

# Comparison of Current (August 2024) and Last Published (May 2024) CRMMS-ESP 5-Year Projections Chance of Lake Powell Falling Below Critical Reservoir Elevations in any Month of the Water Year (WY)

	Run	WY 2025	WY 2026	WY 2027 <sup>1</sup>	WY 2028 <sup>1</sup>	WY 2029 <sup>1</sup>
Lake Powell less than 3,525 feet	May 2024	0%	13%	13%	17%	13%
	<b>August 2024</b>	<b>0%</b>	<b>7%</b>	<b>13%</b>	<b>17%</b>	<b>13%</b>
	Difference	0%	-6%	0%	0%	0%
Lake Powell less than 3,490 feet (minimum power pool)	May 2024	0%	0%	0%	0%	0%
	<b>August 2024</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
	Difference	0%	0%	0%	0%	0%
Lake Powell less than 3,375 feet (dead pool = 3,370 feet)	May 2024	0%	0%	0%	0%	0%
	<b>August 2024</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
	Difference	0%	0%	0%	0%	0%

<sup>1</sup> For modeling purposes, simulated years beyond 2026 assume a continuation of the 2007 Interim Guidelines including the 2024 Supplement to the 2007 Interim Guidelines (no additional SEIS conservation is assumed to occur after 2026), the 2019 Colorado River Basin Drought Contingency Plans, and Minute 323, including the Binational Water Scarcity Contingency Plan. Except for certain provisions related to ICS recovery and Upper Basin demand management, operations under these agreements are in effect through 2026. Reclamation initiated the process to develop operations for post-2026 in June 2023, and the modeling assumptions described here are subject to change.



# Comparison of Current (August 2024) and Last Published (May 2024) CRMMS-ESP 5-Year Projections Chance of Lake Mead Falling Below Critical Reservoir Elevations in any Month of the Calendar Year

	Run	2025	2026	2027 <sup>1</sup>	2028 <sup>1</sup>	2029 <sup>1</sup>
Lake Mead less than 1,020 feet	May 2024	0%	0%	7%	13%	10%
	<b>August 2024</b>	<b>0%</b>	<b>0%</b>	<b>13%</b>	<b>13%</b>	<b>10%</b>
	Difference	0%	0%	6%	0%	0%
Lake Mead less than 1,000 feet	May 2024	0%	0%	0%	0%	3%
	<b>August 2024</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>3%</b>	<b>3%</b>
	Difference	0%	0%	0%	3%	0%
Lake Mead less than 950 feet (minimum power pool)	May 2024	0%	0%	0%	0%	0%
	<b>August 2024</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
	Difference	0%	0%	0%	0%	0%
Lake Mead less than 900 feet (dead pool = 895 feet)	May 2024	0%	0%	0%	0%	0%
	<b>August 2024</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
	Difference	0%	0%	0%	0%	0%

<sup>1</sup> For modeling purposes, simulated years beyond 2026 assume a continuation of the 2007 Interim Guidelines including the 2024 Supplement to the 2007 Interim Guidelines (no additional SEIS conservation is assumed to occur after 2026), the 2019 Colorado River Basin Drought Contingency Plans, and Minute 323, including the Binational Water Scarcity Contingency Plan. Except for certain provisions related to ICS recovery and Upper Basin demand management, operations under these agreements are in effect through 2026. Reclamation initiated the process to develop operations for post-2026 in June 2023, and the modeling assumptions described here are subject to change.



# Upper Basin – Lake Powell

## Percent of Traces with Event or System Condition<sup>1,2,5,6</sup>

### Results from August 2024 CRMMS-ESP (values in percent)

Event or System Condition	2025	2026	2027 <sup>3</sup>	2028 <sup>3</sup>	2029 <sup>3</sup>
Equalization Tier (Powell ≥ Equalization [EQ] Elevation)	0	7	17	20	20
<i>Equalization – annual release &gt; 8.23 maf</i>	0	7	17	20	20
<i>Equalization – annual release = 8.23 maf</i>	0	0	0	0	0
Upper Elevation Balancing Tier (Powell < EQ Elevation and ≥ 3,575 ft)	0	50	53	53	57
<i>Upper Elevation Balancing – annual release &gt; 8.23 maf</i>	0	50	53	50	43
<i>Upper Elevation Balancing – annual release = 8.23 maf</i>	0	0	0	3	13
<i>Upper Elevation Balancing – annual release &lt; 8.23 maf</i>	0	0	0	0	0
Mid-Elevation Release Tier (Powell < 3,575 and ≥ 3,525 ft)	100	40	20	13	10
<i>Mid-Elevation Release – annual release = 8.23 maf</i>	0	0	0	0	0
<i>Mid-Elevation Release – annual release = 7.48 maf</i>	100	40	20	13	10
Lower Elevation Balancing Tier (Powell < 3,525 ft)	0	3	10	13	13
<i>Lower Elevation Balancing – annual release &gt; 8.23 maf</i>	0	0	0	7	7
<i>Lower Elevation Balancing – annual release &lt; 8.23 maf</i>	0	3	10	7	7
<b>Release Adjustments to Avoid Declining Below 3,500 ft<sup>4</sup></b>	<b>0</b>	<b>3</b>	<b>10</b>	<b>10</b>	<b>13</b>
<i>Release Adjustment – annual release &lt; target water year release</i>	0	3	3	0	3
<i>Release Adjustment – annual release &lt; 7.00 maf</i>	0	0	0	0	3

#### Notes:

<sup>1</sup> Modeled operations include the 2007 Interim Guidelines, 2024 Supplement to the 2007 Interim Guidelines, Upper Basin Drought Response Operations, Lower Basin Drought Contingency Plan, Minutes 323, including the Binational Water Scarcity Contingency Plan, and Minute 330.

<sup>2</sup> Reservoir conditions were simulated using the August 2024 CRMMS in ensemble mode using the CBRFC unregulated inflow forecast ensemble (CRMMS-ESP) dated August 1, 2024.

<sup>3</sup> For modeling purposes, simulated years beyond 2026 assume a continuation of the 2007 Interim Guidelines including the 2024 Supplement to the 2007 Interim Guidelines (no additional SEIS conservation is assumed to occur after 2026), the 2019 Colorado River Basin Drought Contingency Plans, and Minute 323, including the Binational Water Scarcity Contingency Plan. Except for certain provisions related to ICS recovery and Upper Basin demand management, operations under these agreements are in effect through 2026. Reclamation initiated the process to develop operations for post-2026 in June 2023, and the modeling assumptions described here are subject to change.

<sup>4</sup> The 2024 Supplement to the 2007 Interim Guidelines may result in release adjustments in the Mid-Elevation Release and Lower Elevation Balancing Tiers if Lake Powell is projected to drop below 3,500 ft. Releases may be reduced, as needed, to not less than 6.0 maf from Lake Powell in the Water Year to maintain an elevation of 3,500 feet.

<sup>5</sup> Percentages shown in this table may not be representative of the full range of future possibilities that could occur with different modeling assumptions.

<sup>6</sup> Percentages shown may not sum to 100% due to round to the nearest percent.



# Lower Basin – Lake Mead

## Percent of Traces with Event or System Condition<sup>1,2,4,5</sup>

### Results from August 2024 CRMMS-ESP (values in percent)

Event or System Condition	2025	2026	2027 <sup>3</sup>	2028 <sup>3</sup>	2029 <sup>3</sup>
<b>Surplus Condition – any amount (Mead <math>\geq</math> 1,145 ft)</b>	0	0	0	0	3
Surplus – Flood Control	0	0	0	0	0
<b>Normal or ICS Surplus Condition (Mead <math>&lt;</math> 1,145 and <math>&gt;</math> 1,075 ft)</b>	0	7	17	20	23
Recovery of DCP ICS / Mexico's Water Savings (Mead $>/\geq$ 1,110 ft)	0	0	0	7	7
DCP Contribution / Mexico's Water Savings (Mead $\leq$ 1,090 and $>$ 1,075 ft)	0	7	10	7	3
<b>Shortage Condition – any amount (Mead <math>\leq</math> 1,075 ft)</b>	100	93	83	80	73
<i>Shortage / Reduction – 1<sup>st</sup> level (Mead <math>\leq</math> 1,075 and <math>\geq</math> 1,050)</i>	100	93	57	53	50
DCP Contribution / Mexico's Water Savings (Mead $\leq$ 1,075 and $>$ 1,050 ft)	100	93	57	53	50
<i>Shortage / Reduction – 2<sup>nd</sup> level (Mead <math>&lt;</math> 1,050 and <math>\geq</math> 1,025)</i>	0	0	27	13	13
DCP Contribution / Mexico's Water Savings (Mead $\leq$ 1,050 and $>$ 1,045 ft)	0	0	7	3	3
DCP Contribution / Mexico's Water Savings (Mead $\leq$ 1,045 and $>$ 1,040 ft)	0	0	7	3	0
DCP Contribution / Mexico's Water Savings (Mead $\leq$ 1,040 and $>$ 1,035 ft)	0	0	10	3	3
DCP Contribution / Mexico's Water Savings (Mead $\leq$ 1,035 and $>$ 1,030 ft)	0	0	0	0	3
DCP Contribution / Mexico's Water Savings (Mead $\leq$ 1,030 and $\geq/>$ 1,025 ft)	0	0	3	3	3
<i>Shortage / Reduction – 3<sup>rd</sup> level (Mead <math>&lt;</math> 1,025)</i>	0	0	0	13	10
DCP Contribution / Mexico's Water Savings (Mead $</\leq$ 1,025 ft)	0	0	0	13	10

#### Notes:

<sup>1</sup> Modeled operations include the 2007 Interim Guidelines, 2024 Supplement to the 2007 Interim Guidelines, Upper Basin Drought Response Operations, Lower Basin Drought Contingency Plan, Minutes 323, including the Binational Water Scarcity Contingency Plan, and Minute 330.

<sup>2</sup> Reservoir conditions were simulated using the August 2024 CRMMS in ensemble mode using the CBRFC unregulated inflow forecast ensemble (CRMMS-ESP) dated August 1, 2024.

<sup>3</sup> For modeling purposes, simulated years beyond 2026 assume a continuation of the 2007 Interim Guidelines including the 2024 Supplement to the 2007 Interim Guidelines (no additional SEIS conservation is assumed to occur after 2026), the 2019 Colorado River Basin Drought Contingency Plans, and Minute 323, including the Binational Water Scarcity Contingency Plan. Except for certain provisions related to ICS recovery and Upper Basin demand management, operations under these agreements are in effect through 2026. Reclamation initiated the process to develop operations for post-2026 in June 2023, and the modeling assumptions described here are subject to change.

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<sup>5</sup> Percentages shown may not sum to 100% due to round to the nearest percent.

