

Percent of Traces with Event or System Condition
Results from April 2018 MTOM/CRSS^{1,2,3,4,5} (values in percent)

	Event or System Condition	2019	2020	2021	2022	2023
Upper Basin – Lake Powell	Equalization Tier	2	15	17	20	24
	<i>Equalization – annual release > 8.23 maf</i>	2	15	17	20	22
	<i>Equalization – annual release = 8.23 maf</i>	0	0	0	0	2
	Upper Elevation Balancing Tier	96	51	53	52	45
	<i>Upper Elevation Balancing – annual release > 8.23 maf</i>	76	44	44	43	35
	<i>Upper Elevation Balancing – annual release = 8.23 maf</i>	19	6	8	9	9
	<i>Upper Elevation Balancing – annual release < 8.23 maf</i>	0	1	1	0	1
	Mid-Elevation Release Tier	3	34	21	16	18
	<i>Mid-Elevation Release – annual release = 8.23 maf</i>	0	0	0	1	2
	<i>Mid-Elevation Release – annual release = 7.48 maf</i>	3	34	21	15	16
	Lower Elevation Balancing Tier	0	<1	8	11	13
Lower Basin – Lake Mead	Shortage Condition – any amount (Mead ≤ 1,075 ft)	N	52	64	68	65
	<i>Shortage – 1st level (Mead ≤ 1,075 and ≥ 1,050)</i>	0	51	43	38	29
	<i>Shortage – 2nd level (Mead < 1,050 and ≥ 1,025)</i>	0	1	21	23	24
	<i>Shortage – 3rd level (Mead < 1,025)</i>	0	0	<1	6	12
	Surplus Condition – any amount (Mead ≥ 1,145 ft)	0	0	3	6	10
	<i>Surplus – Flood Control</i>	0	0	0	1	2
	Normal or ICS Surplus Condition	100	48	33	26	25

¹ Reservoir initial conditions based on results from 35 simulations of December 31, 2018 conditions using the Mid-term Probabilistic Operations Models. MTOM uses the April 3, 2018 unregulated inflow forecast from the CBRFC.

² Each of the 35 initial conditions were coupled with 110 hydrologic inflow sequences based on resampling of the observed natural flow record from 1906-2015 for a total of 3,850 traces analyzed.

³ Percentages shown may not sum to 100% due to rounding to the nearest percent.

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

⁵ The chance of a Lower Basin Shortage in calendar year 2019 is negligible.