

Yellowtail Dam Water Supply and Projected Operations



— BUREAU OF —
RECLAMATION

September 2025



Bighorn River Basin Map Source: DEMIS Mapserver

September Operating Range			
Forecast	Minimum	Median	Maximum
Monthly Average Inflow (cfs)	2,380	2,515	3,265
Monthly Average River Release (cfs)	2,000	2,000	2,000
End of September Elevation (feet)	3627.6	3628.5	3633.4
September 2025 Inflow Forecast (kaf)			
September Volume		150	
Percent of Average		90	
Water Year	Historical Inflow	Rank	
2024	162	15	
2023	198	8	
2022	159	16	
2021	142	21	
30 Year Average	167		

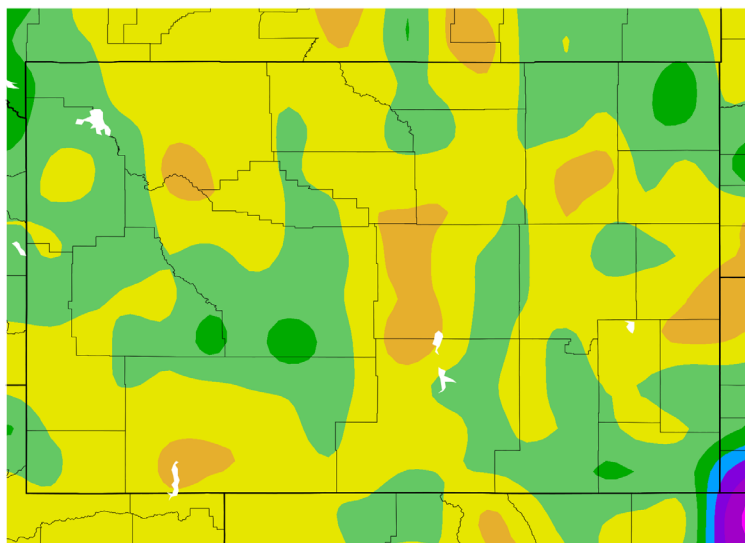


Climate Departure from Normal

August 1 through August 31, 2025

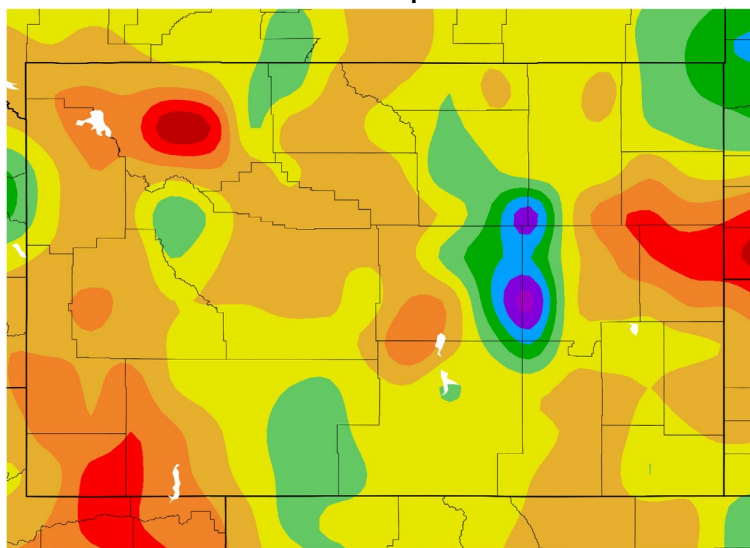
Precipitation

Departure from Normal (inches)



Departure from Normal (°F)

Temperature



HPRCC using provisional data from NOAA Regional Climate Centers

CLIMATE SUMMARY

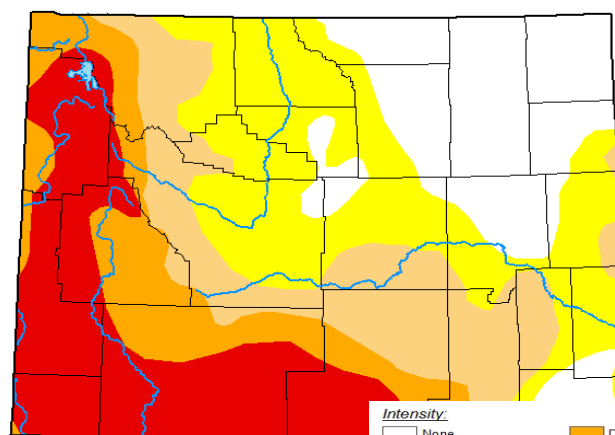
Precipitation in the Bighorn River basin above Yellowtail Dam was below average in the valleys and above average in the Wind River Basin basin during August. The average temperature for August was above average for the basin.

Based on the climate outlook for September, there is an equal chance that precipitation will be either below, near or above average. There is a 40 to 60 percent chance the temperature will be above average.

Drought conditions in the Bighorn River basin range from none to extreme.

Wyoming Drought Monitor Map

September 2, 2025



droughtmonitor.unl.edu

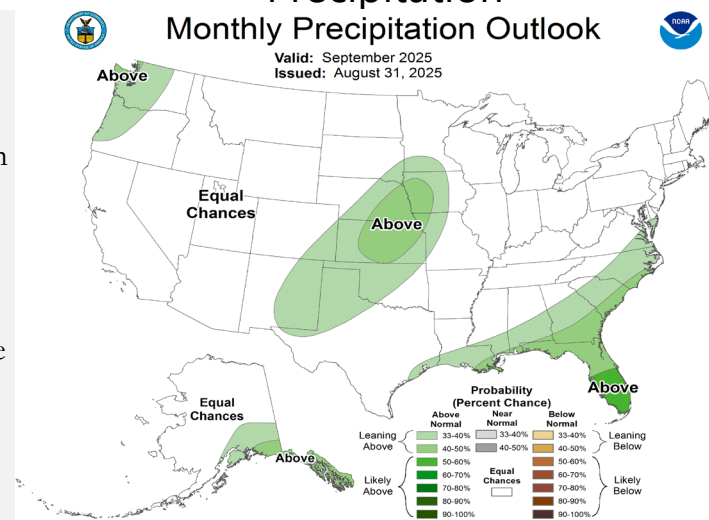
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

September Climate Outlook

Precipitation

Monthly Precipitation Outlook

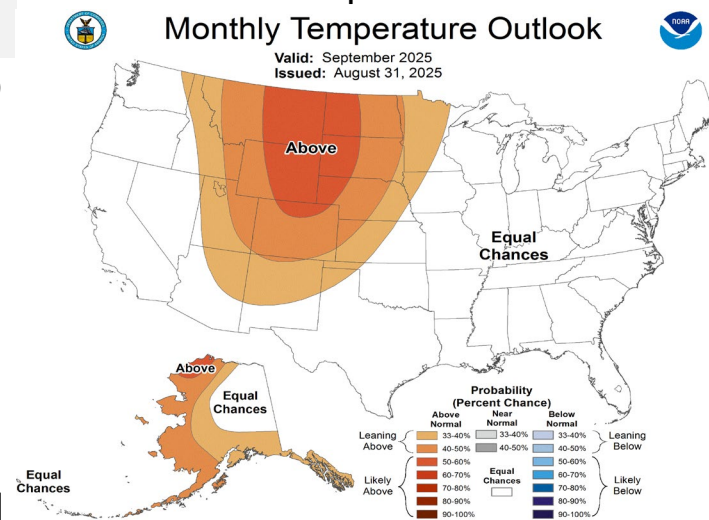
Valid: September 2025
Issued: August 31, 2025



Temperature

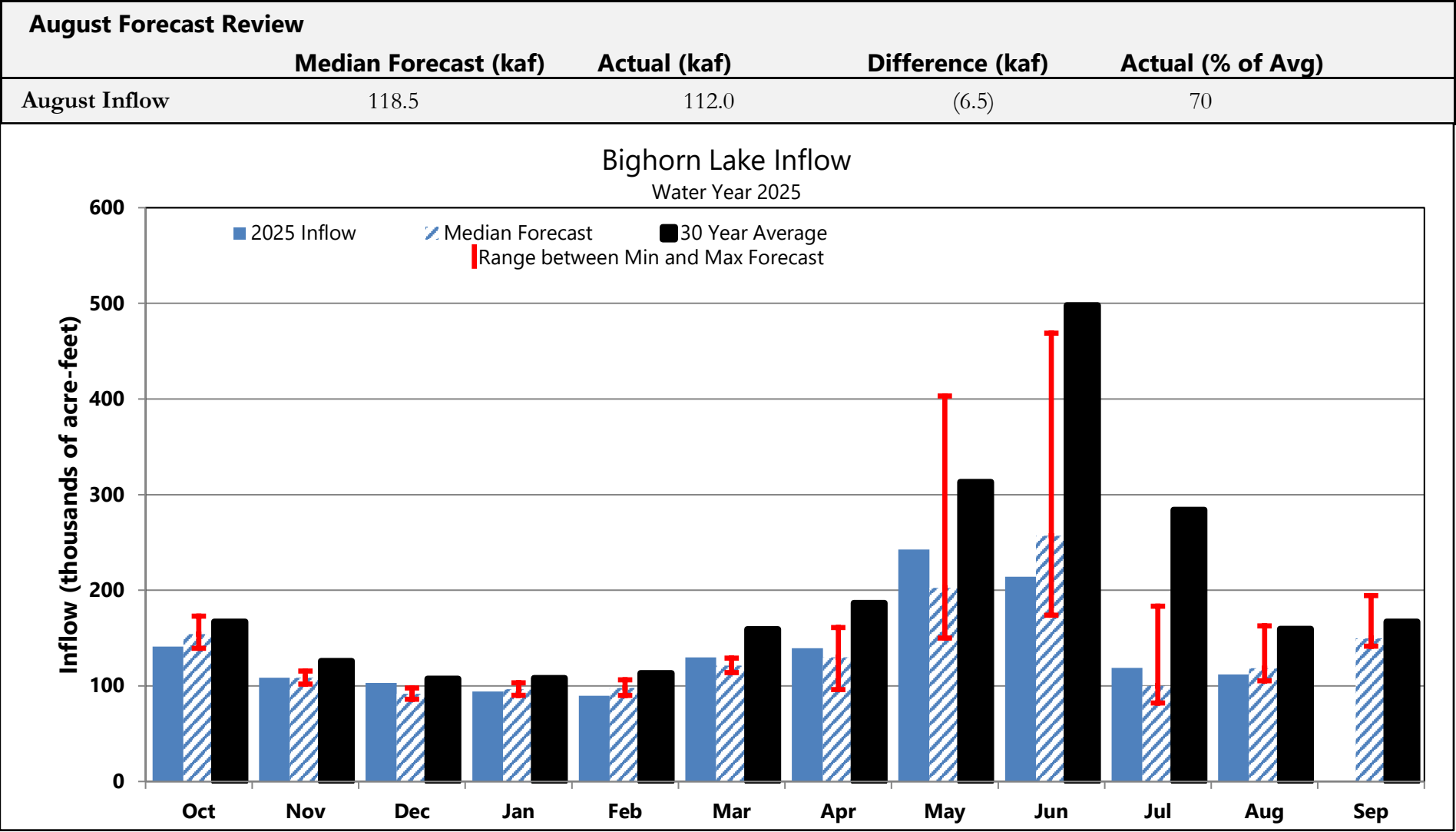
Monthly Temperature Outlook

Valid: September 2025
Issued: August 31, 2025



FORECAST SUMMARY

NRCS SNOTEL data, streamflow data, climate data, and planned releases from Boysen and Buffalo Bill Reservoirs are used to compute an inflow forecast for Bighorn Lake. Actual August inflows were less than the mean inflow forecast.



OPERATIONS OUTLOOK (Septmeber 1, 2025 through March 31, 2026)

The next Bighorn Lake storage targets used for setting releases from Yellowtail Dam are the end of October storage target of 3635 to 3640 feet and the end of March 2026 storage target of 3617 feet. The end of October target is only achieved when river releases of 2,500 cfs or greater can be maintained through March. Since the end of October target cannot be achieved, the end of March target was used to set releases. On March 1, the storage target transitions to April 30 based on forecasted April through July runoff.

Median Inflow Conditions

	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Boysen Release (cfs)	1,000	899	600	600	600	600	600
Buffalo Bill Release (cfs)	1,593	792	153	153	153	155	153
Tributary Gain (cfs)	-77	842	872	550	623	798	1,018
Monthly Inflow (cfs)	2,516	2,533	1,625	1,303	1,376	1,553	1,771
Monthly Inflow (kaf)	149.7	155.8	96.7	80.1	84.6	86.2	108.9
Monthly Release (kaf)	136.9	123.0	119.0	123.0	123.0	111.1	141.3
Afterbay Release (cfs)	2,300	2,000	2,000	2,000	2,000	2,000	2,298
River Release (cfs)	2,000	2,000	2,000	2,000	2,000	2,000	2,298
End-of-Month Content (kaf)	883.1	920.2	902.1	863.5	829.5	808.5	780.4
End-of-Month Elevation (feet)	3628.5	3632.4	3630.6	3626.3	3621.8	3618.8	3614.3

Minimum Inflow Conditions

	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Boysen Release (cfs)	1,000	899	600	600	600	600	600
Buffalo Bill Release (cfs)	1,600	725	155	155	155	157	155
Tributary Gain (cfs)	-222	729	866	545	616	790	1,012
Monthly Inflow (cfs)	2,378	2,353	1,621	1,300	1,371	1,547	1,767
Monthly Inflow (kaf)	141.5	144.7	96.4	79.9	84.3	85.9	108.6
Monthly Release (kaf)	136.9	125.5	115.4	119.3	119.3	107.7	104.5
Afterbay Release (cfs)	2,300	2,041	1,940	1,940	1,940	1,940	1,700
River Release (cfs)	2,000	2,000	1,940	1,940	1,940	1,940	1,700
End-of-Month Content (kaf)	874.9	898.4	883.6	848.5	817.9	799.9	808.3
End-of-Month Elevation (feet)	3627.6	3630.2	3628.6	3624.4	3620.2	3617.5	3618.8

Maximum Inflow Conditions

	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Boysen Release (cfs)	1,101	899	600	600	600	600	1,099
Buffalo Bill Release (cfs)	1,600	725	205	205	205	205	205
Tributary Gain (cfs)	566	1,293	901	574	649	835	1,049
Monthly Inflow (cfs)	3,267	2,917	1,706	1,379	1,454	1,640	2,353
Monthly Inflow (kaf)	194.4	179.4	101.5	84.8	89.4	91.1	144.7
Monthly Release (kaf)	133.9	135.3	142.2	147.0	147.0	132.7	211.4
Afterbay Release (cfs)	2,250	2,200	2,390	2,390	2,390	2,390	3,437
River Release (cfs)	2,000	2,200	2,390	2,390	2,390	2,390	3,437
End-of-Month Content (kaf)	930.8	979.2	942.7	884.8	831.6	793.8	731.4
End-of-Month Elevation (feet)	3633.4	3637.6	3634.5	3628.7	3622.1	3616.5	3605.6

OPERATIONS OUTLOOK (Septmeber 1, 2025 through March 31, 2026)

There is approximately 70 cfs of gain between Yellowtail Dam and Yellowtail Afterbay Dam from springs flowing into Yellowtail Afterbay. Total release from Yellowtail Dam is 70 cfs less than total release from Yellowtail Afterbay Dam. Yellowtail Powerplant will be restricted to two units from September 1 through September 12 for transformer maintenance.

Irrigation Demands Outlook

Bighorn Canal (cfs)

	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Median Forecast	300	0	0	0	0	0	0
Minimum Forecast	300	41	0	0	0	0	0
Maximum Forecast	250	0	0	0	0	0	0

Power Generation Outlook

Current Number of Units Available: 2 of 4
Approximate Yellowtail Powerplant Turbine Capacity: 4,100 cfs
Approximate Yellowtail Powerplant Scheduled Generation Limit: 3,120 cfs

Yellowtail Powerplant Release (cfs)

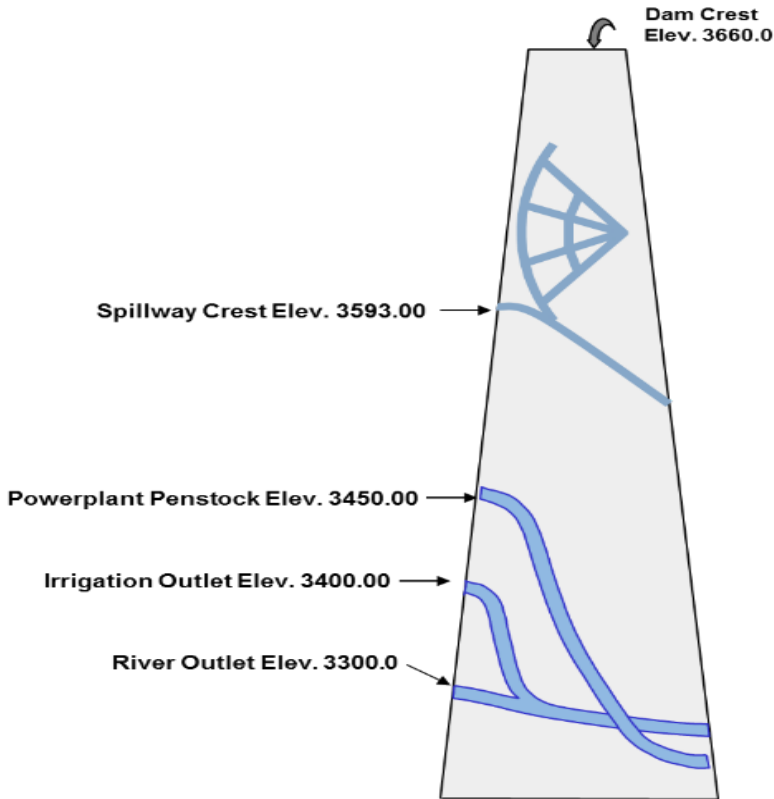
	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Median Forecast	2,230	1,930	1,930	1,930	1,930	1,930	2,228
Minimum Forecast	2,230	1,971	1,870	1,870	1,870	1,870	1,630
Maximum Forecast	2,180	2,130	2,320	2,320	2,320	2,320	3,367

Yellowtail Powerplant Generation (gwh)

	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Median Forecast	49	44	42	44	44	39	50
Minimum Forecast	49	44	41	42	42	38	37
Maximum Forecast	48	48	51	52	52	47	76

Yellowtail Spill (cfs)

	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Median Forecast	0	0	0	0	0	0	0
Minimum Forecast	0	0	0	0	0	0	0
Maximum Forecast	0	0	0	0	0	0	0

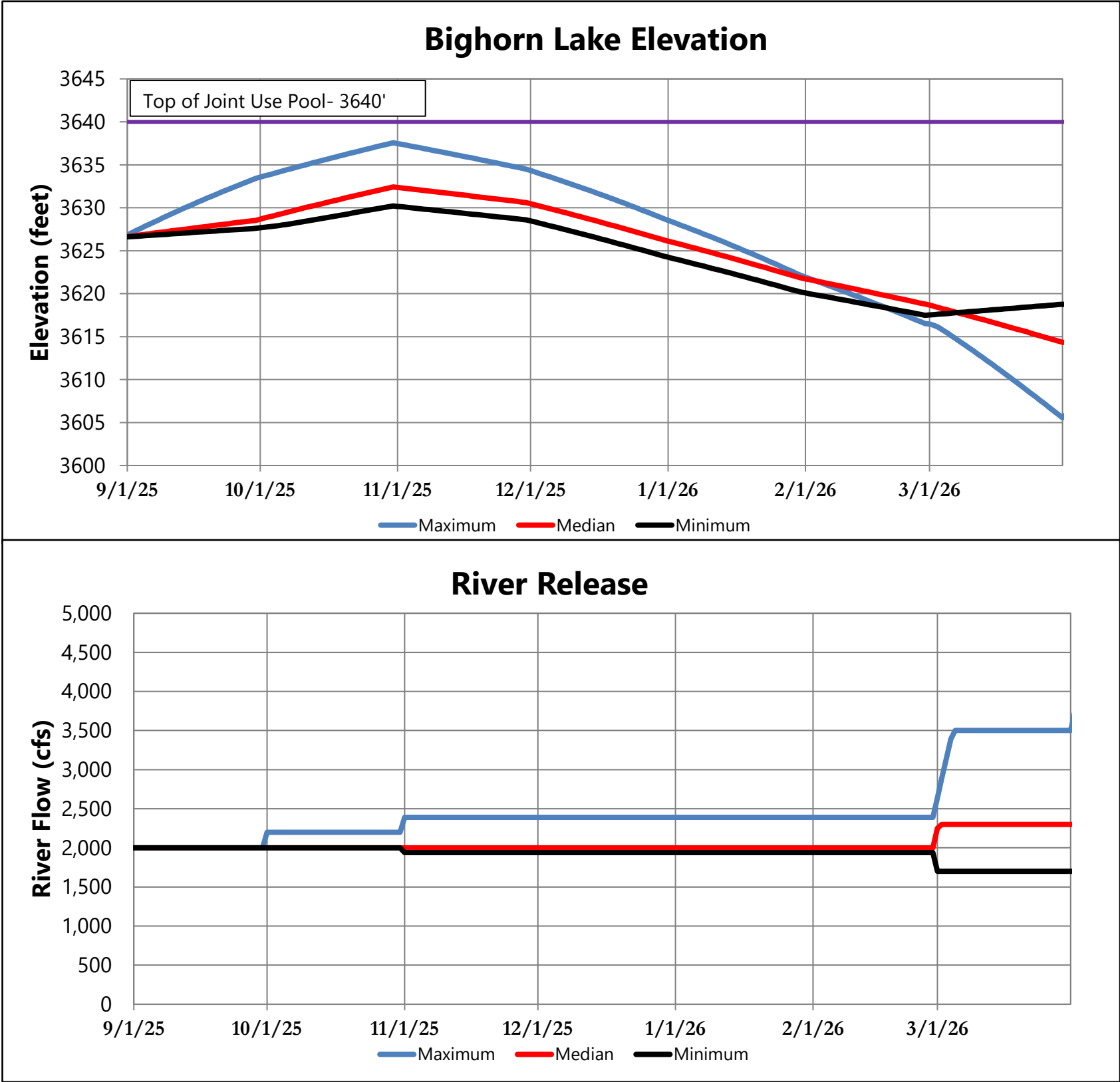


Release Outlook by Outlet

Yellowtail Powerplant bypass releases are not anticipated through the end of March 2026 under all three inflow forecasts.

OPERATIONS OUTLOOK (September 1, 2025 through March 31, 2026)

Projected elevations and the range of river releases are based on the median, minimum, and maximum inflow forecasts. End-of-month elevations and river releases vary based on the difference between forecasted inflow scenarios.



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Monthly Operating Plans, Current Conditions, Snowpack and Other Water Management Information
https://www.usbr.gov/gp/lakes_reservoirs/warepts/main_menu.html