Upper Basin – Lake Powell
Percent of Traces with Event or System Condition
Results from April 2020 MTOM/CRSS using the Full Hydrology and Stress Test Hydrology (values in percent)

Event or System Condition	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Equalization Tier (Powell ≥ Equalization [EQ] Elevation)	**0**	**7**	**21**	**21**	**25**	**0**	**2**	**6**	**10**	**13**
Equalization – annual release > 8.23 maf	*0*	*7*	*21*	*21*	*25*	*0*	*2*	*6*	*10*	*13*
Equalization – annual release = 8.23 maf	*0*	*0*	*<1*	*<1*	*<1*	*0*	*0*	*0*	*0*	*0*
Upper Elevation Balancing Tier (Powell < EQ Elevation and ≥ 3,575 ft)	**100**	**93**	**65**	**59**	**56**	**100**	**98**	**72**	**56**	**50**
Upper Elevation Balancing – annual release > 8.23 maf	*0*	*38*	*39*	*40*	*37*	*0*	*45*	*46*	*42*	*39*
Upper Elevation Balancing – annual release = 8.23 maf	*100*	*55*	*26*	*20*	*18*	*100*	*53*	*26*	*14*	*11*
Upper Elevation Balancing – annual release < 8.23 maf	*0*	*0*	*<1*	*<1*	*1*	*0*	*0*	*<1*	*0*	*<1*
Mid-Elevation Release Tier (Powell < 3,575 and ≥ 3,525 ft)	**0**	**0**	**14**	**19**	**18**	**0**	**0**	**22**	**33**	**31**
Mid-Elevation Release – annual release = 8.23 maf	*0*	*0*	*0*	*0*	*<1*	*0*	*0*	*0*	*0*	*0*
Mid-Elevation Release – annual release = 7.48 maf	*0*	*0*	*14*	*19*	*18*	*0*	*0*	*22*	*33*	*31*
Lower Elevation Balancing Tier (Powell < 3,525 ft)	**0**	**0**	**0**	**<1**	**1**	**0**	**0**	**0**	**<1**	**6**
Below Minimum Power Pool (Powell < 3,490 ft)	0	0	0	0	<1	0	0	0	0	<1

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 December 31, 2020 were simulated using the April 2020 MTOM based on the CRRFC unregulated inflow forecast ensemble dated April 3, 2020.
[3] Each of the 35 initial conditions from MTOM were coupled with 113 hydrologic inflow sequences from the Full Hydrology that resamples the observed natural flow record from 1906-2018 for a total of 3955 traces analyzed and with 31 hydrologic inflow sequences from the Stress Test Hydrology that resamples the observed natural flow record from 1988-2018 for a total of 1,085 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 2020 MTOM/CRSS using the Full Hydrology and Stress Test Hydrology (values in percent)

Event or System Condition	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Surplus Condition – any amount (Mead ≥ 1,145 ft)	**0**	**0**	**<1**	**6**	**10**	**0**	**0**	**0**	**<1**	**1**
Surplus – Flood Control	0	0	0	<1	2	0	0	0	0	0
Normal or ICS Surplus Condition (Mead < 1,145 and > 1,075 ft)	**100**	**100**	**91**	**63**	**53**	**100**	**100**	**88**	**53**	**44**
Recovery of DCP ICS / Mexico's Water Savings (Mead >/≥ 1,110 ft)	0	0	5	15	21	0	0	1	4	8
DCP Contribution / Mexico's Water Savings (Mead ≤ 1,090 and > 1,075 ft)	100	94	77	44	34	100	94	78	41	32
Shortage Condition – any amount (Mead ≤ 1,075 ft)	**0**	**N**	**9**	**31**	**37**	**0**	**N**	**12**	**47**	**55**
Shortage / Reduction – 1st level (Mead ≤ 1,075 and ≥ 1,050)	*0*	*0*	*9*	*30*	*28*	*0*	*0*	*12*	*44*	*32*
DCP Contribution / Mexico's Water Savings (Mead ≤ 1,075 and > 1,050 ft)	0	0	9	30	28	0	0	12	44	32
Shortage / Reduction – 2nd level (Mead < 1,050 and ≥ 1,025)	*0*	*0*	*0*	*1*	*9*	*0*	*0*	*0*	*3*	*23*
DCP Contribution / Mexico's Water Savings (Mead ≤ 1,050 and > 1,045 ft)	0	0	0	1	3	0	0	0	2	5
DCP Contribution / Mexico's Water Savings (Mead ≤ 1,045 and > 1,040 ft)	0	0	0	<1	2	0	0	0	<1	5
DCP Contribution / Mexico's Water Savings (Mead ≤ 1,040 and > 1,035 ft)	0	0	0	0	2	0	0	0	0	7
DCP Contribution / Mexico's Water Savings (Mead ≤ 1,035 and > 1,030 ft)	0	0	0	0	1	0	0	0	0	4
DCP Contribution / Mexico's Water Savings (Mead ≤ 1,030 and ≥/> 1,025 ft)	0	0	0	0	1	0	0	0	0	3
Shortage / Reduction – 3rd level (Mead < 1,025)	*0*	*0*	*0*	*0*	*<1*	*0*	*0*	*0*	*0*	*0*
DCP Contribution / Mexico's Water Savings (Mead </≤ 1,025 ft)	0	0	0	0	<1	0	0	0	0	0

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 December 31, 2020 were simulated using the April 2020 MTOM based on the CRRFC unregulated inflow forecast ensemble dated April 3, 2020.
[3] Each of the 35 initial conditions from MTOM were coupled with 113 hydrologic inflow sequences from the Full Hydrology that resamples the observed natural flow record from 1906-2018 for a total of 3955 traces analyzed and with 31 hydrologic inflow sequences from the Stress Test Hydrology that resamples the observed natural flow record from 1988-2018 for a total of 1,085 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.
[6] The chance of a Lower Basin Shortage in 2021 is negligible.

BUREAU OF RECLAMATION