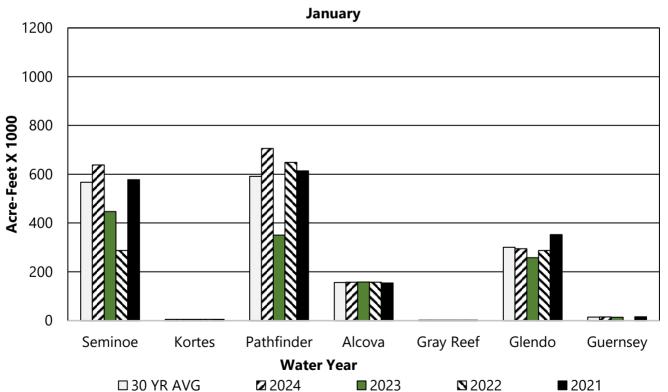
# NORTH PLATTE RIVER BASIN RESERVOIR STORAGE

January Storage, Historical Storage, and Storage Capacity in 1,000 acre-feet

Reservoir	W. Yr. 2024	30 Yr. Avg. <sup>1</sup>	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021	Total Conservation Storage Capacity	Percent of Capacity
Seminoe	638.3	567.1	113%	446.9	287.3	577.9	1017.3	63%
Kortes	4.7	4.7	101%	4.7	4.7	4.7	4.7	101%
Pathfinder	705.9	591.2	119%	350.3	648.8	614.0	1070.0	66%
Alcova	157.4	156.0	101%	157.6	157.4	153.8	184.4	85%
Gray Reef	1.4	1.4	99%	1.4	1.5	1.7	1.8	77%
Glendo	294.5	300.3	98%	257.5	287.0	352.2	492.0	60%
Guernsey	14.9	13.8	108%	13.7	0.0	15.6	45.6	33%
Total	1817.2	1634.6	111%	1232.2	1386.7	1719.9	2815.8	65%

<sup>1</sup> Average is based on the 1994-2023 period.

# NORTH PLATTE RIVER BASIN RESERVOIR STORAGE



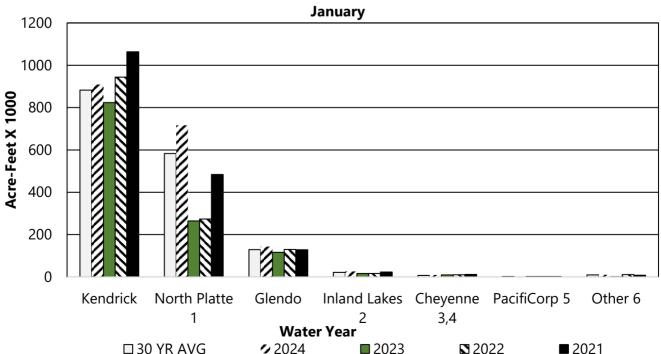
#### NORTH PLATTE RIVER BASIN RESERVOIR STORAGE OWNERSHIP

January Storage, Historical Storage, and Storage Capacity in 1,000 acre-feet

Reservoir	W. Yr. 2024	30 Yr. Avg. <sup>7</sup>	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021	Total Conservation Storage Capacity	Percent of Capacity
Kendrick	909.2	883.0	103%	823.5	944.2	1063.3	1201.7	76%
North Platte 1	716.5	582.7	123%	264.4	273.5	483.8	1115.6	64%
Glendo	143.6	128.9	111%	116.1	130.0	128.4	171.7	84%
Inland Lakes <sup>2</sup>	26.0	21.2	122%	16.4	15.9	22.8	46.0	56%
Cheyenne 3,4	9.6	7.3	133%	9.7	9.9	11.7	15.7	61%
PacifiCorp 5	2.0	2.0	100%	2.0	2.0	2.0	2.0	100%
Other <sup>6</sup>	10.3	9.5	108%	0.1	11.1	7.8	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 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 January 31, 2024, the Operational account contained 10,303 Acre-feet, the Re-Regulation space contained 0 Acre-feet.
- 7 Average is based on the 1994-2023 period.

# **OWNERSHIP OF WATER**



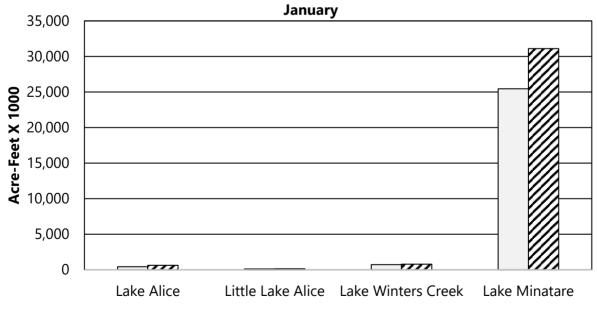
# **INLAND LAKES RESERVOIR STORAGE**

January End of Month Storage, and Storage Capacity in acre-feet

Reservoir	W. Yr. 2024	30 Yr. Avg. <sup>5</sup>	% of Avg.	Total Storage Capacity
Lake Alice	634	421	151%	11,034
Little Lake Alice	124	106	117%	1,166
<b>Lake Winters Creek</b>	774	715	108%	1,746
Lake Minatare	31,105	25,459	122%	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)

# **INLAND LAKES RESERVOIR STORAGE**



□ 30 YR AVG

**2**024

# NORTH PLATTE RIVER BASIN GROSS GENERATION

January Gross Generation and Historical Generation in Giga Watt Hours

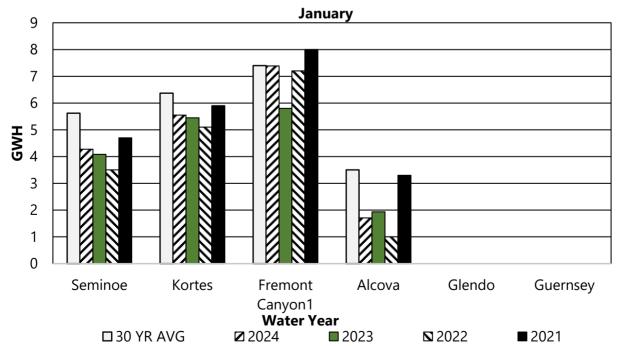
		<b>30 Yr. Avg.</b>				
Powerplant	W. Yr. 2024	2	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021
Seminoe	4.3	5.6	76%	4.1	3.5	4.7
Kortes	5.6	6.4	87%	5.4	5.1	5.9
Fremont Canyon <sup>1</sup>	7.4	7.4	100%	5.8	7.2	8.0
Alcova	1.7	3.5	49%	1.9	1.0	3.3
Glendo	0.0	0.0	n/a	0.0	0.0	0.0
Guernsey	0.0	0.0	n/a	0.0	0.0	0.0

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

January Accumulated Gross Generation Water Year in Giga Watt Hours

		30 Yr. Avg.	
Powerplant	W. Yr. 2024	2	% of Avg.
Seminoe	17.8	21.4	83%
Kortes	21.9	24.6	89%
Fremont Canyon <sup>1</sup>	22.6	23.6	96%
Alcova	11.1	14.5	77%
Glendo	0.0	0.0	n/a
Guernsey	0.0	0.0	n/a

# NORTH PLATTE RIVER BASIN GROSS GENERATION



<sup>2</sup> Average is based on the 1994-2023 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

February 1st Snow Water Equivalent

SWE in inches

	W. Yr.	30 Yr.	% of		W. Yr.	W. Yr.
WATERSHED	2024 3	Median <sup>2</sup>	Median	W. Yr. 2023	2022	2021
Seminoe Reservoir	10.5	13.0	81%	17.3	13.7	10.1
Pathfinder Reservoir	6.8	8.1	83%	13.3	7.8	6.1
Glendo Reservoir	4.1	6.4	63%	8.2	4.9	4.3

# **Seminoe Reservoir Watershed**

SWE in inches <sup>1</sup>

Water	30 Yr.
water	ou yr.

	Water	30 Yr.
<b>Snotel Stations (Elevation)</b>	Content <sup>3</sup>	Median <sup>2</sup>
Arapaho Ridge (10,960)	12.2	14.0
Columbine (9,160)	14.0	14.2
Divide Peak (8,880)	8.8	12.2
Joe Wright (10,120)	8.7	11.7
Laprele Creek (8,375)	3.2	5.4
Never Summer (10,280)	9.9	11.5
North French (10,130)	12.0	16.6
Old Battle (10,000)	14.9	19.0
Rawah (9,020)	6	6.8
Sage Creek Basin (7,850)	5.8	9.1
Sand Lake (10,050)	12.9	16.4
South Brush (8,440)	3.7	7.2
Tower (10,500)	23.1	26.0
Webber Springs (9,250)	11.6	13.2
Willow Creek Pass (9,540)	7.5	7.9
Zirkel (9,340) <sup>4</sup>	14.3	16.8
Watershed Average	10.5	13.0

# **Sweetwater River / Pathfinder Reservoir** Watershed

SWE in inches <sup>1</sup>

SHOUL SUUTONS	Water Content <sup>3</sup>	30 Yr. Median <sup>2</sup>
Deer Park (9,700)	7.1	8.0
South Pass (9,040)	6.4	8.2
Watershed Average	6.8	8.1

# **Glendo Reservoir Watershed**

SWE in inches <sup>1</sup>

<b>Snotel Stations</b>	Water	30 Yr.		
(Elevation)	Content <sup>3</sup>	Median <sup>2</sup>		
Casper (7,900)	4.5	7.6		
Laprele Creek (8,375)	3.2	5.4		
Reno Hill (8,500)	4.7	8.2		
Windy Peak (7,900)	3.8	4.4		
Watershed Average	4.1	6.4		

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

<sup>&</sup>lt;sup>2</sup> Median for the 1991-2020 period

<sup>&</sup>lt;sup>3</sup> Data from NRCS Snowpack Telemetry Network (SNOTEL) Sites.

<sup>&</sup>lt;sup>4</sup> 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

(1000 acre-feet)

								(	o dolo loct
Foregot	Feb 1, 2024 Forecast			30 Yr. April-July Expected	Comparative Actual				
Forecast	of April-July Runoff			Aprii-July	Expected	April - July Runoff			
Points	Reasonable	Expected	Reasonable	Runoff	% of Avg.	W. Yr.	W. Yr.	W. Yr.	W. Yr.
	Maximum <sup>1</sup>		Minimum <sup>1</sup>	Avg. <sup>2</sup>	•	2023	2022	2021	2020
Seminoe Reservoir	850	470	280	721	65	969	547	339	632
Sweetwater River Above Pathfinder Reservoir	79	42	16	55	77	112	17	17	25
Alcova to Glendo	130	60	25	146	41	227	81	110	134

<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.

(1000 acre-feet)

Forecast Points	· · · · · · · · · · · · · · · · · · ·					30 Yr. Apr - Jul Runoff	
	95%	75%	50%	% of Avg	25%	5%	Avg. 1
Seminoe							
Reservoir	280	392	470	65	626	850	721
Sweetwater River Above Pathfinder							
Reservoir	16	31	42	77	57	79	55
Alcova to Glendo							
Gain	25	46	60	41	89	130	146

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

<sup>&</sup>lt;sup>2</sup> Average is based on the 1994-2023 period.