

July 2021 24-Month Study Projections Lake Powell End of Month Elevation Chart



Explanation of Hydrologic Scenarios

In addition to the July 2021 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 model runs in July to determine a possible range of reservoir elevations under Probable Minimum and Probable Maximum inflow scenarios. Normally, outside of the DROA, Probable Minimum and Probable Maximum model runs are only conducted in January, April, August, and October. 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.

Consistent with the Upper Basin DROA provisions to protect a target elevation at Lake Powell, this July 2021 24-Month Study includes releases from the upstream initial units of the Colorado River Storage Project Act to deliver an additional 181 thousand acre-feet (kaf) to Lake Powell by the end of December 2021. The additional releases will be implemented on the following schedule:

Upper Basin Drought Response Operations Releases

	Jul (kaf)	Aug (kaf)	Sep (kaf)	Oct (kaf)	Nov (kaf)	Dec (kaf)	Total (kaf)
Flaming Gorge Reservoir	13	42	43	27	0	0	125
Blue Mesa Reservoir	0	14	18	4	0	0	36
Navajo Reservoir	0	0	0	0	10	10	20
Total (kaf)	13	56	61	31	10	10	181

The releases detailed above are in addition to the already established releases determined by operational plans for each of the identified facilities. The additional delivery of 181 kaf is expected to raise Lake Powell's elevation by approximately three feet. Releases from Lake Powell to Lake Mead will not be adjusted in water year 2021 as those releases are determined by annual release volumes consistent with the Interim Guidelines.

DROA July 2021 Probable Minimum 24-Month Study

The water year 2021 unregulated inflow in the DROA May Probable Minimum inflow scenario is 3.23 million acre-feet (maf), or 30% of average. Consistent with the Interim Guidelines, the DROA July Probable Minimum 24-Month Study results in a projected release volume of Glen Canyon Dam of 8.23 maf in water year 2021 and 7.48 maf in water year 2022. Under the probable minimum scenario, Lake Powell's elevation is projected to be 3,535.34 feet on December 31, 2021. With intervening flows between Lake Powell and Lake Mead of 0.591 maf in calendar year 2021, Lake Mead's elevation is projected to be 1,064.05 feet on December 31, 2021.

July 2021 Most Probable 24-Month Study

The water year 2021 unregulated inflow into Lake Powell in the July Most Probable inflow scenario is 3.23 maf, or 30% of average. Consistent with the Interim Guidelines, the July Most Probable 24-Month Study results in a projected release volume of Glen Canyon Dam of 8.23 maf in water year 2021 and 7.48 maf in

water year 2022. Under the most probable scenario, Lake Powell's elevation is projected to be 3,535.34 feet on December 31, 2021. With intervening flows between Lake Powell and Lake Mead of 0.623 maf in calendar year 2021, Lake Mead's elevation is projected to be 1,064.84 feet on December 31, 2021.

DROA July 2021 Probable Maximum 24-Month Study

The water year 2021 unregulated inflow in the DROA May Probable Maximum inflow scenario is 3.48 maf, or 32% of average. Consistent with the Interim Guidelines, the DROA July Probable Maximum 24-Month Study results in a projected release volume of Glen Canyon Dam of 8.23 maf in water year 2021 and 7.48 maf in water year 2022. Under the probable maximum scenario, Lake Powell's elevation is projected to be 3,540.68 feet on December 31, 2021. With intervening flows between Lake Powell and Lake Mead of 0.638 maf in calendar year 2021, Lake Mead's elevation is projected to be 1,065.65 feet on September December 31, 2021.

The 2021 AOP is available for download at: <https://www.usbr.gov/uc/water/rsvrs/ops/aop/AOP21.pdf>.

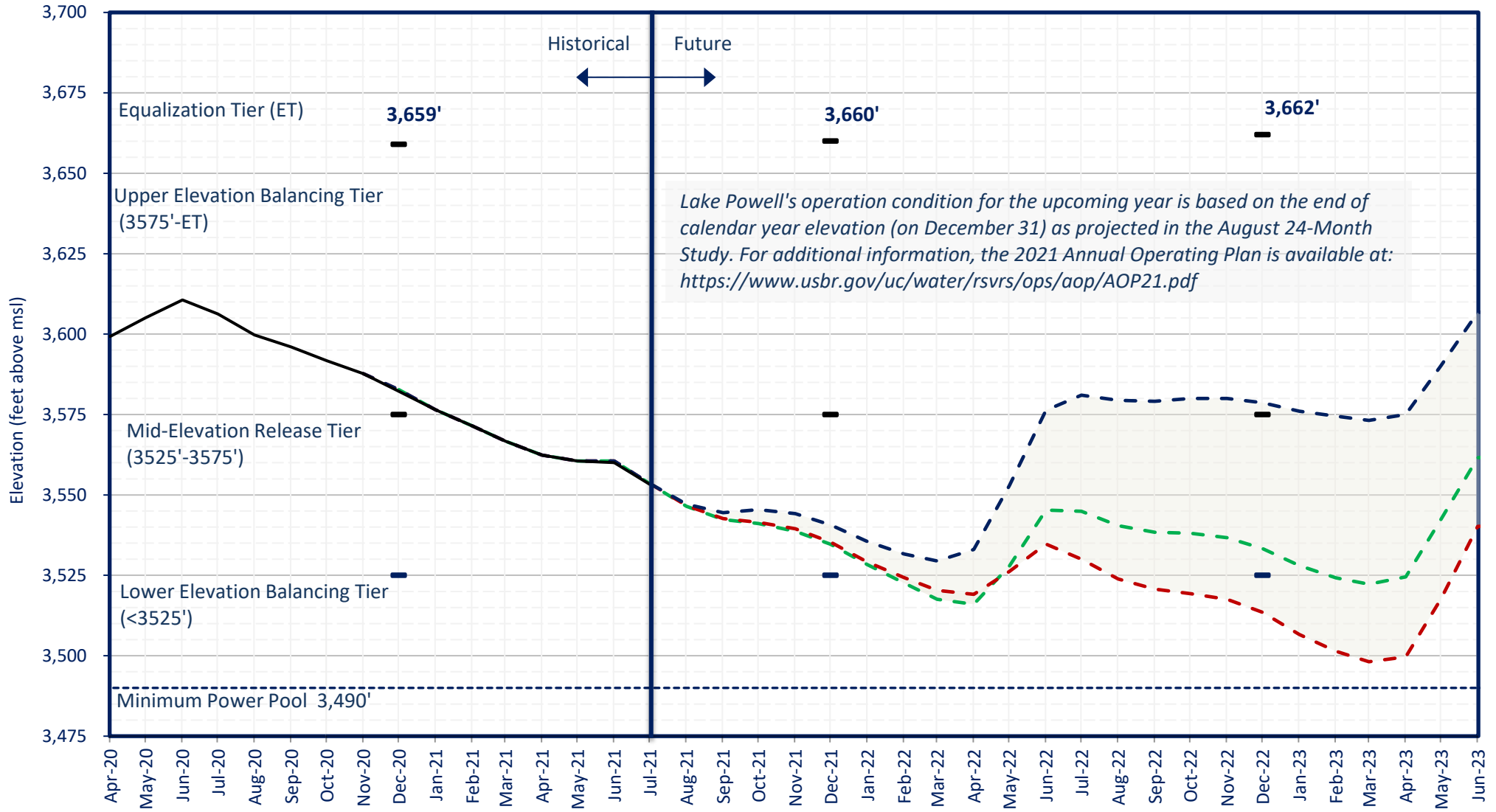
The Interim Guidelines are available for download at: <https://www.usbr.gov/lc/region/programs/strategies/RecordofDecision.pdf>.

The Colorado River DCPs are available for download at: <https://www.usbr.gov/dcp/finaldocs.html>.

The Upper Basin Hydrology Summary can be found at: https://www.usbr.gov/uc/water/crsp/studies/24Month_07_ucb.pdf.

Lake Powell End of Month Elevations

Projections from the July 2021 24-Month Study Inflow Scenarios



- July 2021 Most Probable - Lake Powell release of 8.23 maf in WY2021 and 7.48 maf in WY2022
- July 2021 DROA* Minimum Probable - Lake Powell release of 8.23 maf in WY2021 and 7.48 maf in WY2022
- July 2021 DROA* Maximum Probable - Lake Powell release of 8.23 maf in WY2021 and 7.48 maf in WY2022
- Historical Elevations

*The Drought Response Operations Agreement (DROA) can be found here: <https://www.usbr.gov/dcp/finaldocs.html>



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