

Upper Basin – Lake Powell

Percent of Traces with Event or System Condition

Results from April 2021 CRMMS MTOM Mode/CRSS using the **Full Hydrology** and **Stress Test Hydrology** (values in percent)

Event or System Condition	2021	2022	2023	2024	2025	2021	2022	2023	2024	2025
Equalization Tier (Powell ≥ Equalization [EQ] Elevation)	0	0	6	12	17	0	0	0	3	7
<i>Equalization – annual release > 8.23 maf</i>	0	0	6	12	17	0	0	0	3	7
<i>Equalization – annual release = 8.23 maf</i>	0	0	0	0	0	0	0	0	0	0
Upper Elevation Balancing Tier (Powell < EQ Elevation and ≥ 3,575 ft)	100	3	36	49	50	100	3	31	41	39
<i>Upper Elevation Balancing – annual release > 8.23 maf</i>	0	2	35	45	44	0	2	30	39	36
<i>Upper Elevation Balancing – annual release = 8.23 maf</i>	100	<1	1	4	5	100	<1	<1	2	3
<i>Upper Elevation Balancing – annual release < 8.23 maf</i>	0	0	0	<1	0	0	0	0	<1	0
Mid-Elevation Release Tier (Powell < 3,575 and ≥ 3,525 ft)	0	91	51	31	23	0	91	65	45	35
<i>Mid-Elevation Release – annual release = 8.23 maf</i>	0	0	0	<1	2	0	0	0	0	5
<i>Mid-Elevation Release – annual release = 7.48 maf</i>	0	91	51	30	21	0	91	65	45	30
Lower Elevation Balancing Tier (Powell < 3,525 ft)	0	6	7	8	10	0	6	4	11	18
<i>Below Minimum Power Pool (Powell < 3,490 ft)</i>	0	0	1	4	6	0	0	<1	9	12

Notes:

¹ Modeled operations include the 2007 Interim Guidelines, Upper Basin Drought Response Operations, Lower Basin Drought Contingency Plan, and Minute 323, including the Binational Water Scarcity Contingency Plan.

² Reservoir initial conditions on March 31, 2021 were simulated using the April 2021 MTOM based on the CBRFC unregulated inflow forecast ensemble dated April 2, 2021.

³ Each of the 35 initial conditions from MTOM were coupled with 114 hydrologic inflow sequences from the Full Hydrology that resamples the observed natural flow record from 1906-2019 for a total of 3,990 traces analyzed and with 32 hydrologic inflow sequences from the Stress Test Hydrology that resamples the observed natural flow record from 1988-2019 for a total of 1,120 traces analyzed.

⁴ Percentages shown in this table may not be representative of the full range of future possibilities that could occur with different modeling assumptions.

⁵ Percentages shown may not sum to 100% due to rounding to the nearest percent.

Lower Basin – Lake Mead

Percent of Traces with Event or System Condition

Results from April 2021 CRMMS MTOM Mode/CRSS using the **Full Hydrology** and **Stress Test Hydrology** (values in percent)

Event or System Condition	2021	2022	2023	2024	2025	2021	2022	2023	2024	2025
Surplus Condition – any amount (Mead ≥ 1,145 ft)	0	0	0	1	4	0	0	0	0	0
Surplus – Flood Control	0	0	0	0	<1	0	0	0	0	0
Normal or ICS Surplus Condition (Mead < 1,145 and > 1,075 ft)	100	3	6	17	19	100	3	8	9	6
Recovery of DCP ICS / Mexico’s Water Savings (Mead >/≥ 1,110 ft)	0	0	0	4	9	0	0	0	0	<1
DCP Contribution / Mexico’s Water Savings (Mead ≤ 1,090 and > 1,075 ft)	100	3	5	11	10	100	3	7	9	3
Shortage Condition – any amount (Mead ≤ 1,075 ft)	0	97	94	82	77	0	97	92	91	94
<i>Shortage / Reduction – 1st level (Mead ≤ 1,075 and ≥ 1,050)</i>	0	97	81	37	34	0	97	71	31	33
DCP Contribution / Mexico’s Water Savings (Mead ≤ 1,075 and > 1,050 ft)	0	97	81	37	34	0	97	71	31	33
<i>Shortage / Reduction – 2nd level (Mead < 1,050 and ≥ 1,025)</i>	0	0	13	44	32	0	0	21	60	36
DCP Contribution / Mexico’s Water Savings (Mead ≤ 1,050 and > 1,045 ft)	0	0	11	9	6	0	0	17	6	7
DCP Contribution / Mexico’s Water Savings (Mead ≤ 1,045 and > 1,040 ft)	0	0	2	9	6	0	0	4	11	6
DCP Contribution / Mexico’s Water Savings (Mead ≤ 1,040 and > 1,035 ft)	0	0	<1	11	8	0	0	0	16	6
DCP Contribution / Mexico’s Water Savings (Mead ≤ 1,035 and > 1,030 ft)	0	0	0	10	7	0	0	0	17	6
DCP Contribution / Mexico’s Water Savings (Mead ≤ 1,030 and ≥/> 1,025 ft)	0	0	0	5	6	0	0	0	9	10
<i>Shortage / Reduction – 3rd level (Mead < 1,025)</i>	0	0	0	1	11	0	0	0	<1	25
DCP Contribution / Mexico’s Water Savings (Mead </≤ 1,025 ft)	0	0	0	1	11	0	0	0	<1	25

Notes:

¹ Modeled operations include the 2007 Interim Guidelines, Upper Basin Drought Response Operations, Lower Basin Drought Contingency Plan, and Minute 323, including the Binational Water Scarcity Contingency Plan.

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