# COLORADO RIVER BASIN UPDATE AND STATUS

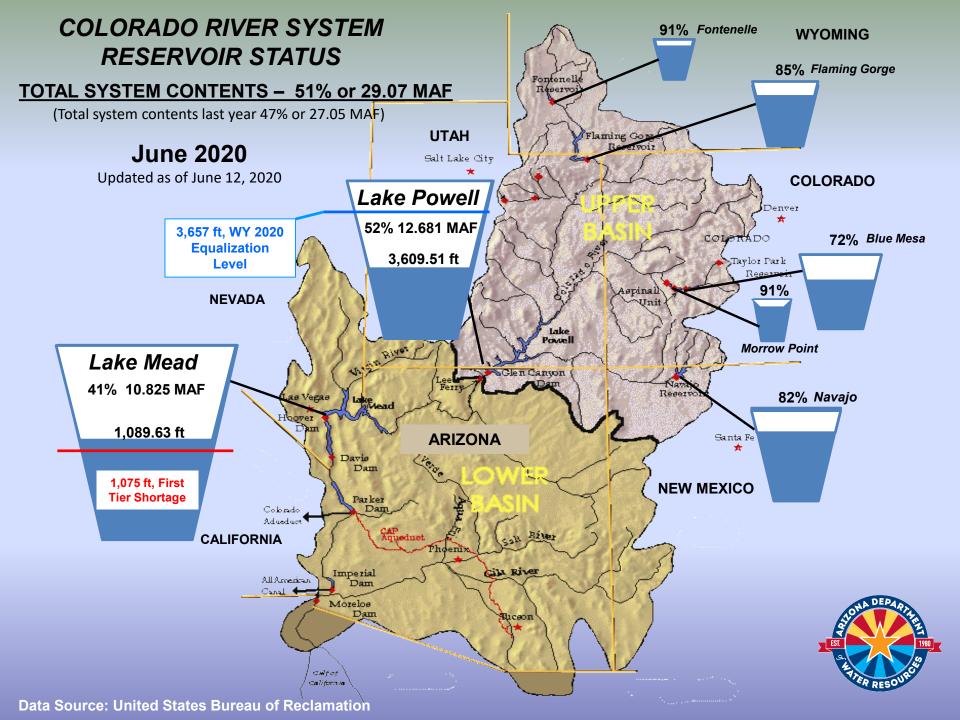
Presented to

## Arizona Water Banking Authority June 17, 2020

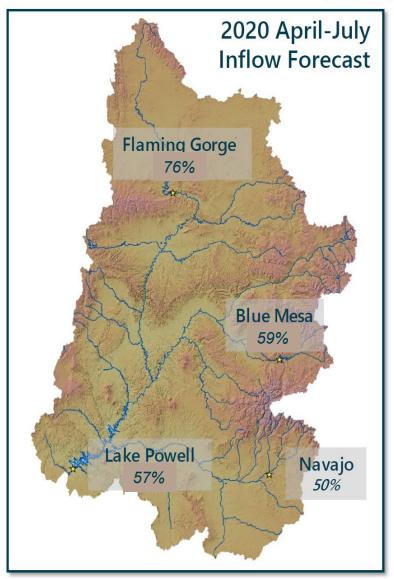








### CBRFC Unregulated Inflow Forecast Dated June 3, 2020

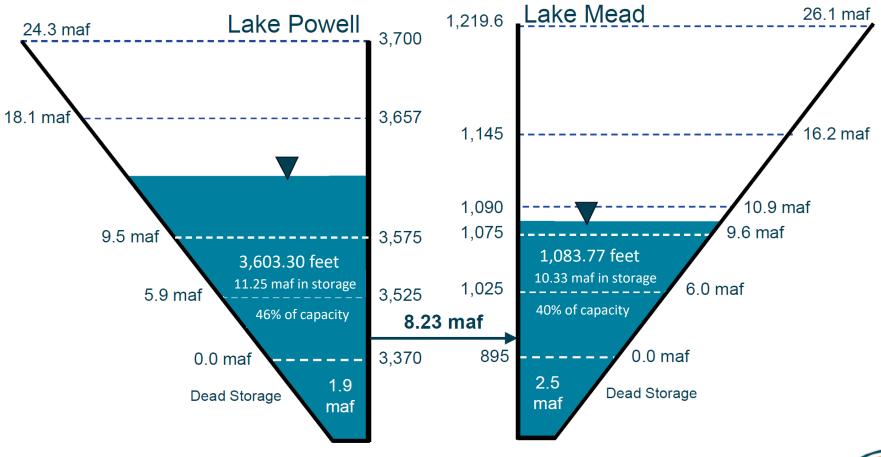


Powell Unregulated Inflow Forecast									
Month/Period	Inflow (kaf)	Percent of Average							
Apr 2020 (Observed)	475	45							
May 2020 (Observed)	1,541	66							
Jun 2020	1,650	62							
Jul 2020	434	40							
2020 Apr-Jul	4,100	57							
WY 2020	6,762	62							

#### **End of Water Year 2020 Projections**

June 2020 24-Month Study Most Probable Inflow Scenario<sup>1</sup>

Projected Lake Powell Unregulated Inflow = 6.762 maf (62% of average)

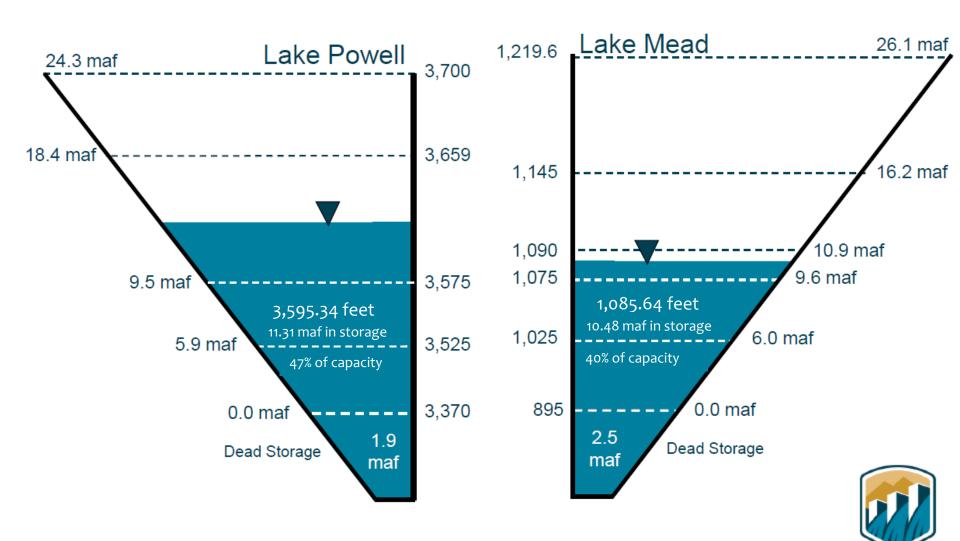




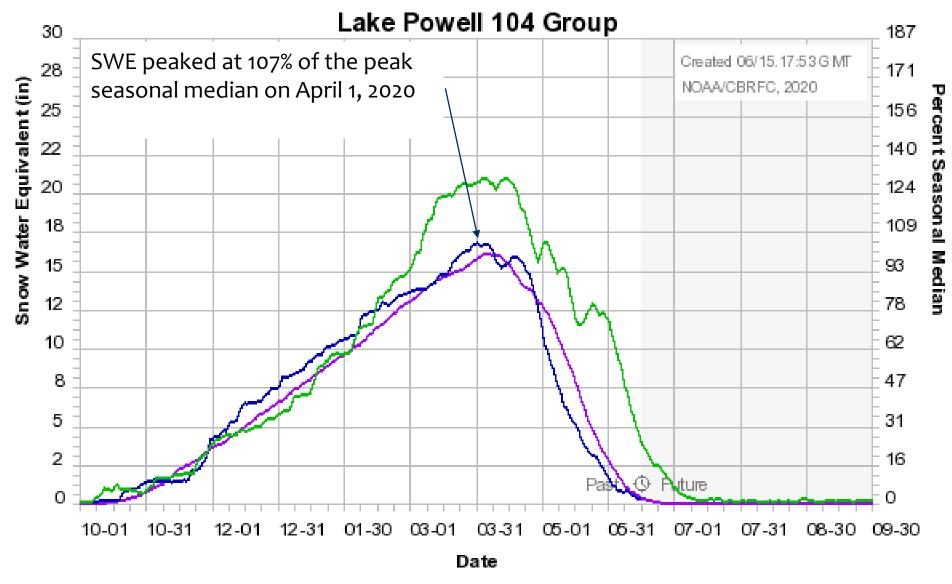
#### **End of Calendar Year 2020 Projections**

June 2020 24-Month Study Most Probable Inflow Scenario<sup>1</sup>

Based on a Lake Powell release of 8.23 maf in WY 2020 & 9.00 maf in WY 2021



Colorado Basin River Forecast Center



Median 1981-2010 - 2020 - 2019 -

### 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 – 2 <sup>nd</sup> 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 – 3 <sup>rd</sup> level (Mead < 1,025)	0	0	0	0	<1	0	0	0	0	0
DCP Contribution / Mexico's Water Savings (Mead ≤ 1,025 ft)</td <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>&lt;1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	0	0	0	0	<1	0	0	0	0	0

Notes:



<sup>&</sup>lt;sup>1</sup> 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. <sup>2</sup> 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.

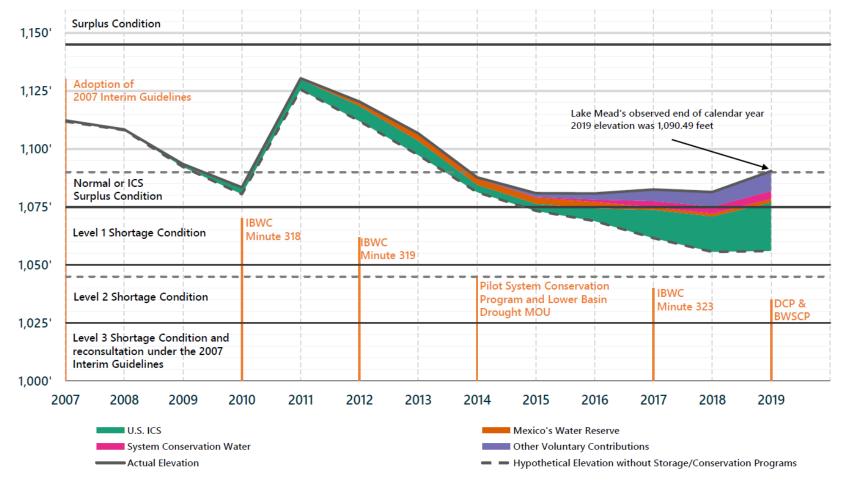
<sup>&</sup>lt;sup>3</sup> Each of the 35 initial conditions from MTOM were coupled with 113 hydrologic inflow sequences from the Full Hydrology that resamples the observed natural flow record from 1906-2018 for a total of 3955 traces analyzed and with 31 hydrologic inflow sequences from the Stress Test Hydrology that resamples the observed natural flow record from 1988-2018 for a total of 1,085 traces analyzed.

<sup>&</sup>lt;sup>4</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>&</sup>lt;sup>5</sup> Percentages shown may not sum to 100% due to rounding to the nearest percent.

<sup>&</sup>lt;sup>6</sup>The chance of a Lower Basin Shortage in 2021 is negligible.

#### Lake Mead Storage and Conservation 2007-2019





End of calendar year 2019 balances of U.S. ICS and Mexico's Water Reserve, system conservation water, and other voluntary contributions to Lake Mead are provisional and subject to change.