Hydrology Report – December 2024

Upper Basin Hydrology

- In November, the upper basin received 114% of average precipitation bringing the cumulative precipitation to 113% for the year.
- Temperatures in the upper basin in November were 1-5 degrees F below normal.
- Snowpack accumulation is currently at 95% of normal (as of 12/9/2024).
- The Basin Forecast Center is estimating water year 2025 runoff at 8.7 million acre-feet or 91% of average.

Current reservoir status

- As of December 8, 2024, Lake Mead is at an elevation of **1,061.3** feet and has about 8.5 million acre-feet in storage (33% capacity).
- As of December 8, 2024, Lake Powell is at an elevation of 3,574.4 feet and has about 8.9 million acrefeet in storage (38% capacity).
- Total system storage for the upper and lower basin is around 24.6 million acre-feet (42% capacity).

2025 reservoir operations

- Lake Powell will be operated in the Mid-Elevation Release Tier with a release of 7.48 million acre-feet in water year 2025.
- Lake Mead will operate in a Level 1 Shortage Condition in calendar year 2025.
- Accordingly, in 2025, Nevada's consumptive use will be reduced by 13,000 acre-feet under the 2007 Interim Guidelines and Nevada will make a Drought Contingency Plan contribution of 8,000 acre-feet.
- Arizona and Mexico are also required to take shortage and make a water savings contribution in 2025. Those amounts are significantly larger than Nevada's obligations.
- The total combined volumes for Arizona, Nevada, and Mexico are 613,000 acre-feet in calendar year 2025, which will save the equivalent of about 8 feet in elevation in Lake Mead.

Water Use in Southern Nevada ¹

• Southern Nevada's consumptive use for January-October of 2024 was 188,587 acre-feet, which is a 6% decrease compared to the three-year average.

Reclamation's Lake Mead and Lake Powell Projections²

- Reclamation uses computer models to forecast reservoir elevations based on planned water use and anticipated runoff. The November 24-Month Study forecasts Lake Mead to be between 1,064.5 and 1,054.0 feet in elevation by the end of 2025.
- Reclamations November 24-Month Study is forecasting Lake Powell's elevation to be between 3,575.9 and 3,540.6 feet by the end of 2025.

¹ 2024 consumptive use data is preliminary.

² Reclamation modeling assumes the current operational guidelines and planned conservation activities.

Colorado River Commission of Nevada

Hydrology and River Updates

Warren Turkett

December 10, 2024



Precipitation and Temperature



Pared by NOAA, Colorado Basin Hiver Forecast Cer Salt Lake City, Utah, www.cbrfc.noaa.gov

Lake Powell %Average Precipitation Water Year 2025

Area	Oct	Nov	Water Year
UC-Powell	111	114	113



Prepared by NOAA, Colorado Basin River Forecast Center Salt Lake City, Utah, www.cbrfc.noaa.gov

Snowpack



Lake Powell End-of-Month Elevations November 2024 24 Month Study



December 8, 2024 elevation: 3,574.4 feet

Lake Mead End-of-Month Elevations

November 2024 24 Month Study



December 8, 2024 elevation: 1,061.3 feet



Water Use In Southern Nevada

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2024 January-October Southern Nevada Water	Use' Acre-reet	
Nevada Annual Allocation	300,000	
Drought Contingency Plan contribution	-8,000	
Interim Guidelines Shortages	-13,000	
Diversions	392,853	
Return Flow Credits	204,266	
Consumptive Use ¹ 2024 Consumptive use data is preliminary.	188,587 (6% decrease compared to 3-year average)	