

Hydrology Report – April 2024

Upper Basin Hydrology

- In March, the upper basin received 130% of average precipitation bringing the cumulative total to 102% for the year.
- Temperatures in the upper basin for March were 1-3 degrees below normal.
- Snowpack accumulation is currently 111% of the seasonal median.
- The Basin Forecast Center is forecasting runoff this year at 87% of average.

Current reservoir status

- As of April 1, 2024, Lake Mead is at an elevation of **1,075.4** feet and has about 9.6 million acre-feet in storage (37% capacity). The level is **34 feet higher** than the low reached in July of 2022 of 1,041.
- As of April 1, 2024, Lake Powell is at an elevation of 3,559.0 feet and has about 7.7 million acre-feet in storage (33% capacity).
- Total system storage for the upper and lower basin is around 24.6 million acre-feet (42% capacity).

2024 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 2024.
- Lake Mead will operate in a Level 1 Shortage Condition in calendar year 2024.
- Accordingly, in 2024, 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 2024. 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 2024, 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-February of 2024 was 11,691 acre-feet, which is a 24% decrease in water use compared to 2023.

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 March 2024 24 Month Study is forecasting Lake Mead to be between 1,059.8 and 1,056.5 feet in elevation by the end of 2024.
- Reclamations March 2024 24 Month Study is forecasting Lake Powell's elevation to be between 3,569.2 and 3,552.6 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

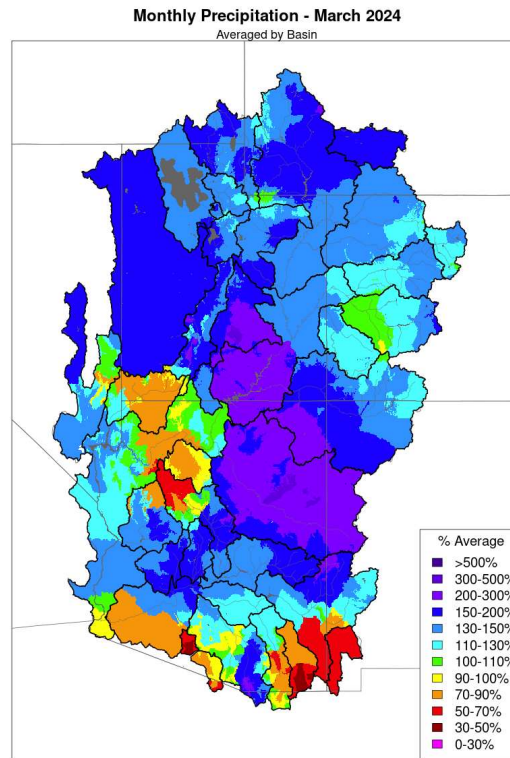
Warren Turkett

April 9, 2024

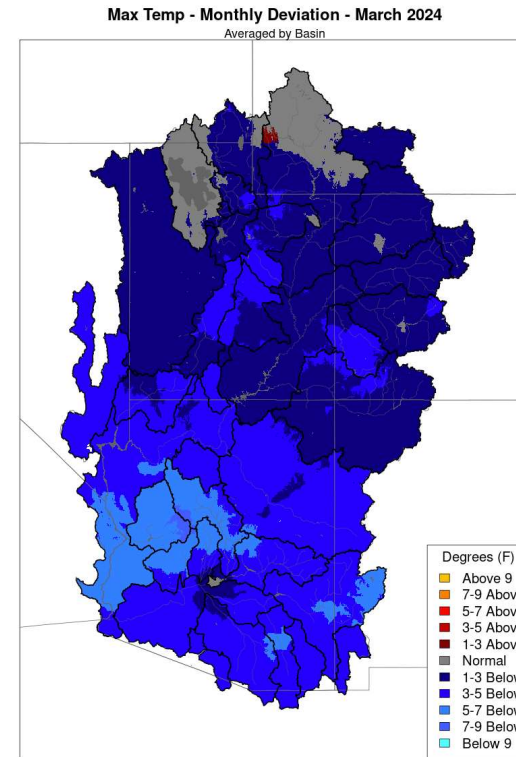




Precipitation and Temperature



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



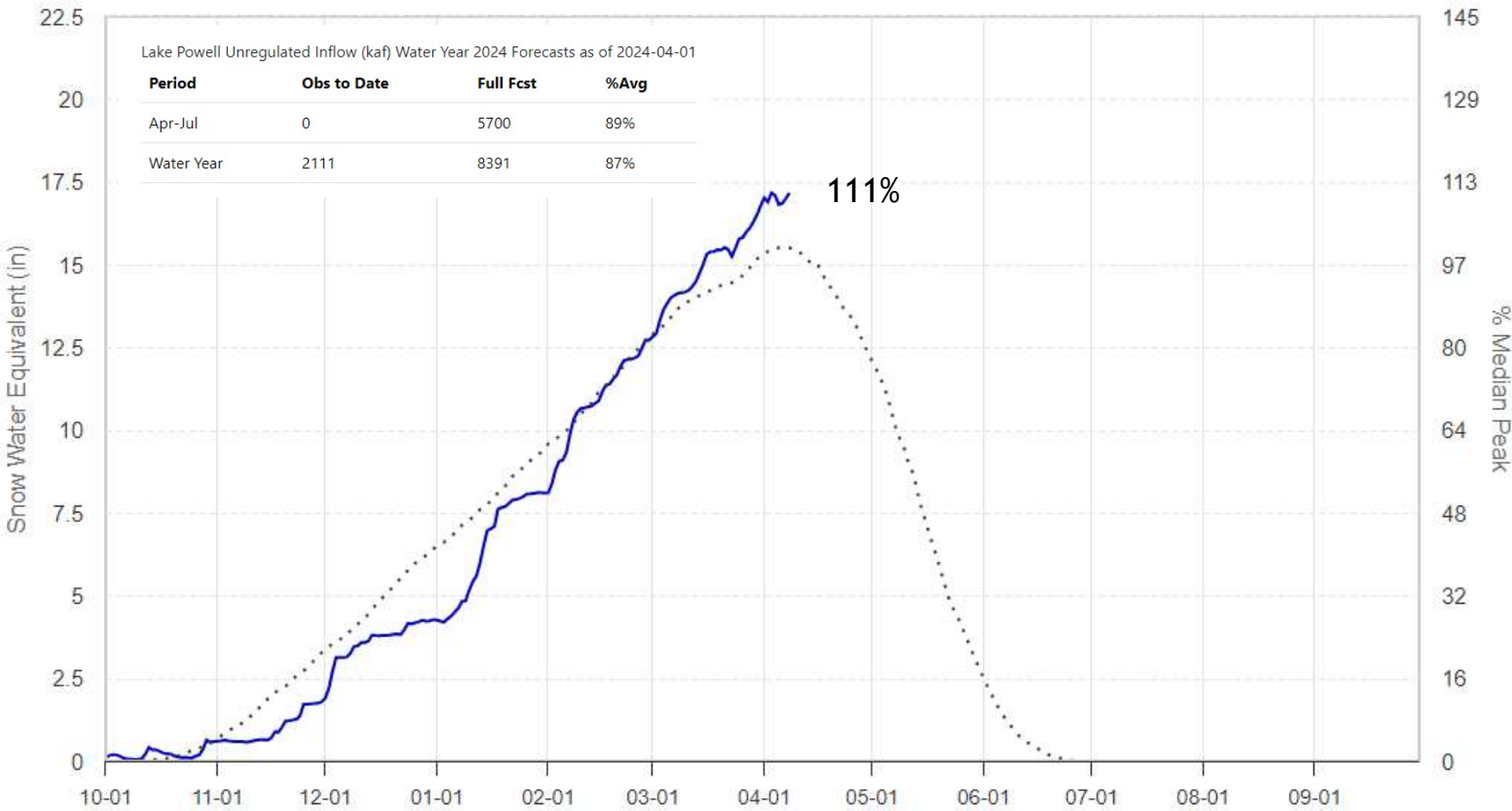
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Lake Powell %Average Precipitation Water Year 2024

Area	Oct	Nov	Dec	Jan	Feb	Mar	Water Year
UC-Powell	92	56	76	120	137	130	102



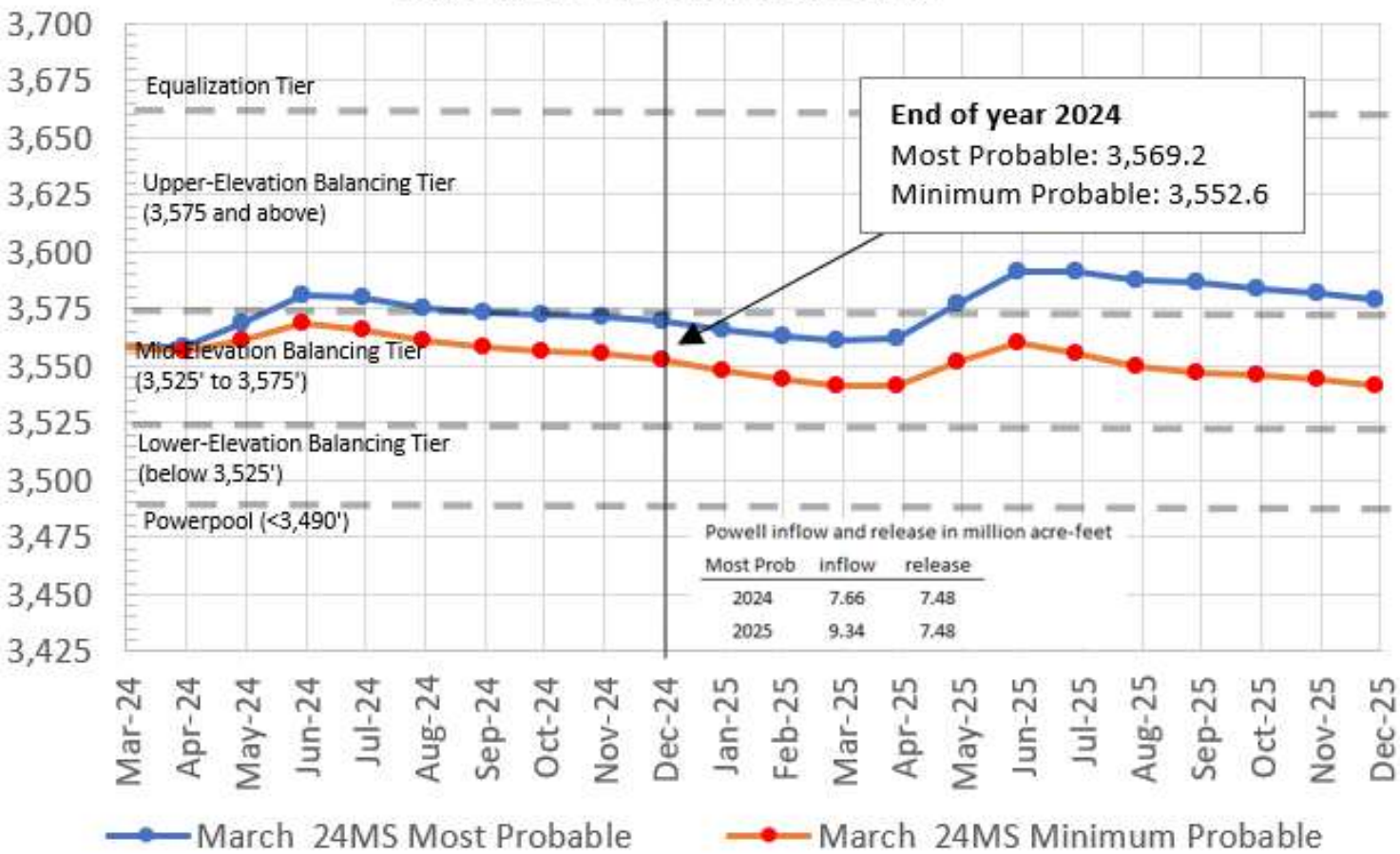
Snowpack Accumulation





Lake Powell End-of-Month Elevations

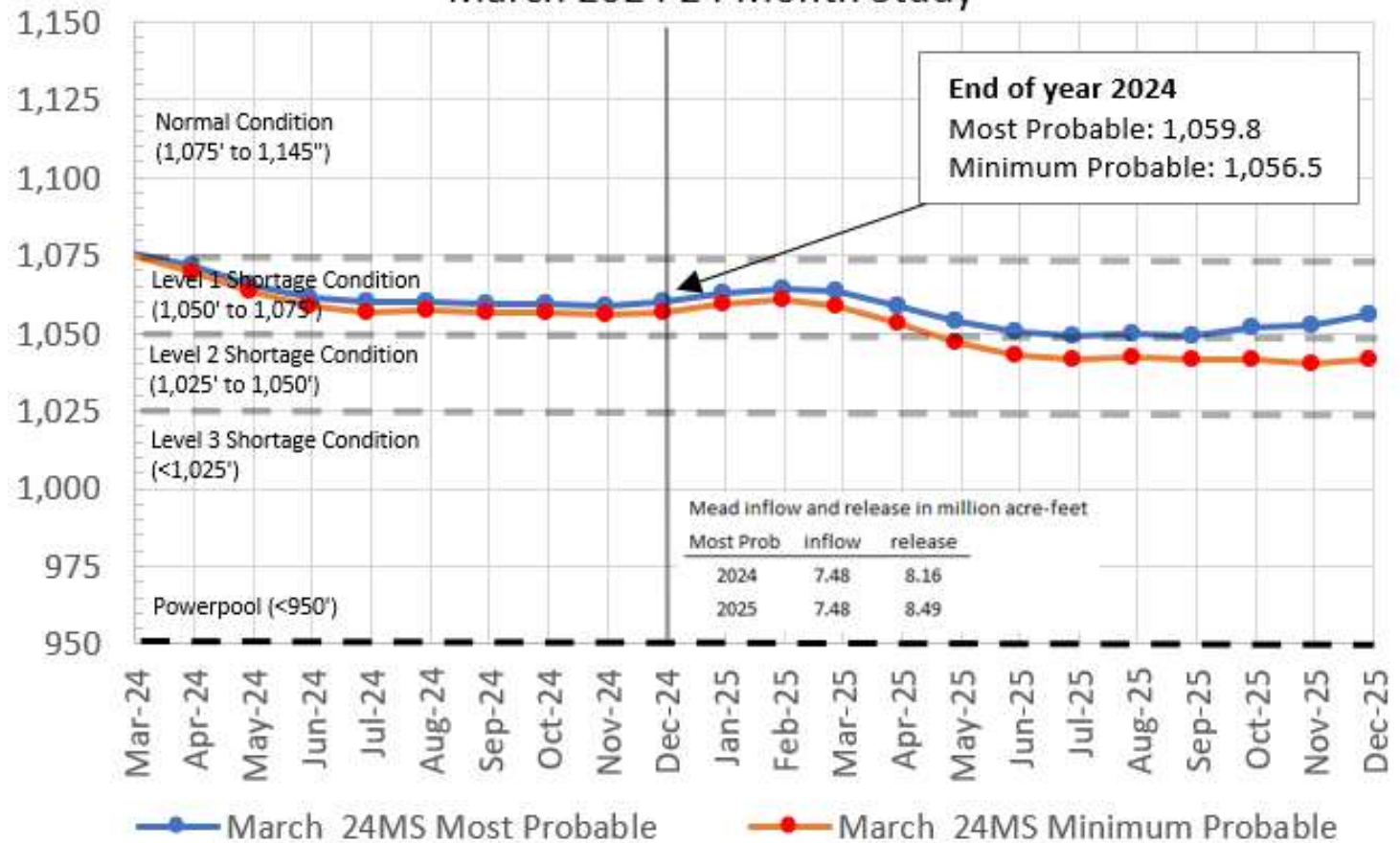
March 2024 24 Month Study





Lake Mead End-of-Month Elevations

March 2024 24 Month Study





Water Use In Southern Nevada

2024 January-February Southern Nevada Water Use¹

Acre-Feet

Nevada Annual Allocation	300,000
Drought Contingency Plan contribution	-8,000
Interim Guidelines Shortages	-13,000
Diversions	55,254
Return Flow Credits	43,554
Consumptive Use	11,691
¹ 2024 Consumptive use data is preliminary.	(-24% compared to last year)