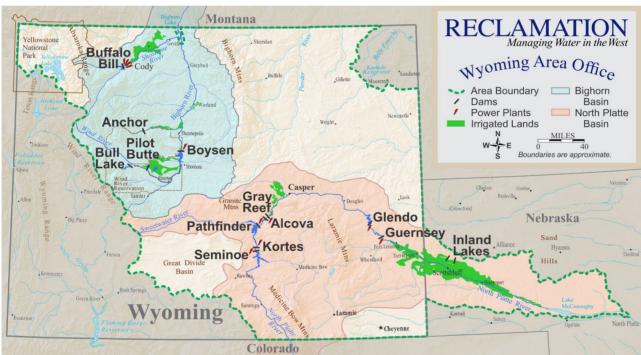


## **Bighorn Basin Water Supply and Utilization Report Wyoming Area Office**

Report for May 2025



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 withir 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 May 2025 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 May Inflow and Historical Inflows, values in 1,000 acre-feet

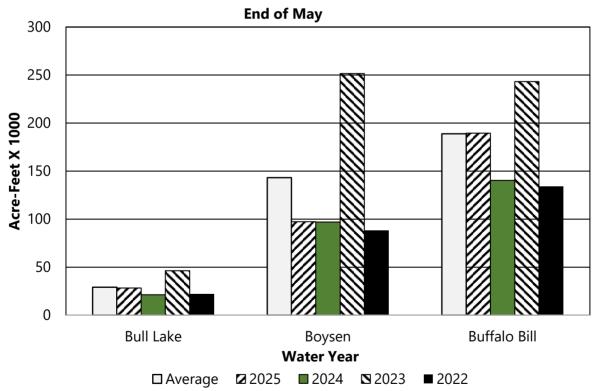
| Reservoir    | W. Yr. 2025 | 30 Yr. Avg. | % of Avg. | W. Yr. 2024 | W. Yr. 2023 | W. Yr. 2022 |
|--------------|-------------|-------------|-----------|-------------|-------------|-------------|
| Bull Lake    | 28.2        | 29.1        | 97        | 21.2        | 46.2        | 22.0        |
| Boysen       | 97.3        | 143.1       | 68        | 97.0        | 251.6       | 88.1        |
| Buffalo Bill | 189.5       | 188.8       | 100       | 140.2       | 243.2       | 133.9       |

<sup>30</sup> year average is based on the 1995-2024 period.

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

| Reservoir    | W. Yr. 2025 | 30 Yr. Avg. | % of Avg. |
|--------------|-------------|-------------|-----------|
| Bull Lake    | 48.9        | 51.9        | 94        |
| Boysen       | 350.1       | 473.7       | 74        |
| Buffalo Bill | 332.4       | 359.1       | 93        |

#### **BIGHORN RIVER BASIN RESERVOIR INFLOW**



#### **BIGHORN RIVER BASIN RESERVOIR OUTFLOW**

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

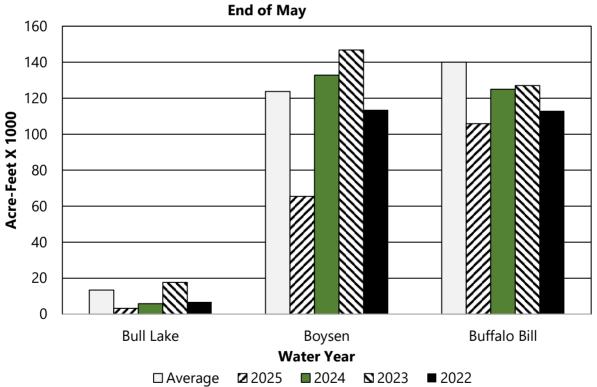
| Reservoir    | W. Yr. 2025 | 30 Yr. Avg. | % of Avg. | W. Yr. 2024 | W. Yr. 2023 | W. Yr. 2022 |
|--------------|-------------|-------------|-----------|-------------|-------------|-------------|
| Bull Lake    | 3.2         | 13.4        | 24        | 5.8         | 17.7        | 6.8         |
| Boysen       | 65.4        | 123.7       | 53        | 132.8       | 146.7       | 113.6       |
| Buffalo Bill | 105.8       | 140.0       | 76        | 124.9       | 127.0       | 113.0       |

30 year average is based on the 1995-2024 period.

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

| Reservoir    | W. Yr. 2025 | 30 Yr. Avg. | % of Avg. |  |
|--------------|-------------|-------------|-----------|--|
| Bull Lake    | 15.5        | 33.0        | 47        |  |
| Boysen       | 377.1       | 500.1       | 75        |  |
| Buffalo Bill | 267.6       | 357.3       | 75        |  |

### BIGHORN RIVER BASIN RESERVOIR OUTFLOW



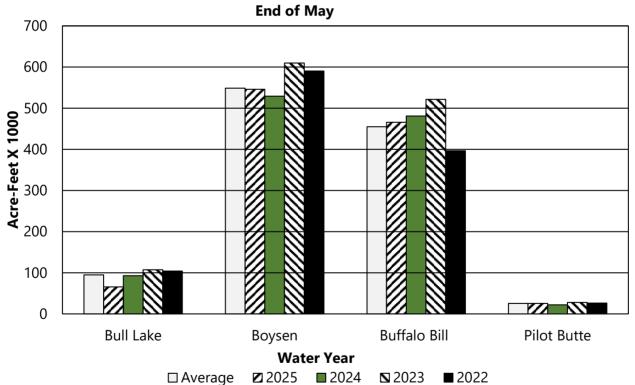
#### **BIGHORN RIVER BASIN RESERVOIR STORAGE**

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

| Reservoir    | W. Yr.<br>2025 | 30 Yr.<br>Avg. | % of<br>Avg. | W. Yr.<br>2024 | W. Yr.<br>2023 | W. Yr.<br>2022 | Total<br>Conservation<br>Storage<br>Capacity | Percent of<br>Capacity |
|--------------|----------------|----------------|--------------|----------------|----------------|----------------|--|------------------------|
| Bull Lake    | 65.7           | 95.0           | 69           | 92.8           | 107.1          | 104.2          | 152.5  | 43                     |
| Boysen       | 546.1          | 548.7          | 100          | 529.1          | 609.7          | 590.2          | 741.6  | 74                     |
| Buffalo Bill | 465.6          | 454.7          | 102          | 481.0          | 521.4          | 396.3          | 646.6  | 72                     |
| Pilot Butte  | 25.6           | 25.6           | 100          | 22.0           | 27.7           | 26.5           | 33.7   | 76                     |

<sup>30</sup> year average is based on the 1995-2024 period.

#### BIGHORN RIVER BASIN RESERVOIR STORAGE End of May



#### **BIGHORN RIVER BASIN RESERVOIR GENERATION**

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

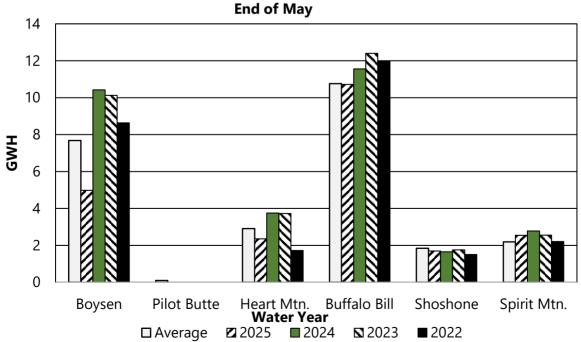
| Reservoir    | W. Yr. 2025 | 30 Yr. Avg. | % of Avg. | W. Yr. 2024 | W. Yr. 2023 | W. Yr. 2022 |
|--------------|-------------|-------------|-----------|-------------|-------------|-------------|
| Boysen       | 5.0         | 7.7         | 64.9      | 10.4        | 10.1        | 8.6         |
| Pilot Butte  | 0.0         | 0.1         | 0.0       | 0.0         | 0.0         | 0.0         |
| Heart Mtn.   | 2.4         | 2.9         | 80.7      | 3.7         | 3.7         | 1.7         |
| Buffalo Bill | 10.7        | 10.8        | 99.6      | 11.6        | 12.4        | 12.0        |
| Shoshone     | 1.7         | 1.8         | 91.7      | 1.7         | 1.8         | 1.5         |
| Spirit Mtn.  | 2.5         | 2.2         | 116.3     | 2.8         | 2.6         | 2.2         |

Th 30 year average is based on the 1995 - 2024 period. Pilot Butte Powerplant is currently in "mothballed" status and does not generate electricity. Spirit Mountain average is based on the 1996 - 2024 period.

End of May Accumulated Gross Generation Water Year in GWH.

|   | Powerplant   | W. Yr. 2025 | 30 Yr. Avg. | % of Avg. |
|---|--------------|-------------|-------------|-----------|
|   | Boysen       | 27.0        | 34.2        | 79.0      |
|   | Pilot Butte  | 0           | 0.3         | 0         |
|   | Heart Mtn.   | 5.3         | 5.0         | 105.5     |
|   | Buffalo Bill | 17.9        | 32.1        | 55.7      |
| # | Shoshone     | 10.5        | 12.1        | 87.0      |
|   | Spirit Mtn.  | 5.3         | 3.8         | 139.9     |

#### BIGHORN RIVER BASIN GROSS GENERATION End of May



#### **BIGHORN SNOWPACK WATER CONTENT**

June 1st Snow Water Equivalent

SWE in inches

|                        | W. Yr. | 30 Yr. | % of   |             | W. Yr. |             |
|------------------------|--------|--------|--------|-------------|--------|-------------|
| WATERSHED              | 2025   | Median | Median | W. Yr. 2024 | 2023   | W. Yr. 2022 |
| Bull Lake Reservoir    | 1.3    | 1.8    | 72%    | 5.1         | 2.0    | 6.1         |
| Boysen Reservoir       | 1.7    | 3.5    | 49%    | 4.4         | 1.9    | 8.8         |
| Buffalo Bill Reservoir | 4.4    | 8.7    | 50%    | 8.8         | 3.6    | 10.5        |

#### **Boysen Reservoir Watershed**

**Buffalo Bill Reservoir Watershed** 

SWE in inches

|                                    | SWE in inche |        |  |  |
|------------------------------------|--------------|--------|--|--|
|                                    | Water        | 30 Yr. |  |  |
| <b>Snotel Stations (Elevation)</b> | Content      | Median |  |  |
| Burroughs Creek (8,750)            | 0            | 0      |  |  |
| Hobbs Park (10,100)                | 3.9          | 5.4    |  |  |
| Kirwin (9,800)                     | 0            | 0.4    |  |  |
| Little Warm (9,620)                | 0            | 0      |  |  |
| Togwotee Pass (9,580)              | 8.1          | 18.5   |  |  |
| Townsend Creek (8,700)             | 0            | 0      |  |  |
| Younts Peak (8,350)                | 0            | 0      |  |  |
| Watershed Average                  | 1.7          | 3.5    |  |  |

|                                |                  | 5 W L III III CIICS |
|--------------------------------|------------------|---------------------|
| Snotel Stations<br>(Elevation) | Water<br>Content | 30 Yr.<br>Median    |
| Blackwater (9,780)             | 11.9             | 19.6                |
| Evening Star (9,200)           | 10.7             | 17.9                |
| Marquette (8,760)              | 0.0              | 0.0                 |
| Sylvan Lake (8,420)            | 0.0              | 4.9                 |
| Sylvan Road (8,120)            | 0.0              | 0.0                 |
| Togwotee Pass (9,580)          | 8.1              | 18.5                |
| Younts Peak (8,350)            | 0.0              | 0.0                 |
| Watershed Average              | 4.4              | 8.7                 |

#### **Bull Lake Reservoir Watershed**

SWE in inches

| 2 \(\frac{1}{2}\) In this          |         |        |  |  |  |
|------------------------------------|---------|--------|--|--|--|
|                                    | Water   | 30 Yr. |  |  |  |
| <b>Snotel Stations (Elevation)</b> | Content | Median |  |  |  |
| Elkhart Park (8,400)               | 0.0     | 0      |  |  |  |
| Hobbs Park (10,100)                | 3.9     | 5.4    |  |  |  |
| Little Warm (9,620)                | 0       | 0      |  |  |  |
| Watershed Average                  | 1.3     | 1.8    |  |  |  |

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

#### MAY BIGHORN WATER SUPPLY FORECAST

June through July Forecast and Historical Runoff Volumes KAF

| Forecast<br>Points | Forecast<br>Reasonable<br>Minimum | Forecast<br>Expected |     |     |    | Actual<br>June- July<br>Runoff<br>2022 | Runoff | Actual<br>June -<br>July<br>Runoff<br>2024 |
|--------------------|-----------------------------------|----------------------|-----|-----|----|--|--------|--|
| Bull Lake          |                                   |                      |     |     |    |  |        |  |
| Reservoir          | 75                                | 94                   | 110 | 113 | 83 | 116                                    | 136    | 99   |
| Wind River         |                                   |                      |     |     |    |  |        |  |
| above Bull         |                                   |                      |     |     |    |  |        |  |
| Lake Creek         | 180                               | 220                  | 300 | 290 | 76 | 271                                    | 372    | 245  |
| Boysen             |                                   |                      |     |     |    |  |        |  |
| Reservoir          | 100                               | 240                  | 420 | 388 | 62 | 363                                    | 714    | 297  |
| Buffalo Bill       |                                   |                      |     |     |    |  |        |  |
| Reservoir          | 280                               | 320                  | 450 | 486 | 66 | 612                                    | 486    | 415  |

The probability is estimated to be 9 chances in 10 that the actual volume will fall between the reasonable minimum and reasonable maximum. Median is based on the 1995-2024 period.

#### Exceedance Forecast:

| Exceedance Forecast. |     |     |     |           |     |     |                              |
|----------------------|-----|-----|-----|-----------|-----|-----|------------------------------|
| Forecast<br>Points   | 90% | 70% | 50% | % of Med. | 30% | 10% | 30 Yr.<br>June- July<br>Med. |
| Bull Lake            |     |     |     |           |     |     |                              |
| Reservoir            | 75  | 86  | 94  | 83        | 101 | 110 | 113                          |
| Wind River           |     |     |     |           |     |     |                              |
| above Bull           |     |     |     |           |     |     |                              |
| Lake Creek           | 180 | 204 | 220 | 76        | 253 | 300 | 290                          |
| Boysen               |     |     |     |           |     |     |                              |
| Reservoir            | 100 | 183 | 240 | 62        | 314 | 420 | 388                          |
| Buffalo Bill         |     |     |     |           |     |     |                              |
| Reservoir            | 280 | 304 | 320 | 66        | 373 | 450 | 486                          |

Median is based on the 1995-2024 period.