April 2024 24-Month Study Projections Lake Powell and Lake Mead: End of Month Elevation Charts



Explanation of Hydrologic Scenarios

In addition to the April 2024 24-Month Study based on the Most Probable inflow scenario, and in accordance with the Upper Basin Drought Response Operations Agreement (DROA), Reclamation has conducted additional model runs in April to determine a possible range of reservoir elevations. Probable minimum and probable maximum model runs are conducted in January, April, August, and October, or when necessary to incorporate changing conditions. The Probable Minimum inflow scenario reflects a dry hydrologic condition which statistically would be exceeded 90% of the time. The Most Probable inflow scenario reflects a median hydrologic condition which statistically would be exceeded 50% of the time. The Probable Maximum inflow scenario reflects a wet hydrologic condition which statistically would be exceeded 10% of the time. There is approximately an 80% probability that a future elevation will fall inside the range of the minimum and maximum inflow scenarios. Additionally, there are possible inflow scenarios that would result in reservoir elevations falling outside the ranges indicated in these reports.

April 2024 Probable Minimum 24-Month Study

The water year (WY) 2024 unregulated inflow into Lake Powell in the April Probable Minimum inflow scenario is 7.10 million acre-feet (maf), or 74% of average. The Probable Minimum 24-Month Study includes a release volume from Glen Canyon Dam of 7.48 maf in WY 2024 and in WY 2025. Under the Probable Minimum scenario, Lake Powell's elevation is projected to be 3,563.79 feet on December 31, 2024. With intervening flows between Lake Powell and Lake Mead of 0.650 maf in calendar year (CY) 2024, Lake Mead's elevation is projected to be 1,056.87 feet on December 31, 2024.

April 2024 Most Probable 24-Month Study

The WY 2024 unregulated inflow into Lake Powell in the April Most Probable inflow scenario is 8.39 maf, or 87% of average. The Most Probable 24-Month Study includes a release volume from Glen Canyon Dam of 7.48 maf in WY 2024 and in WY 2025. Under the Most Probable scenario, Lake Powell's elevation is projected to be 3,577.63 feet on December 31, 2024. With intervening flows between Lake Powell and Lake Mead of 0.830 maf in CY 2024, Lake Mead's elevation is projected to be 1,059.16 feet on December 31, 2024.

April 2024 Probable Maximum 24-Month Study

The WY 2024 unregulated inflow into Lake Powell in the April Probable Maximum inflow scenario is 11.33 maf, or 118% of average. The Probable Maximum 24-Month Study includes a release volume from Glen Canyon Dam of 7.48 maf in WY 2024 and 9.00 maf in WY 2025. Under the Probable Maximum scenario, Lake Powell's elevation is projected to be 3,602.44 feet on December 31, 2024. With intervening flows between Lake Powell and Lake Mead of 1.068 maf in CY 2024, Lake Mead's elevation is projected to be 1,068.33 feet on December 31, 2024.

The draft 2024 Annual Operating Plan (AOP) is available online at:

https://www.usbr.gov/lc/region/g4000/AOP2024/AOP24_draft.pdf.

The Interim Guidelines are available online at:

https://www.usbr.gov/lc/region/programs/strategies/RecordofDecision.pdf.

The Colorado River Drought Contingency Plans (DCPs) are available online at:

 $\underline{https://www.usbr.gov/ColoradoRiverBasin/dcp/finaldocs.html}.$

The Upper Basin DROA is online at:

 $\underline{https://www.usbr.gov/ColoradoRiverBasin/dcp/droa.html}.$

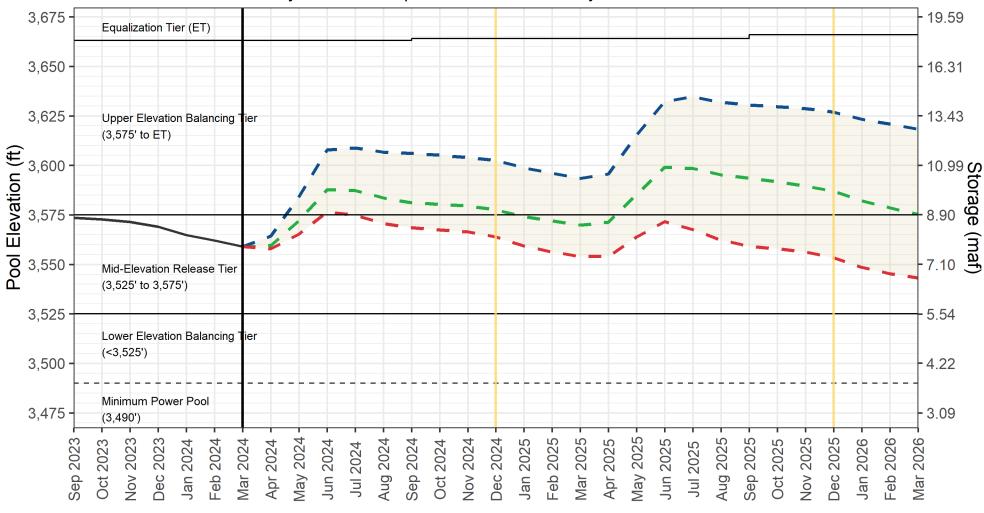
The Upper Basin Hydrology Summary is available online at:

https://www.usbr.gov/uc/water/crsp/studies/24Month 04 ucb.pdf.

Information on the Lower Colorado Basin (LCB) Conservation Program is available online at:

https://www.usbr.gov/lc/LCBConservation.html.

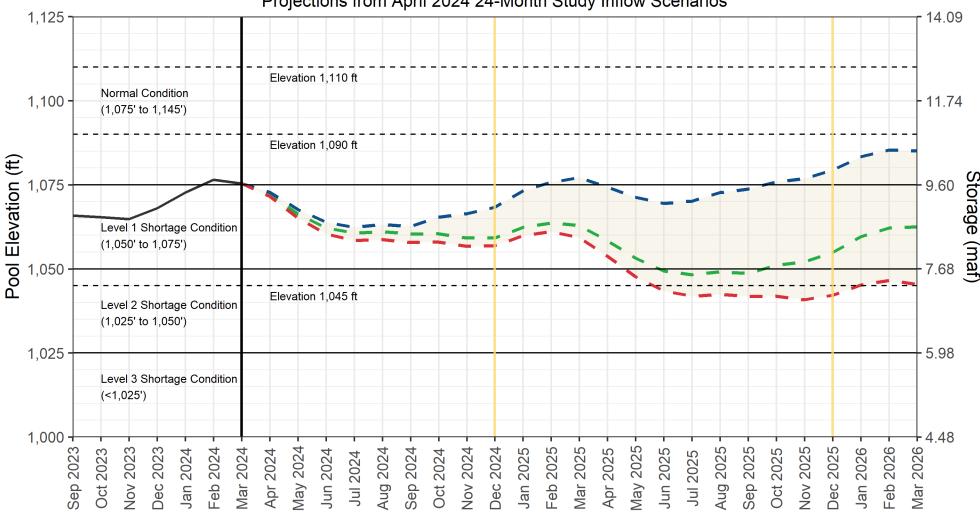
Lake Powell End-of-Month Elevations Projections from April 2024 24-Month Study Inflow Scenarios



- Historical Elevations
- April 2024 Probable Maximum Inflow with a Lake Powell release of 7.48 maf in WY 2024 and 9.00 maf in WY 2025
- April 2024 Most Probable Inflow with a Lake Powell release of 7.48 maf in WY 2024 and WY 2025
- April 2024 Probable Minimum Inflow with a Lake Powell release of 7.48 maf in WY 2024 and WY 2025



Lake Mead End-of-Month Elevations Projections from April 2024 24-Month Study Inflow Scenarios



- Historical Elevations
- April 2024 Probable Maximum Inflow with a Lake Powell release of 7.48 maf in WY 2024 and 9.00 maf in WY 2025
- April 2024 Most Probable Inflow with a Lake Powell release of 7.48 maf in WY 2024 and WY 2025
- April 2024 Probable Minimum Inflow with a Lake Powell release of 7.48 maf in WY 2024 and WY 2025

