### Hydrology Report – November 2024

#### Upper Basin Hydrology

- October was the start of the new water year (water year 2025).
- In October, the upper basin received 111% of average precipitation.
- Temperatures in the upper basin for August were 3 to 9 degrees F above normal.
- Snowpack accumulation is currently at 160% of normal (as of 11/8/2024).
- The Basin Forecast Center is estimating water year 2025 runoff at 8.6 million acre-feet or 90% of average.

#### **Current reservoir status**

- As of November 7, 2024, Lake Mead is at an elevation of **1,061.5** feet and has about 8.6 million acre-feet in storage (33% capacity).
- As of November 7, 2024, Lake Powell is at an elevation of 3,576.6 feet and has about 9.0 million acrefeet in storage (39% capacity).
- Total system storage for the upper and lower basin is around 24.8 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 <sup>1</sup>

• Southern Nevada's consumptive use for January-September of 2024 was 167,949 acre-feet, which is a 9% decrease compared to the three-year average.

### Reclamation's Lake Mead and Lake Powell Projections<sup>2</sup>

- Reclamation uses computer models to forecast reservoir elevations based on planned water use and anticipated runoff. The October 24-Month Study forecasts Lake Mead to be between 1,060.0 and 1,054.6 feet in elevation by the end of 2025.
- Reclamations October 24-Month Study is forecasting Lake Powell's elevation to be between 3,579.1 and 3,538.4 feet by the end of 2025.

<sup>&</sup>lt;sup>1</sup> 2024 consumptive use data is preliminary.

<sup>&</sup>lt;sup>2</sup> Reclamation modeling assumes the current operational guidelines and planned conservation activities.

# **Colorado River Commission of Nevada**

# Hydrology and River Updates

Warren Turkett

November 12, 2024



### **Precipitation and Temperature**



#### Lake Powell %Average Precipitation Water Year 2025

Area	Oct	Water Year
UC-Powell	111	111



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

## Snowpack





Lake Powell End-of-Month Elevations

November 7, 2024 elevation: 3,576.6 feet

### Lake Mead End-of-Month Elevations

### October 2024 24 Month Study



November 7, 2024 elevation: 1,061.5 feet



## Water Use In Southern Nevada

### 2024 January-September Southern Nevada Water Use<sup>1</sup> Acre-Feet

Nevada Annual Allocation	300,000
Drought Contingency Plan contribution	-8,000
Interim Guidelines Shortages	-13,000
Diversions	351,444
Return Flow Credits	183,494
<b>Consumptive Use</b> <sup>1</sup> 2024 Consumptive use data is preliminary.	167,949 (9% decrease compared to 3-year average)