# Colorado River Mid-term Modeling System Ensemble Output

**Run Information**: Start Month: , End Month: , Run Duration:

**Date:**

**Notes:** This report presents results from the Colorado River Mid-Term Modeling System ensemble mode. These results were generated by stakeholder analysis

**Explanation of Model Inputs**

The results of this model run represent the ensemble of outputs resulting from 30 hydrologic traces, provided by the Colorado Basin River Forecast Center (CBRFC). Each hydrologic trace represents an Upper Basin unregulated inflow projection that incorporates current hydrologic conditions as well as historic climatological data such as temperature and precipitation from the year listed on the chart axis or legend. For example, the projected hydrology in the “1981” trace would be based on historical climatological data from 1981 in the first year to 1986 in the final year of the trace. The 30 traces cover the time period of 1981 through 2010, inclusive.

Intervening flows below Glen Canyon Dam are not included in the ensemble forecast. Intervening flows below Glen Canyon Dam are resampled observed records over the same time period, 1981 through 2010.

**Fontenelle Reservoir – Inflow**

**Fontenelle Reservoir - Pool Elevation**

**Fontenelle Reservoir - Outflow**

**Flaming Gorge Reservoir – Unregulated Inflow**

**Yampa River - Inflow**

**Flaming Gorge Reservoir – Pool Elevation**

**Flaming Gorge Reservoir - Outflow**

**Blue Mesa Reservoir – Unregulated Inflow**

**Blue Mesa Reservoir - Pool Elevation**

**Crystal Reservoir - Outflow**

**Vallecito Reservoir – Inflow**

**Vallecito Reservoir – Pool Elevation**

**Navajo Reservoir – Modified Unregulated Inflow**

**Navajo Reservoir – Pool Elevation**

**Navajo Reservoir - Outflow**

**Lake Powell – Unregulated Inflow**

**Lake Powell - Pool Elevation**

**Lake Powell - Outflow**

**Lake Mead/Hoover Dam – Inflow**

**Lake Mead/Hoover Dam – Pool Elevation**

**Lake Mead/Hoover Dam – Outflow**

**Lake Mead/Hoover Dam Energy**

**Lake Mohave/Davis Dam – Outflow**

**Lake Mohave/Davis Dam - Energy**

**Lake Havasu/Parker Dam – Outflow**

**Lake Havasu/Parker Dam - Energy**

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|  | **Event or System Condition** |  |  |  |  |  |  |
| **Upper Basin - Lake Powell** | **Equalization Tier** |  |  |  |  |  |  |
| *Equalization - annual release > 8.23 maf* |  |  |  |  |  |  |
| *Equalization - annual release = 8.23 maf* |  |  |  |  |  |  |
| **Upper Elevation Balancing Tier** |  |  |  |  |  |  |
| *Upper Elevation Balancing - annual release > 8.23 maf* |  |  |  |  |  |  |
| *Upper Elevation Balancing - annual release = 8.23 maf* |  |  |  |  |  |  |
| *Upper Elevation Balancing - annual release < 8.23 maf* |  |  |  |  |  |  |
| **Mid-Elevation Release Tier** |  |  |  |  |  |  |
| *Mid-Elevation Balancing - annual release = 8.23 maf* |  |  |  |  |  |  |
| *Mid-Elevation Balancing - annual release = 7.48 maf* |  |  |  |  |  |  |
| **Lower Elevation Balancing Tier** |  |  |  |  |  |  |
| **Lower Basin - Lake Mead** | **Shortage Condition - any amount (Mead <= 1,075 ft)** |  |  |  |  |  |  |
| *Shortage - 1st level (Mead<= 1,075 and >= 1,050)* |  |  |  |  |  |  |
| *Shortage - 2nd level (Mead<1,050 and >= 1,025)* |  |  |  |  |  |  |
| *Shortage - 3rd level (Mead< 1,025)* |  |  |  |  |  |  |
| **Surplus Condition - any amount (Mead >= 1,145 ft)** |  |  |  |  |  |  |
| *Surplus - Flood Control* |  |  |  |  |  |  |
| **Normal or ICS Surplus Condition** |  |  |  |  |  |  |