

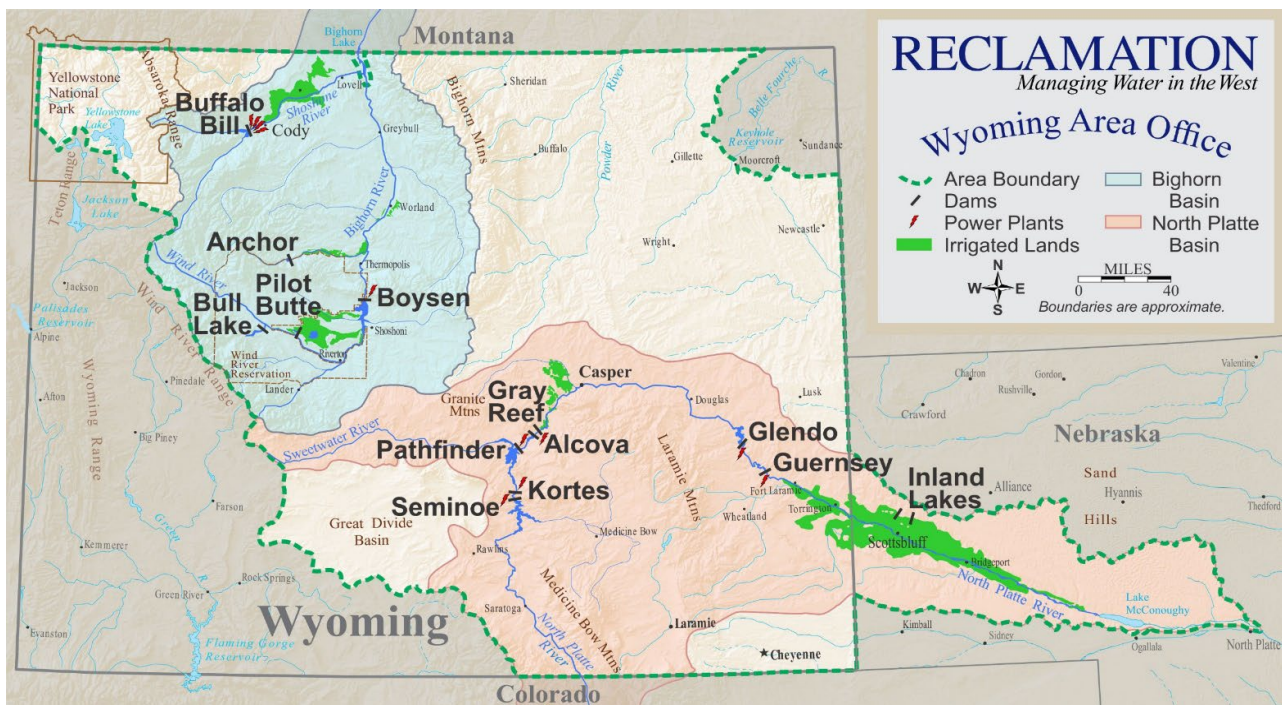


— BUREAU OF —
RECLAMATION

Bighorn Basin Water Supply and Utilization Report

Wyoming Area Office

Report for November 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.

**Report for November 2023
WATER SUPPLY AND UTILIZATION REPORT
BIGHORN RIVER BASIN
WYOMING AREA OFFICE**

This report concerns the operation of Reclamation facilities in the Shoshone and Wind/Bighorn 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 Great Plains Home Page at <http://www.usbr.gov/gp>**
- 2. Select Water Operations.**
- 3. Select Water Management Information.**
- 4. Select Water Supply Report.**
- 5. Under Bighorn Basin, select the current report or reports from the previous 12 months.**

BIGHORN RIVER BASIN RESERVOIR INFLOW

End of November Inflow and Historical Inflows, values in 1,000 acre-feet

Reservoir	W. Yr. 2024	30 Yr. Avg.	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021
Bull Lake	4.5	3.4	133	4.0	6.8	2.7
Boysen	62.3	49.3	127	45.6	35.1	43.8
Buffalo Bill	39.1	23.8	164	19.4	18.4	27.9

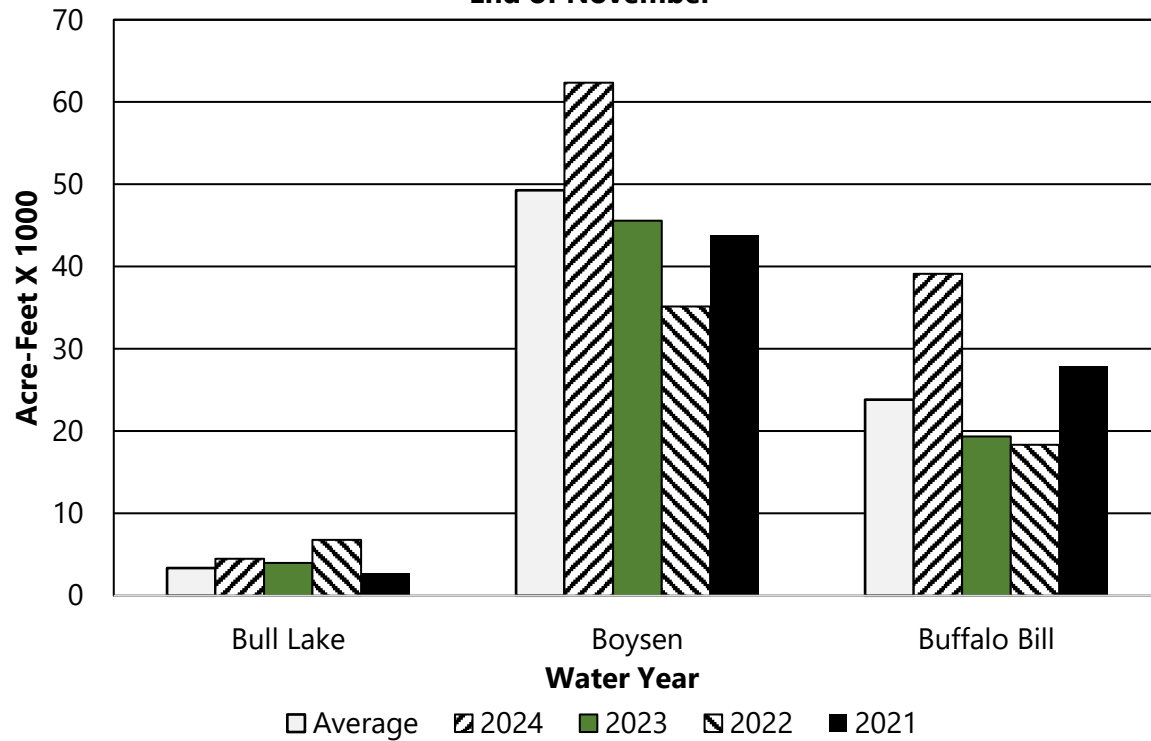
30 year average is based on the 1994- 2023 period.

End of November Accumulated Water Year Inflows in 1,000 acre-feet

Reservoir	W. Yr. 2024	30 Yr. Avg.	% of Avg.
Bull Lake	13.1	9.9	132
Boysen	154.9	105.9	146
Buffalo Bill	92.5	53.0	174

BIGHORN RIVER BASIN RESERVOIR INFLOW

End of November



BIGHORN RIVER BASIN RESERVOIR OUTFLOW

End of November Outflow and Historical Outflows, values in 1,000 acre-feet

Reservoir	W. Yr. 2024	30 Yr. Avg.	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021
Bull Lake	4.7	2.4	194	1.7	1.6	1.5
Boysen	74.0	47.3	157	53.6	41.3	41.7
Buffalo Bill	16.7	20.1	83	12.0	11.8	12.4

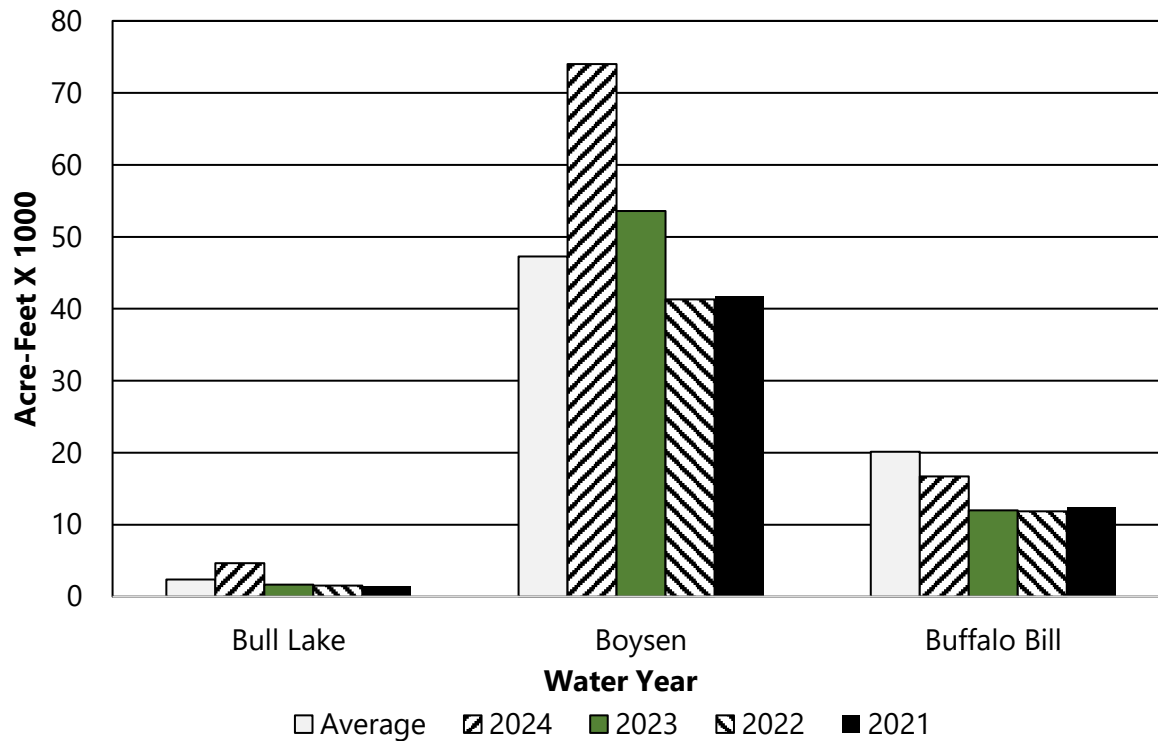
30 year average is based on the 1994- 2023 period.

End of November Accumulated Water Year Outflows in 1,000 acre-feet.

Reservoir	W. Yr. 2024	30 Yr. Avg.	% of Avg.
Bull Lake	23.0	8.8	260
Boysen	160.9	100.4	160
Buffalo Bill	70.4	63.9	110

BIGHORN RIVER BASIN RESERVOIR OUTFLOW

End of November



BIGHORN RIVER BASIN RESERVOIR STORAGE

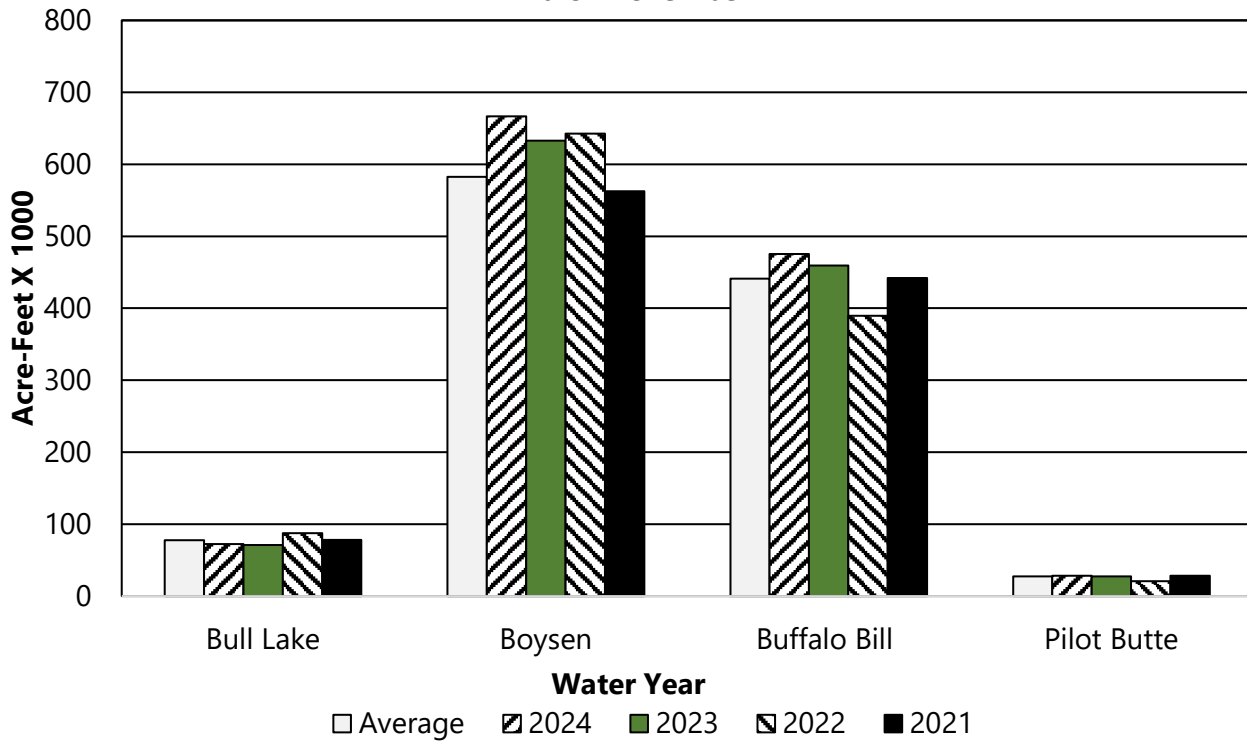
End of November Storage, Historical Storage, and Storage Capacity in 1,000 acre-feet.

Reservoir	W. Yr. 2024	30 Yr. Avg.	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021	Total Conservation Storage Capacity	Percent of Capacity
Bull Lake	72.3	77.8	93	71.0	87.6	77.9	152.5	47
Boysen	666.8	582.5	114	633.0	642.5	562.6	741.6	90
Buffalo Bill	475.2	441.2	108	459.5	389.4	442.2	646.6	73
Pilot Butte	28.1	27.4	103	27.2	20.7	28.1	33.7	83

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

BIGHORN RIVER BASIN RESERVOIR STORAGE

End of November



BIGHORN RIVER BASIN RESERVOIR GENERATION

End of November Gross Generation and Historical Generation in giga-watt hours (GWH).

Reservoir	W. Yr. 2024	30 Yr. Avg.	% of Avg.	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021
Boysen	5.5	3.4	161.4	2.3	3.3	3.1
Pilot Butte	0.0	0.0	0.0	0.0	0.0	0.0
Heart Mtn.	0.0	0.0	0.0	0.0	0.0	0.0
Buffalo Bill	0.8	2.1	39.8	0.0	0.0	0.0
Shoshone	1.7	1.5	108.4	1.4	1.4	0.8
Spirit Mtn.	0.0	0.0	0.0	0.0	0.0	0.0

The 30 year average is based on the 1994 - 2023 period. Pilot Butte Powerplant is currently in "mothballed" status and does not generate electricity. Spirit Mountain average is based on the 1996 - 2023 period.

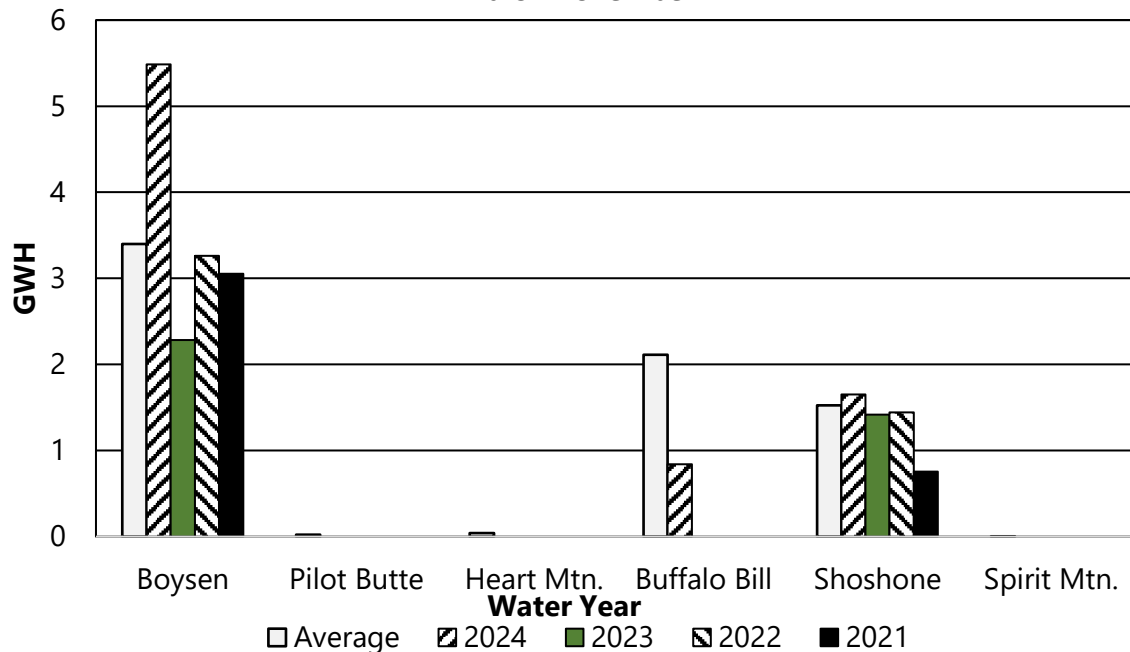
End of November Accumulated Gross Generation Water Year in GWH.

Powerplant	W. Yr. 2024	30 Yr. Avg.	% of Avg.
Boysen	12.2	7.0	174.6
Pilot Butte	0	0.2	0
Heart Mtn.	2.0	1.1	183.3
Buffalo Bill	4.5	5.5	82.1
Shoshone	3.1	3.2	98.5
Spirit Mtn.	1.6	1.2	130.3

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BIGHORN RIVER BASIN GROSS GENERATION

End of November



BIGHORN SNOWPACK WATER CONTENT

December 1st Snow Water Equivalent

SWE in inches

WATERSHED	W. Yr. 2024	30 Yr. Median	% of Median	W. Yr. 2023	W. Yr. 2022	W. Yr. 2021
Bull Lake Reservoir	2.9	3.3	87%	3.3	2.9	2.5
Boysen Reservoir	3.6	3.9	93%	3.5	2.8	3.7
Buffalo Bill Reservoir	4.3	5.1	86%	4.7	2.9	5.8

Boysen Reservoir Watershed

SWE in inches

Snotel Stations (Elevation)	Water Content	30 Yr. Median
Burroughs Creek (8,750)	2.8	3.4
Hobbs Park (10,100)	5	4
Kirwin (9,800)	5	3.4
Little Warm (9,620)	2.6	2.8
Togwotee Pass (9,580)	4	7
Townsend Creek (8,700)	2.4	2.4
Younts Peak (8,350)	3.3	4
Watershed Average	3.6	3.9

Buffalo Bill Reservoir Watershed

SWE in inches

Snotel Stations (Elevation)	Water Content	30 Yr. Median
Blackwater (9,780)	6.7	7.4
Evening Star (9,200)	5.6	6.9
Marquette (8,760)	5	2.2
Sylvan Lake (8,420)	4.3	4.9
Sylvan Road (8,120)	1.4	3
Togwotee Pass (9,580)	4	7
Younts Peak (8,350)	3.3	4
Watershed Average	4.3	5.1

Bull Lake Reservoir Watershed

SWE in inches

Snotel Stations (Elevation)	Water Content	30 Yr. Median
Elkhart Park (8,400)	1.1	3.2
Hobbs Park (10,100)	5	4
Little Warm (9,620)	2.6	2.8
Watershed Average	2.9	3.3

SWE (Snow Water Content is the amount of water in the snowpack expressed in inches).
Median for the 1991-2020 period.