

Hydrology Report – October 2024

Upper Basin Hydrology

- In September, the upper basin received 57% of average precipitation bringing the cumulative total to 100% for the year.
- Temperatures in the upper basin for August were 1 to 7 degrees F above normal.
- Snowpack accumulation peaked this year at 111% of the seasonal median.
- The Basin Forecast Center estimated runoff this year at 8 million acre-feet or 83% of average.

Current reservoir status

- As of October 6, 2024, Lake Mead is at an elevation of **1,064.0** feet and has about 8.7 million acre-feet in storage (33% capacity).
- As of October 6, 2024, Lake Powell is at an elevation of 3,577.7 feet and has about 9.1 million acre-feet in storage (39% capacity).
- Total system storage for the upper and lower basin is around 25.2 million acre-feet (43% 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-August of 2024 was 146,540 acre-feet, which is a 10% decrease compared to the three-year average.

Reclamation’s Lake Mead and Lake Powell Projections ²

- Reclamation uses computer models to forecast reservoir elevations based on planned water use and anticipated runoff. The September 2024 24-Month Study is forecasting Lake Mead to be between 1,064.9 and 1,064.6 feet in elevation by the end of 2024.
- Reclamations August 2024 24-Month Study is forecasting Lake Powell’s elevation to be between 3,574.5 and 3,573.4 feet by the end of 2024.

¹ 2024 consumptive use data is preliminary.

² Reclamation modeling assumes the current operational guidelines and planned conservation activities. Forecasts could improve by implementing additional actions.



Colorado River Commission of Nevada

Hydrology and River Updates

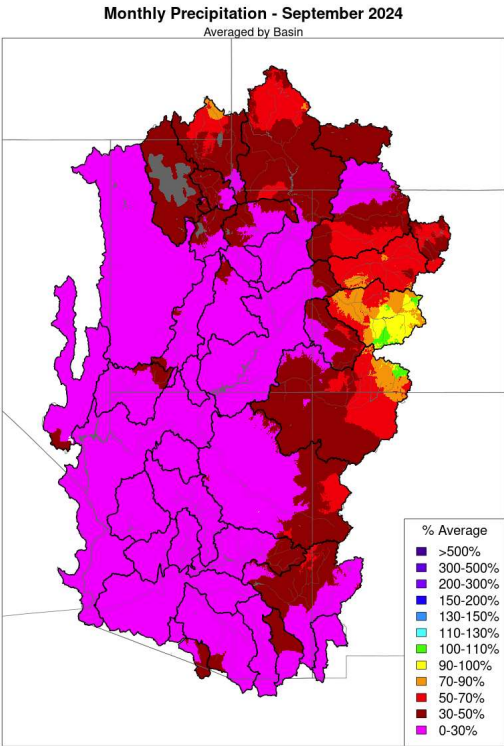
Warren Turkett

October 7, 2024

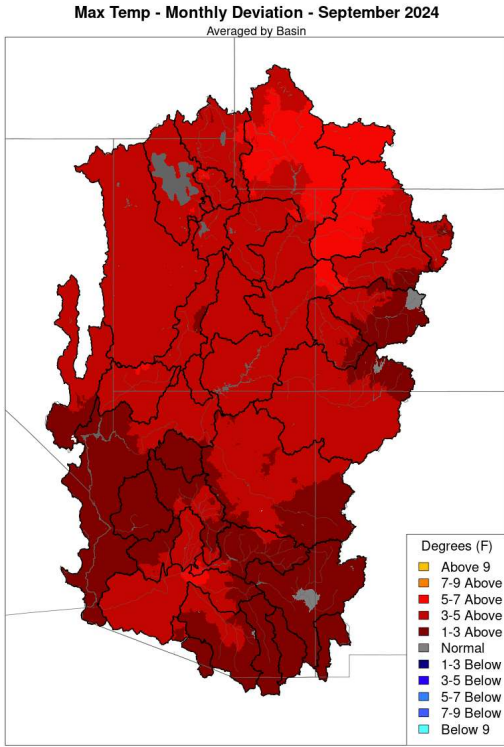




Precipitation and Temperature



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



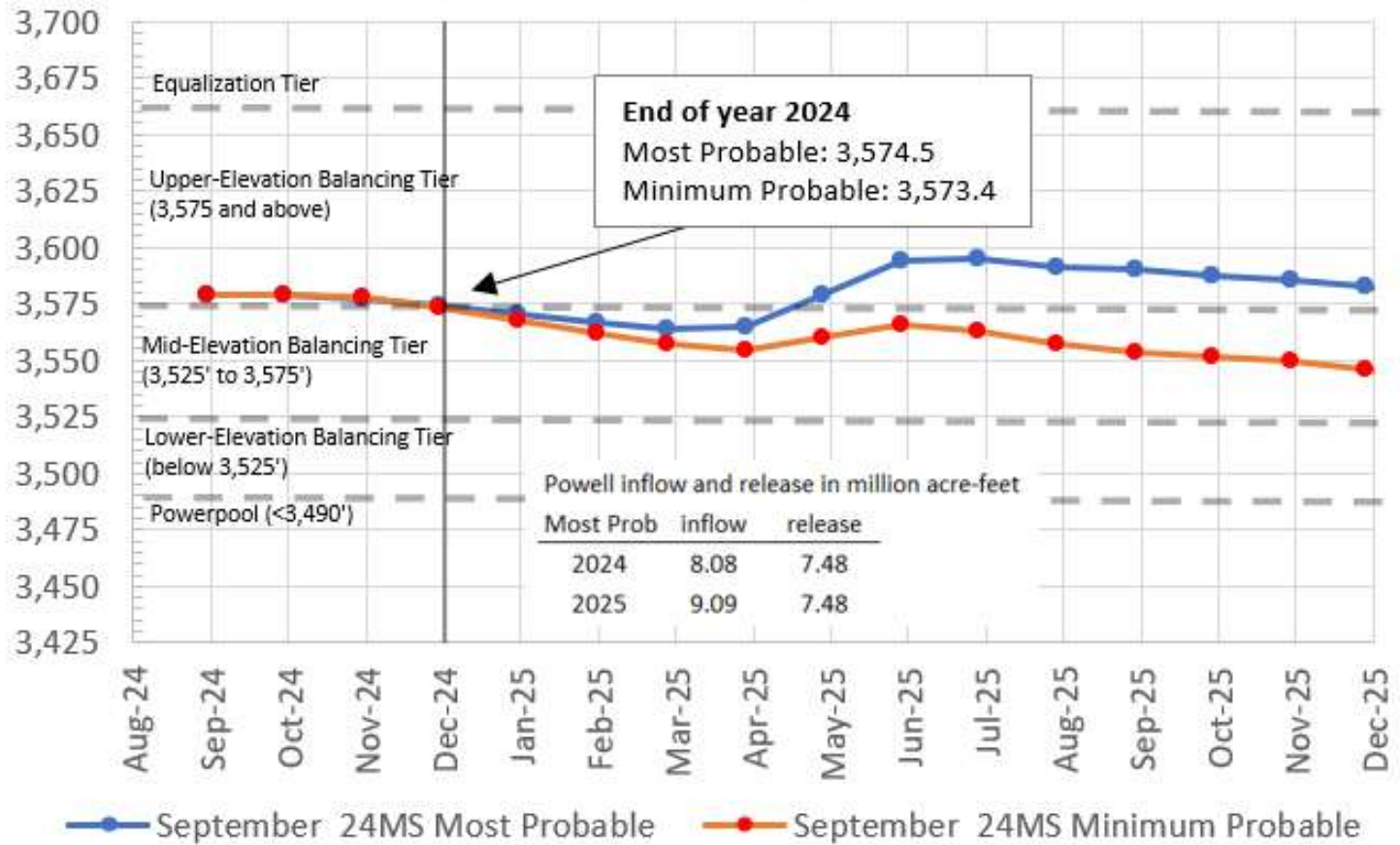
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Salt Lake City, Utah, www.cbrfc.noaa.gov

Lake Powell %Average Precipitation Water Year 2024

Area	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Water Year
UC-Powell	92	56	76	120	137	130	69	95	153	65	168	57	100



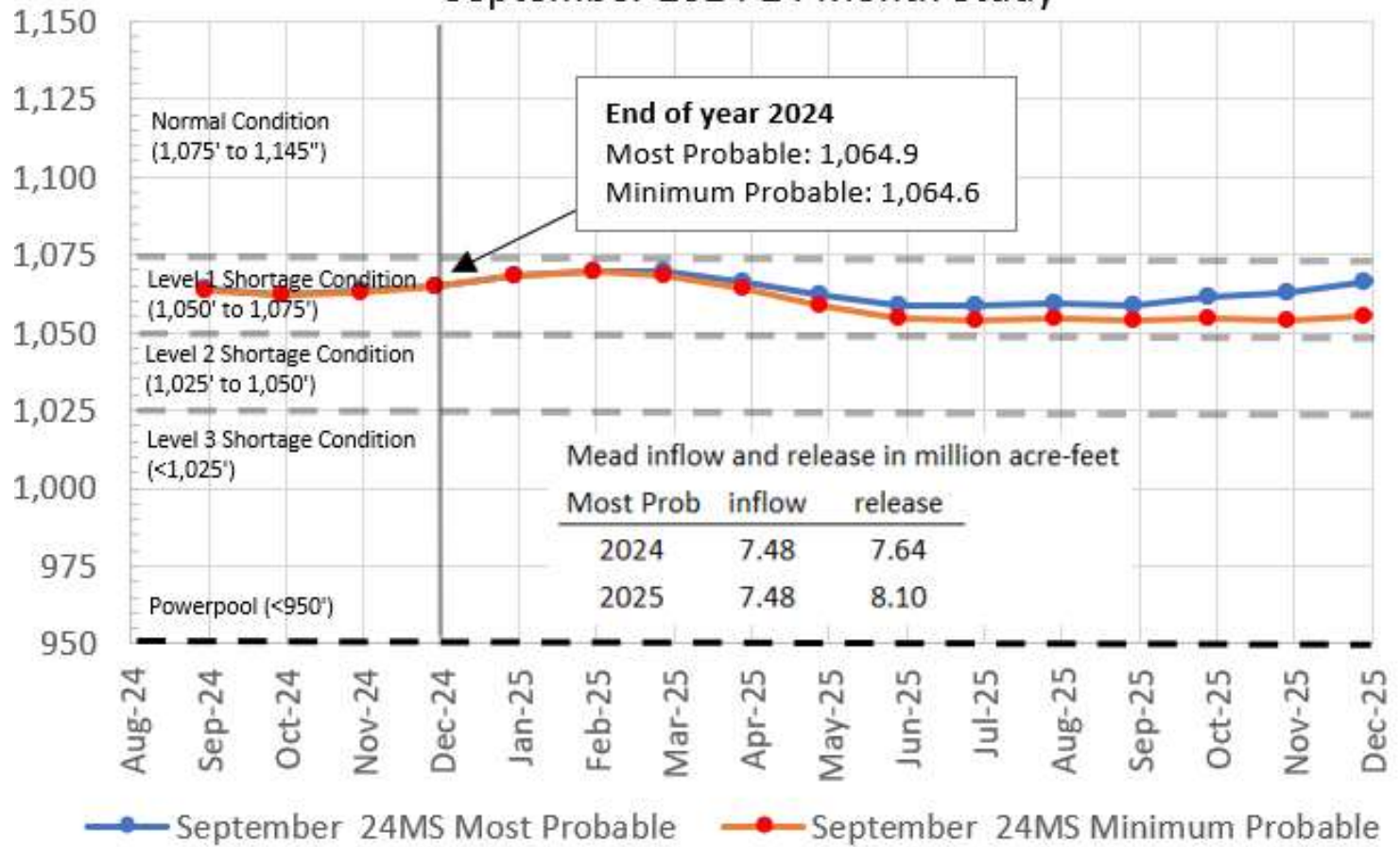
Lake Powell End-of-Month Elevations September 2024 24 Month Study



October 6, 2024 elevation: 3,577.7 feet



Lake Mead End-of-Month Elevations September 2024 24 Month Study



October 6, 2024 elevation: 1,064.0 feet



Water Use In Southern Nevada

2024 January-August Southern Nevada Water Use¹

Acre-Feet

Nevada Annual Allocation	300,000
Drought Contingency Plan contribution	-8,000
Interim Guidelines Shortages	-13,000
Diversions	310,787
Return Flow Credits	164,247
Consumptive Use	146,540
¹ 2024 Consumptive use data is preliminary.	(10% decrease compared to 3-year average)