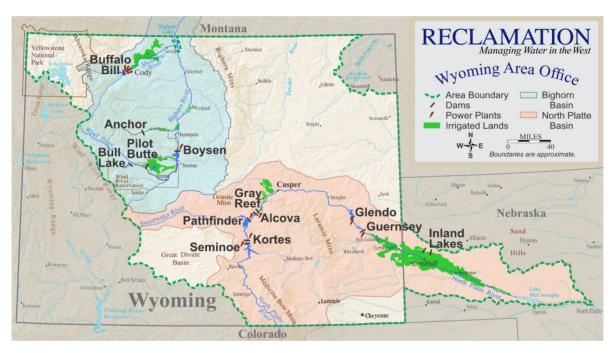


# **Bighorn Basin Water Supply and Utilization Report Wyoming Area Office**

Report for September 2022



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 September 2022 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 September Inflow and Historical Inflows, values in 1,000 acre-feet

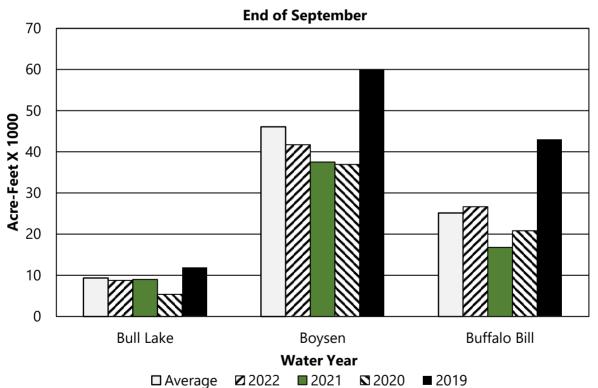
Reservoir	2022	30 Yr. Avg.	% of Avg.	2021	2020	2019
Bull Lake	8.8	9.3	94	9.0	5.4	11.9
Boysen	41.7	46.1	91	37.5	36.9	59.9
Buffalo Bill	26.7	25.1	106	16.8	20.8	43.0

<sup>30</sup> year average is based on the 1992-2021 period.

End of September Accumulated Water Year Inflows

Reservoir	W. Yr. 2022	30 Yr. Avg.	% of Avg.			
Bull Lake	194.5	188.8	103			
Boysen	821.1	974.6	84			
<b>Buffalo Bill</b>	937.4	929.6	101			

# **BIGHORN RIVER BASIN RESERVOIR INFLOW**



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

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

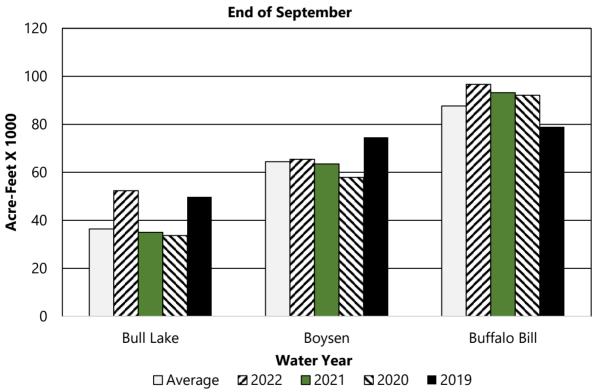
Reservoir	2022	30 Yr. Avg.	% of Avg.	2021	2020	2019
Bull Lake	52.4	36.4	144	35.0	33.6	49.8
Boysen	65.4	64.4	102	63.5	57.9	74.5
Buffalo Bill	96.6	87.7	110	93.2	92.1	78.9

<sup>30</sup> year average is based on the 1992-2021 period.

End of September Accumulated Water Year Outflows

Reservoir	W. Yr. 2022	30 Yr. Avg.	% of Avg.
Bull Lake	203.0	189.1	107
Boysen	813.3	975.3	83
Buffalo Bill	869.2	925.1	94

# **BIGHORN RIVER BASIN RESERVOIR OUTFLOW**



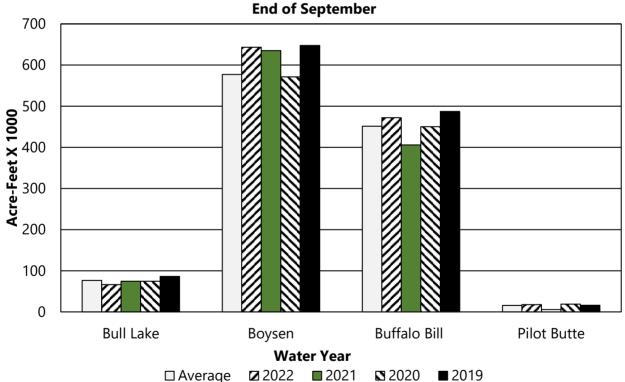
#### **BIGHORN RIVER BASIN RESERVOIR STORAGE**

End of September Storage, Historical Storage, and Storage Capacity

Reservoir	2022	30 Yr. Avg.	% of Avg.	2021	2020	2019	Total Conservation Storage Capacity	Percent of Capacity
Bull Lake	66.2	76.3	87	74.7	74.7	86.1	152.5	43
Boysen	643.1	577.2	111	635.2	571.2	647.6	741.6	87
Buffalo Bill	471.9	451.5	105	405.6	450.1	487.0	646.6	73
Pilot Butte	17.7	15.7	113	5.5	18.9	16.1	33.7	53

Average is based on the 1992-2021 period, except Buffalo Bill Reservoir. The average for Buffalo Bill is based on the period, 1993 - 2021. In 1992 the capacity of Buffalo Bill Reservoir was increased to approximately 646,565 acre-fee as a result of raising the dam.

# **BIGHORN RIVER BASIN RESERVOIR STORAGE**



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

End of September Gross Generation and Historical Generation

Powerplant	2022	30 Yr. Avg.	% of Avg.	2021	2020	2019
Boysen	5.5	5.2	104.9	5.0	4.4	5.9
Pilot Butte	0.0	0.3	0.0	0.0	0.0	0.0
Heart Mtn.	3.7	2.8	132.3	2.3	3.1	3.4
Buffalo Bill	6.7	6.7	99.2	6.9	5.7	3.4
Shoshone	1.7	1.8	95.5	1.5	1.7	1.8
Spirit Mtn.	3.1	2.9	106.6	2.8	2.9	3.1

Boysen average based on the 1992 - 2021 period. Pilot Butte average based on the 1992 2021 period. Pilot Butte Powerplant is currently in "mothballed" status and does not generate electricity. Heart Mountain, Buffalo Bill, and Shoshone averages are based on the 1993 - 2021 period. Spirit Mountain average is based on the 1996 - 2021 period.

End of September Accumulated Gross Generation Water Year

Powerplant	W. Yr. 2022	30 Yr. Avg.	% of Avg.	
Boysen	62.2	61.1	101.7	
Pilot Butte	0	1.9	0	
Heart Mtn.	15.3	16.1	94.8	
Buffalo Bill	62.1	71.8	86.5	
Shoshone	18.1	20.0	90.4	
Spirit Mtn.	15.5	15.8	98.1	

## **BIGHORN RIVER BASIN GROSS GENERATION**

