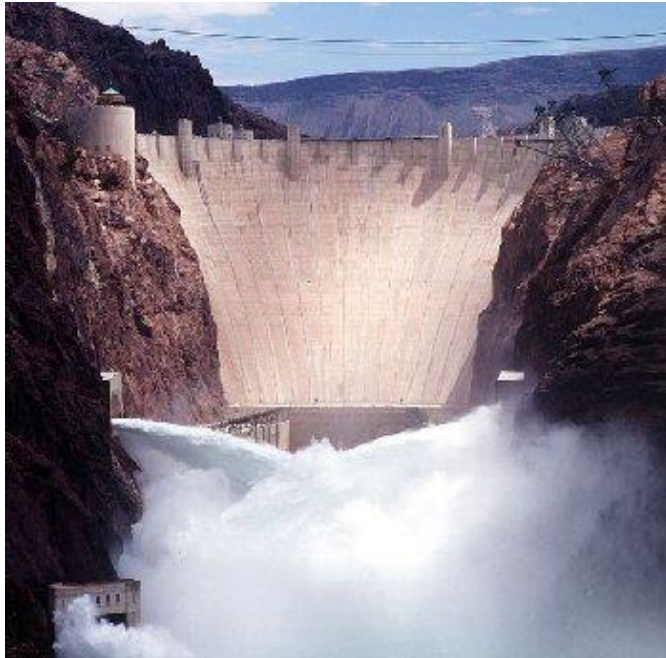


COLORADO RIVER BASIN STATUS UPDATE

Presented to:
Arizona Water Banking Authority

September 13, 2022



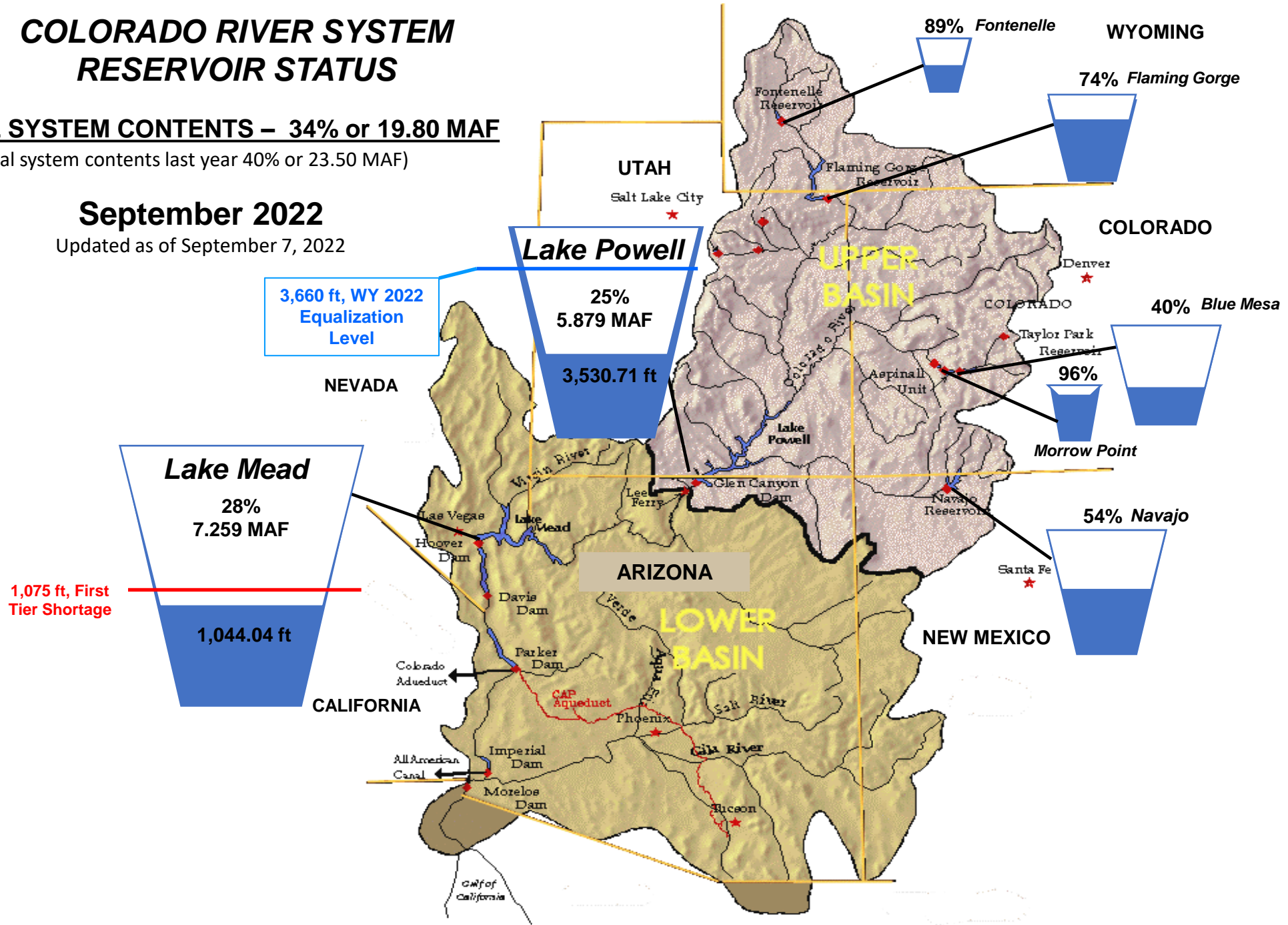
COLORADO RIVER SYSTEM RESERVOIR STATUS

TOTAL SYSTEM CONTENTS – 34% or 19.80 MAF

(Total system contents last year 40% or 23.50 MAF)

September 2022

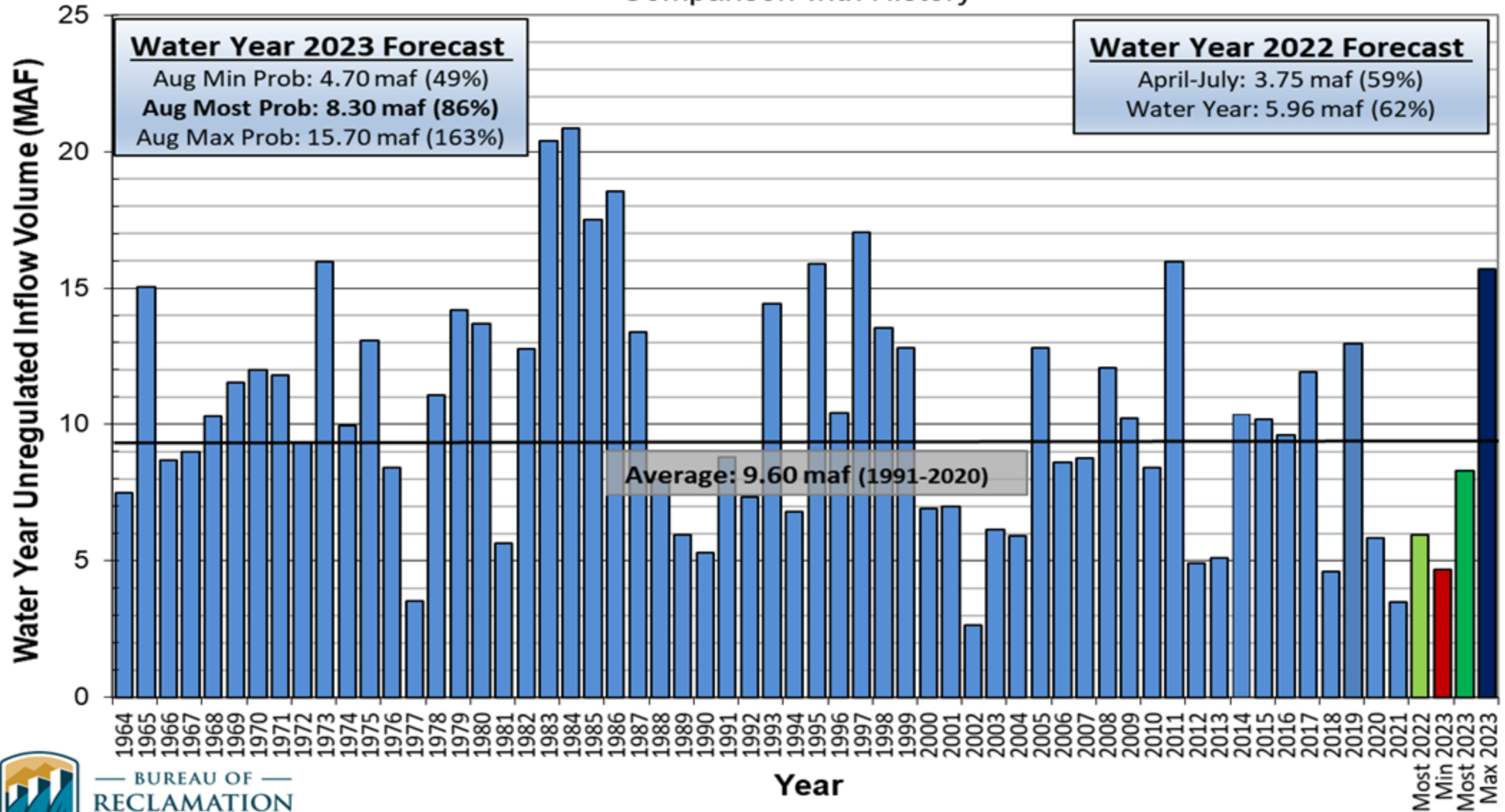
Updated as of September 7, 2022



Lake Powell Unregulated Inflow

Water Year 2022 and 2023 Forecast *(issued August 2)*

Comparison with History



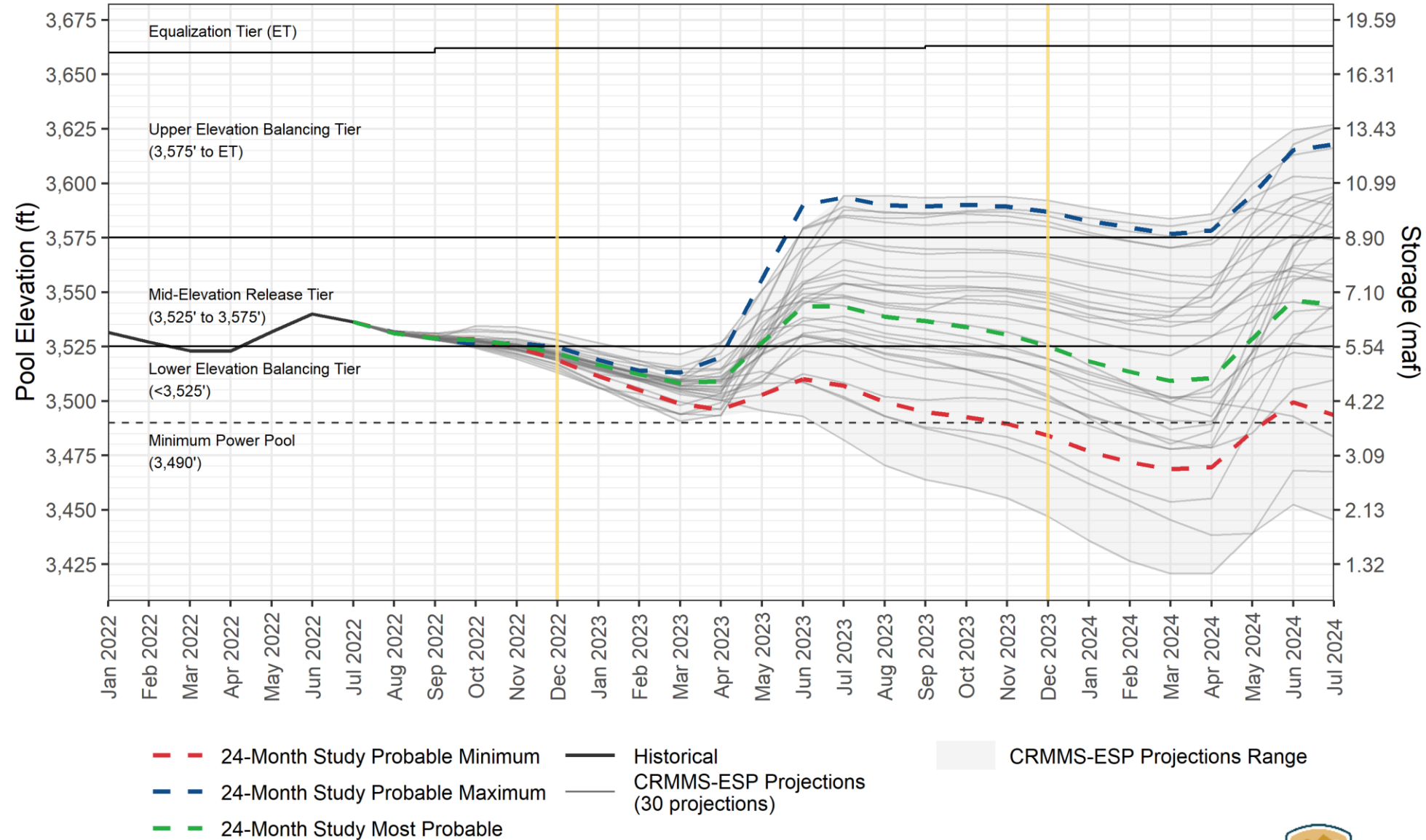
BUREAU OF RECLAMATION

Year

Most 2022
 Min 2023
 Most 2023
 Max 2023

Lake Powell End-of-Month Elevations¹

CRMMS Projections from August 2022



End of CY 2022 Projections

Most Probable:
3,521.84 feet (23% full)

Probable Min to Max Range:
3,518.75 to 3,524.72 feet

End of CY 2023 Projections

Most Probable:
3,525.07 feet (24% full)

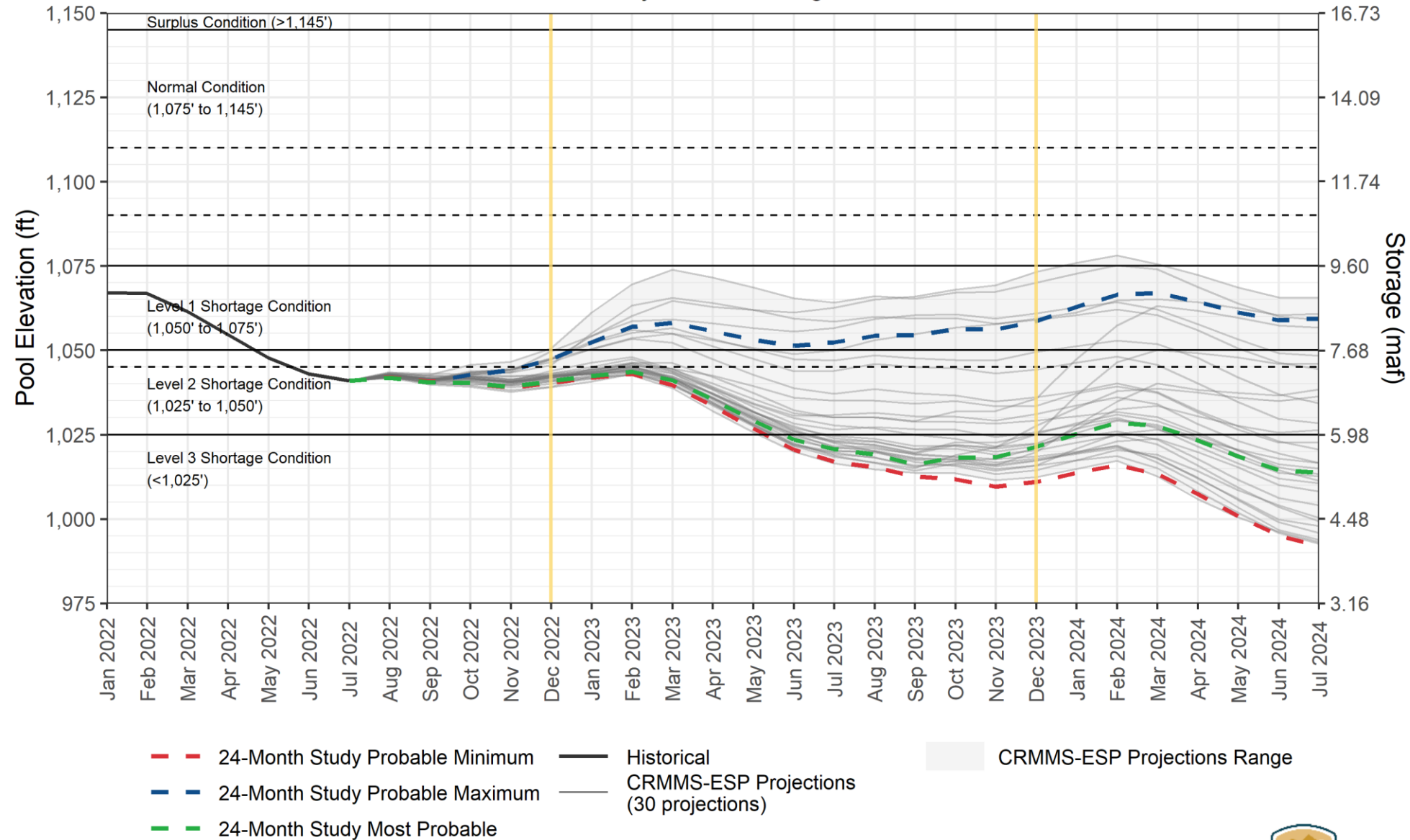
Probable Min to Max Range:
3,484.06 to 3,586.78 feet

¹ Projected Lake Powell end-of-month physical elevations from the latest CRMMS-ESP and 24-Month Study inflow scenarios.



Lake Mead End-of-Month Elevations¹

CRMMS Projections from August 2022



End of CY 2022 Projections

Most Probable:
1,040.78 feet (27% full)

Probable Min to Max Range:
1,040.25 to 1,047.39 feet

End of CY 2023 Projections

Most Probable:
1,021.39 feet (22% full)

Probable Min to Max Range:
1,010.95 to 1,058.63 feet

¹ Projected Lake Mead end-of-month physical elevations from the latest CRMMS-ESP and 24-Month Study inflow scenarios.



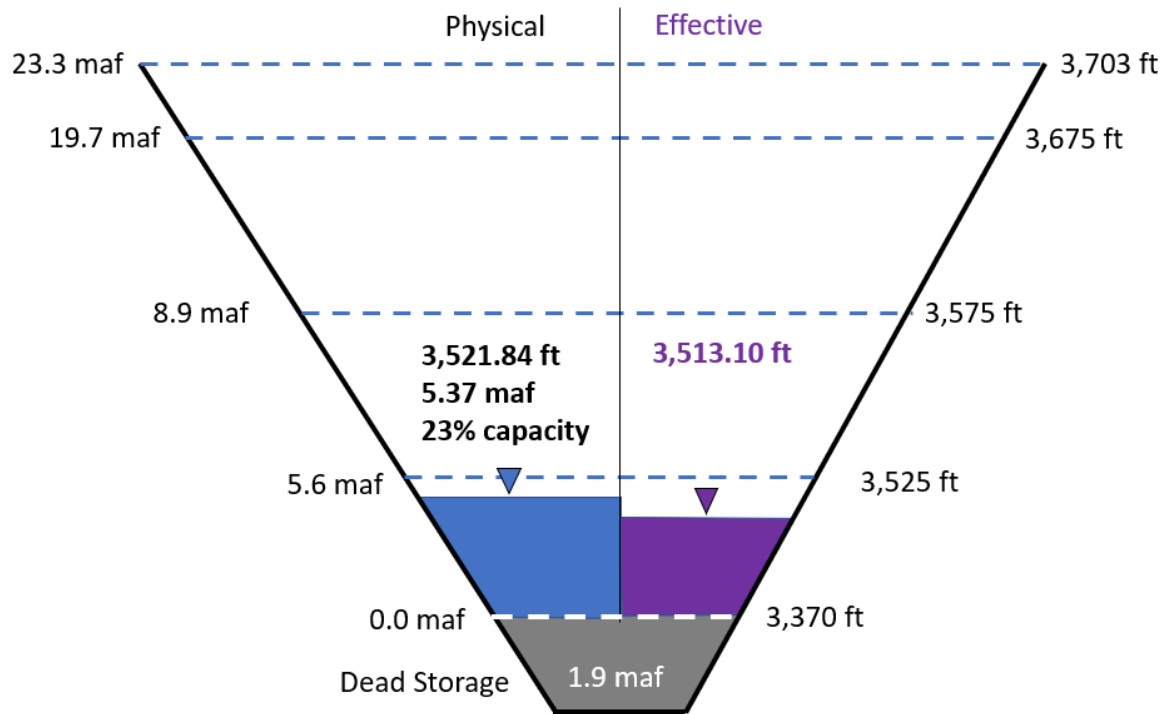
Arizona 500+ Plan Activity (August 24-Month Study)	2021	2022 (Projected)	2023 (Projected)
CAP ICS delivery offset	6,147	19,604	-18,400
Gila River Indian Community System Conservation	40,000	50,937	0
Gila River Indian Community ICS Creation	0	78,565	0
Colorado River Indian Tribes System Conservation	4,685	4,685	0
CAWCD System Conservation	0	35,506	0
YMIDD System Conservation	0	8,544	13,670
MVIDD System Conservation	0	9,592	9,592
Total Arizona 500+ Plan Activity	50,832	207,433	4,862

Additional 500+ Plan Activity	2021	2022 (Projected)	2023 (Projected)
MWD ICS delivery offset and/or creation	58,134	-4,578	-161,978
PVID System Conservation	12,305	50,800	58,000
SNWA ICS creation	12,832	15,000	15,000
Total CA and NV 500+ Plan	83,271	61,222	-88,978
Total LB 500+ Plan Activity - Modeled	134,103	268,655	-84,116
Total LB 500+ Plan Activity - Modeled (Cumulative)		402,758	318,642

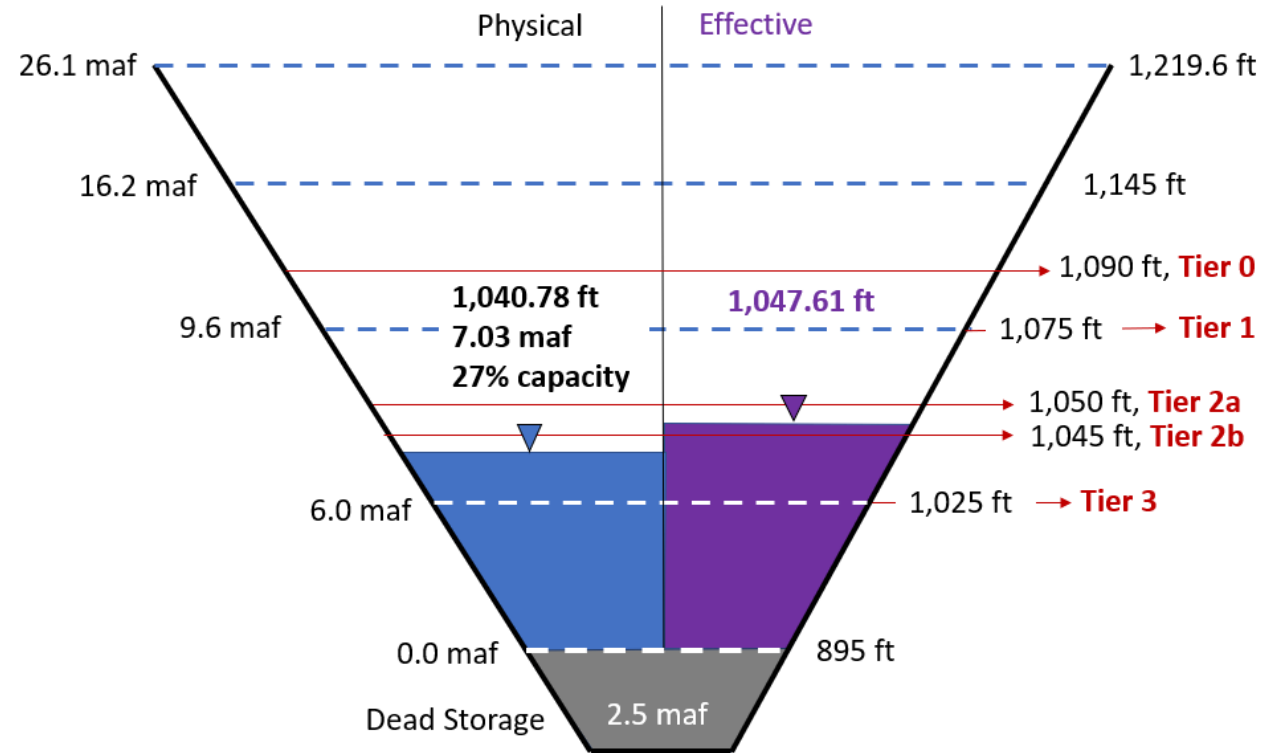
End of Calendar Year 2022 Projections

August 2022 24-Month Study Most Probable Inflow Scenario

Lake Powell



Lake Mead



Lower Colorado River Tier 2a Shortage in 2023

On Tuesday, August 16th, Camille Touton, Commissioner of the Bureau of Reclamation, announced Lake Mead will operate in a Tier 2a Shortage Condition in 2023. Tier 2a reductions include:

- Arizona: 592,000 acre-feet, which is approximately 21% of the state's annual apportionment
- Nevada: 25,000 acre-feet, which is 8% of the state's annual apportionment
- Mexico: 104,000 acre-feet, which is approximately 7% of the country's annual allotment
- There is no required water savings contribution for California in 2023 under this operating condition.

2007 Interim Guidelines, Minute 323, Lower Basin Drought Contingency Plan, and Binational Water Scarcity Contingency Plan

Total Volumes (kaf)

- Tier 1 →
- Tier 2a →
- Tier 2b →
- Tier 2c →
- Tier 2d →
- Tier 2e →
- Tier 3 →

Lake Mead Elevation (feet msl)	2007 Interim Guidelines Shortages		Minute 323 Delivery Reductions	Total Combined Reductions	DCP Water Savings Contributions			Binational Water Scarcity Contingency Plan Savings	Combined Volumes by Country <i>US: (2007 Interim Guidelines Shortages + DCP Contributions)</i> <i>Mexico: (Minute 323 Delivery Reductions + Binational Water Scarcity Contingency Plan Savings)</i>					Total Combined Volumes
	AZ	NV	Mexico	<i>Lower Basin States + Mexico</i>	AZ	NV	CA	Mexico	AZ Total	NV Total	CA Total	<i>Lower Basin States Total</i>	<i>Mexico Total</i>	<i>Lower Basin States + Mexico</i>
1,090 - 1,075	0	0	0	0	192	8	0	41	192	8	0	200	41	241
1,075 - 1050	320	13	50	383	192	8	0	30	512	21	0	533	80	613
1,050 - 1,045	400	17	70	487	192	8	0	34	592	25	0	617	104	721
1,045 - 1,040	400	17	70	487	240	10	200	76	640	27	200	867	146	1,013
1,040 - 1,035	400	17	70	487	240	10	250	84	640	27	250	917	154	1,071
1,035 - 1,030	400	17	70	487	240	10	300	92	640	27	300	967	162	1,129
1,030 - 1,025	400	17	70	487	240	10	350	101	640	27	350	1,017	171	1,188
<1,025	480	20	125	625	240	10	350	150	720	30	350	1,100	275	1,375

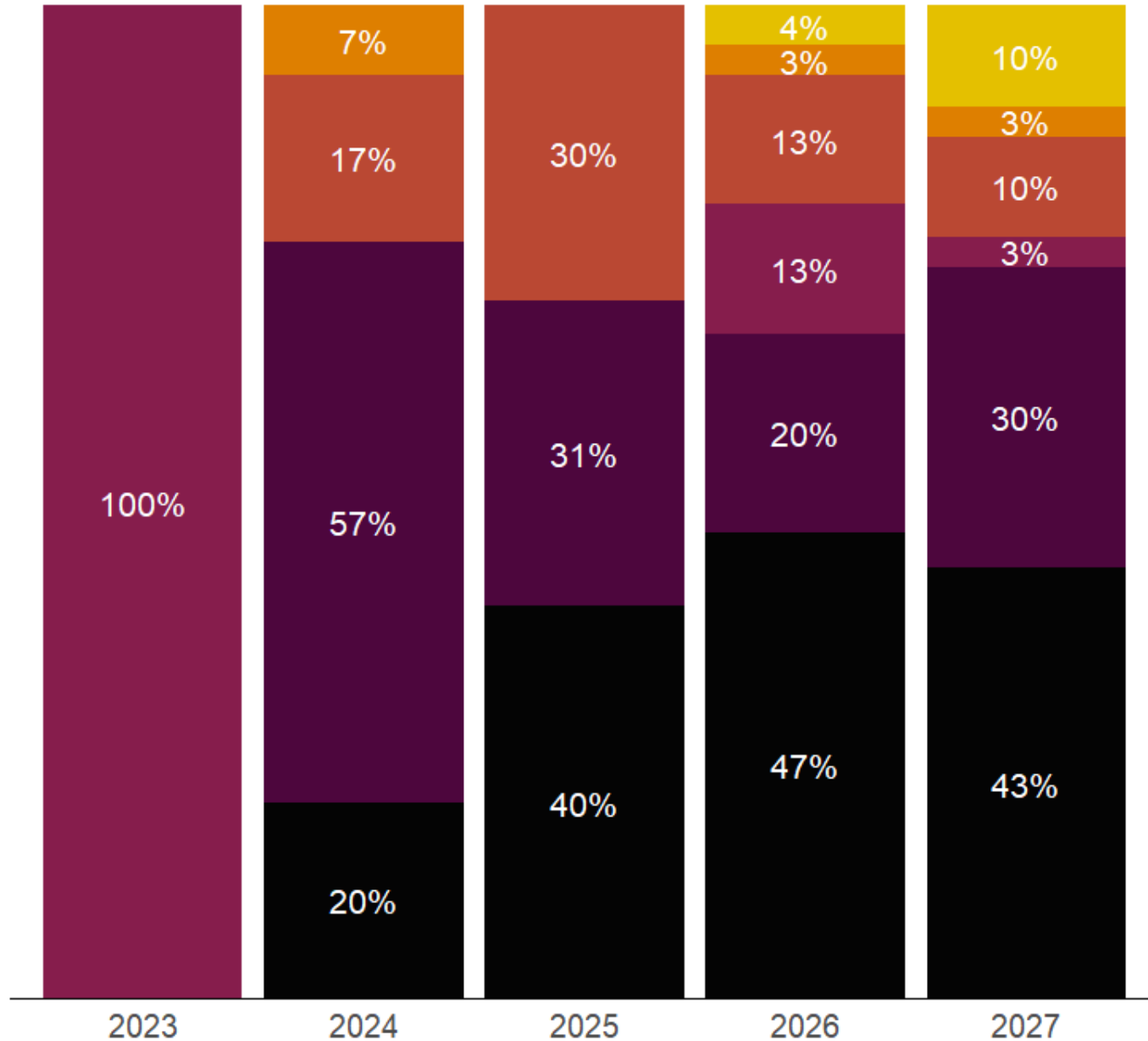
Basin States Commit to Continue Working

- The Basin States were unable to meet the mid-August deadline set by Commissioner Touton to identify 2-4 MAF of conservation.
- The Basin States will continue to meet with the U.S. to address the challenges on the Colorado River System.
- All water users have a stake in the outcome and all need to contribute to the solution.
- The Basin States are discussing ways that additional reductions can be implemented.

*Source: "Interior Department Announces Actions to Protect Colorado River System, Sets 2023 Operating Conditions for Lake Powell and Lake Mead." U.S. *Bureau of Reclamation*, August 16, 2022, <https://www.usbr.gov/newsroom/news-release/4294>. Press Release.

Percent of Traces with Event or System Condition - Lake Mead

August 2022 CRMMS-ESP Projections



Data Source: Bureau of Reclamation

Operating Condition	Pool Elevation	AZ Reduction & Contribution
Surplus	≥ 1,145'	0 KAF
Normal	> 1,090' and < 1,145'	0 KAF
Tier 0	> 1,075' and ≤ 1,090'	192 KAF
Tier 1	≥ 1,050' and ≤ 1,075'	512 KAF
Tier 2a	> 1,045' and < 1,050'	592 KAF
Tier 2b-e	≥ 1,025' and ≤ 1,045'	640 KAF
Tier 3	< 1,025'	720 KAF

Notes:

1. All results computed as the percent of traces with a system condition. Percentages shown in this table may not be representative of the full range of future possibilities that could occur with different modeling assumptions.
2. For modeling purposes, simulated years beyond 2026 assume a continuation of the 2007 Interim Guidelines, the 2019 Colorado River Basin Drought Contingency Plans, and Minute 323, including the Binational Water Scarcity Contingency Plan. With the exception of certain provisions related to ICS recovery and Upper Basin demand management, operations under these agreements are in effect through 2026. Reclamation anticipates beginning a process in early 2023 to develop operations for post-2026, and the modeling assumptions described here are subject to change for the analysis to be used in that process.