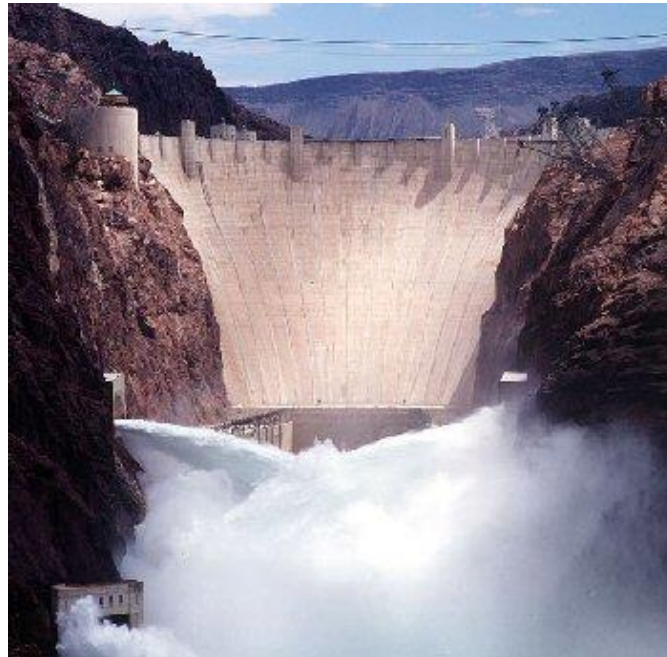


COLORADO RIVER BASIN STATUS UPDATE

Presented to:
Arizona Water Banking Authority

March 23, 2022



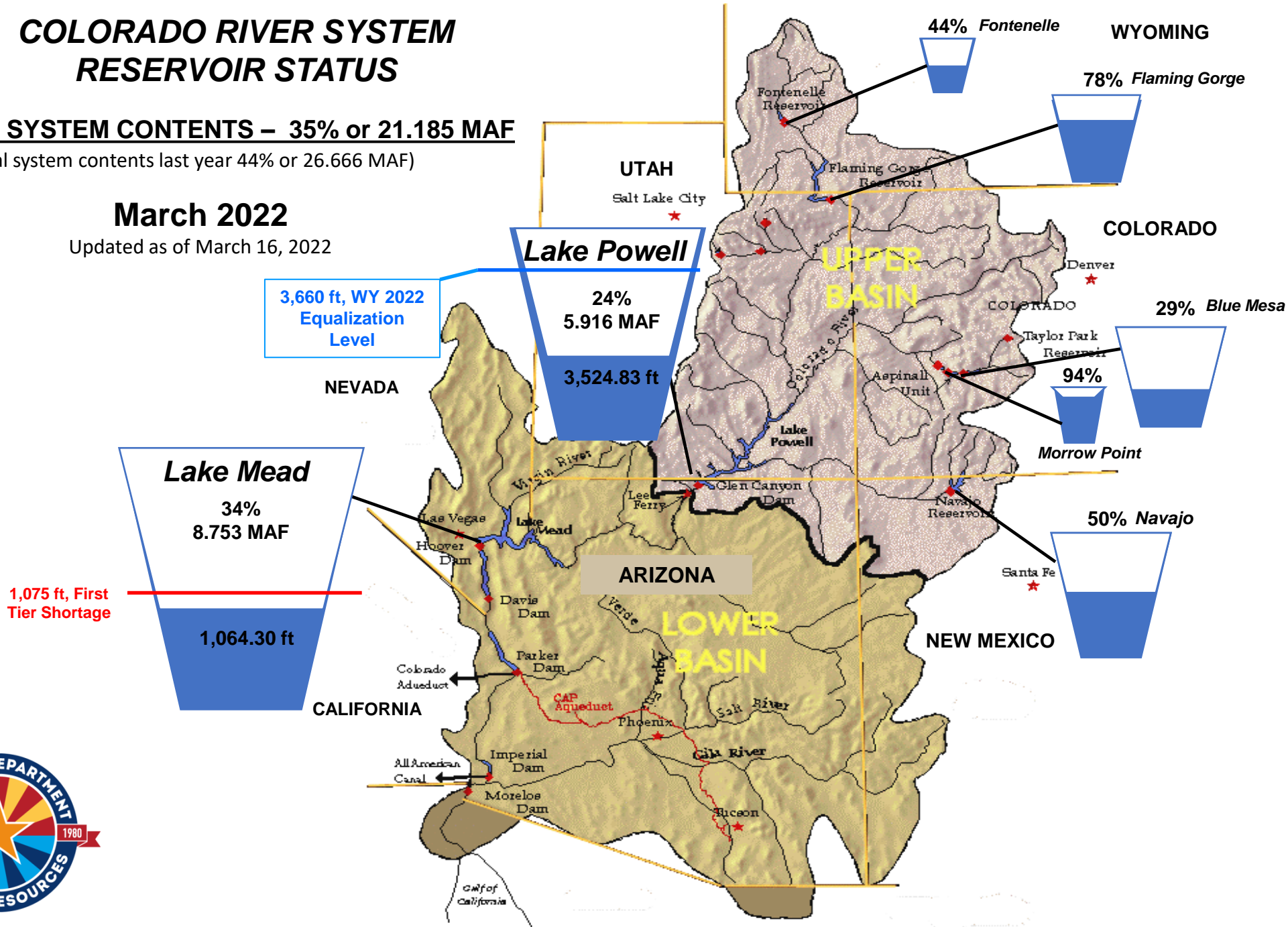
COLORADO RIVER SYSTEM RESERVOIR STATUS

TOTAL SYSTEM CONTENTS – 35% or 21.185 MAF

(Total system contents last year 44% or 26.666 MAF)

March 2022

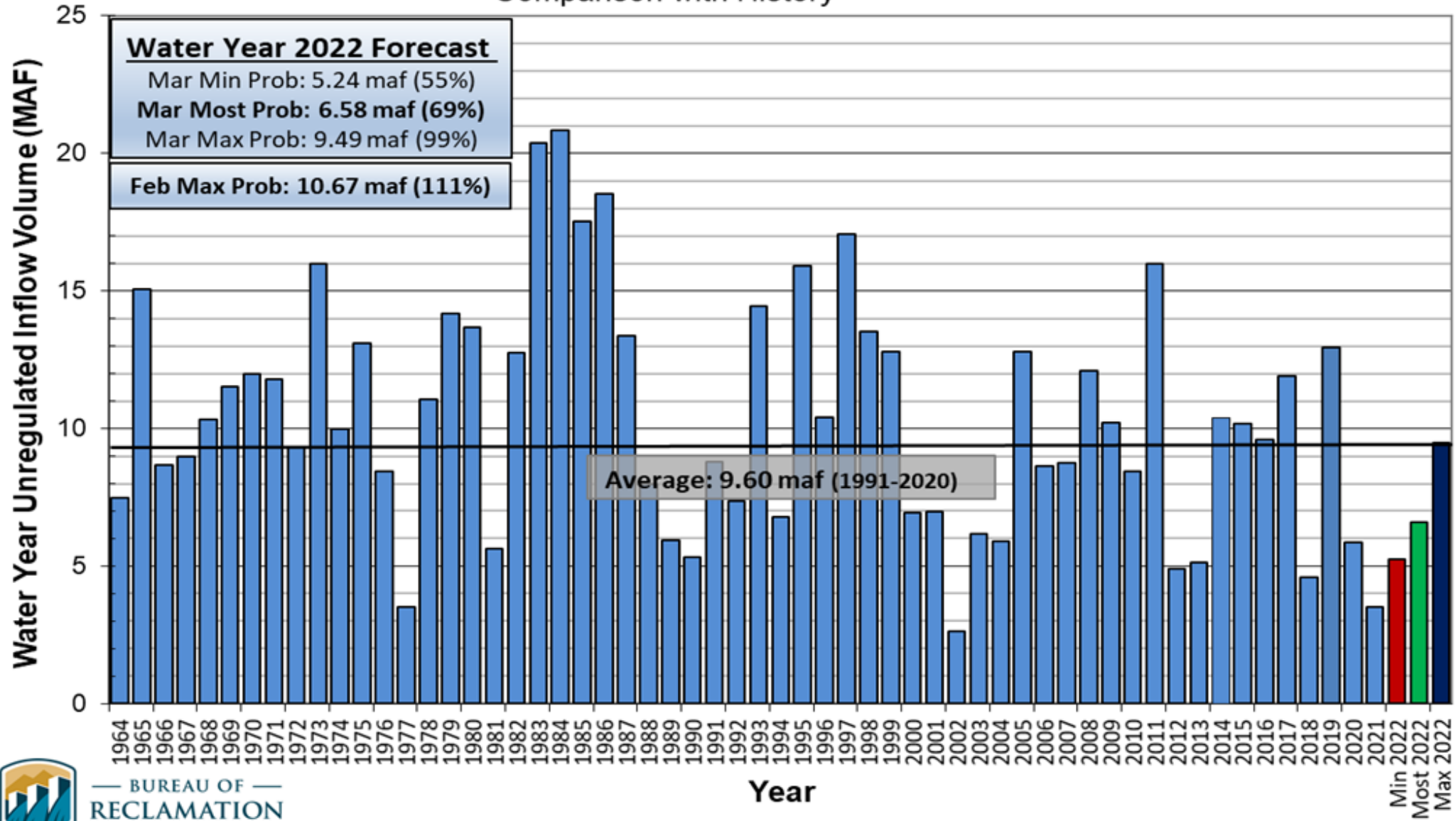
Updated as of March 16, 2022



Lake Powell Unregulated Inflow

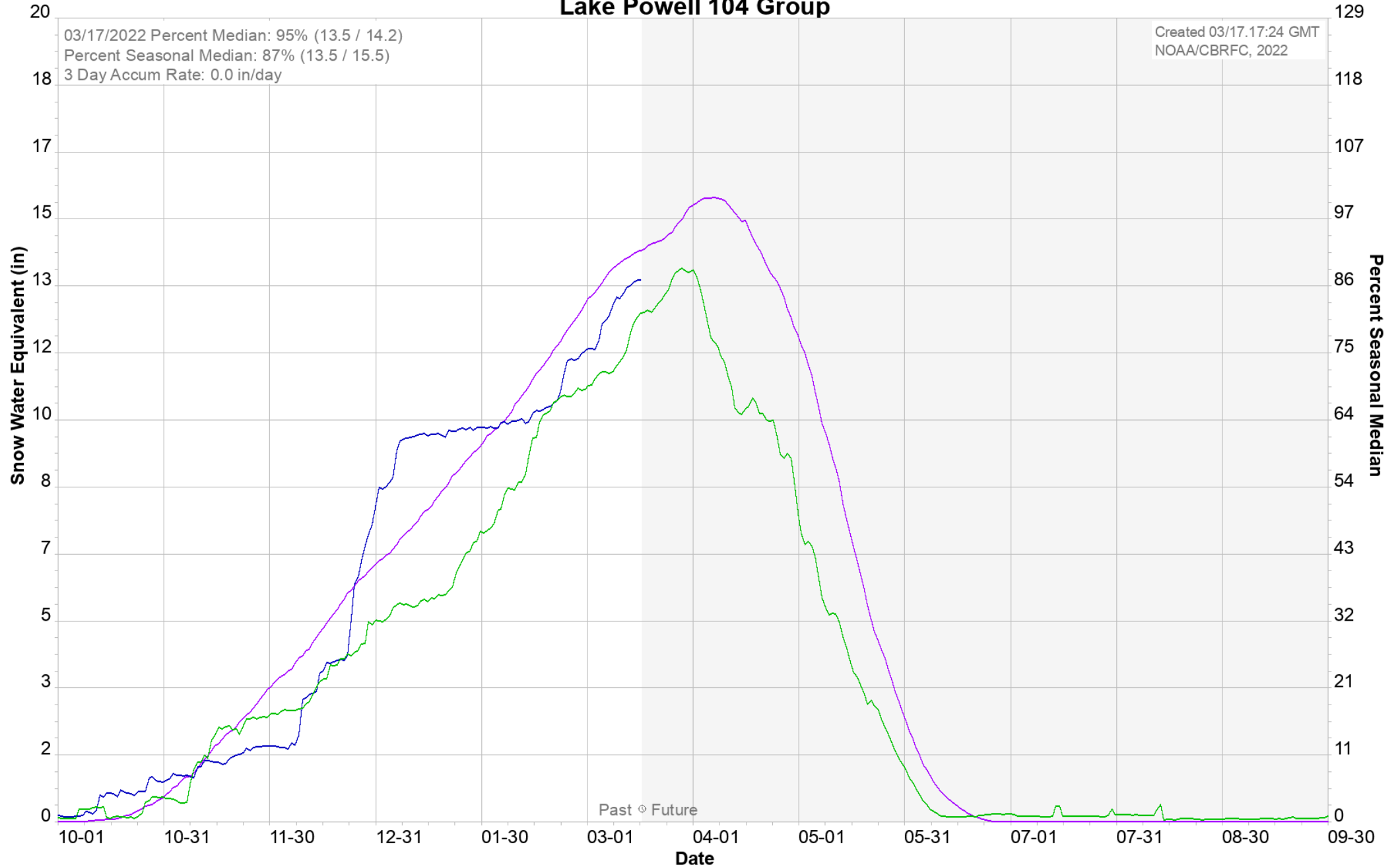
Water Year 2022 Forecast *(issued March 3)*

Comparison with History



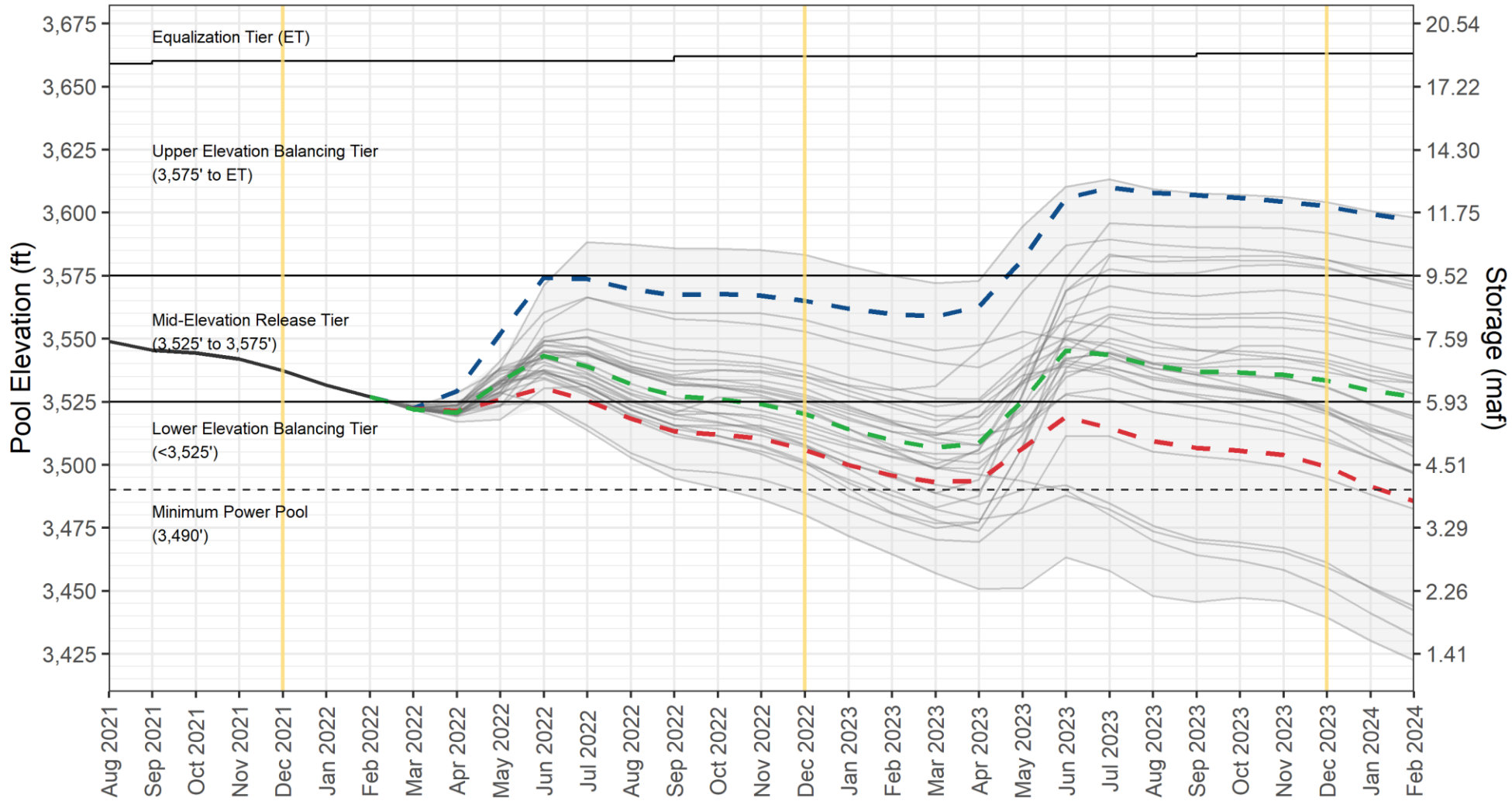
BUREAU OF RECLAMATION

Colorado Basin River Forecast Center Lake Powell 104 Group



Lake Powell End-of-Month Elevations

CRMMS Projections from February and March 2022



End of CY 2022 Projections

Most Probable:
3,520.08 feet (23% full)

Probable Min:
3,505.84 feet

End of CY 2023 Projections

Most Probable:
3,533.37 feet (27% full)

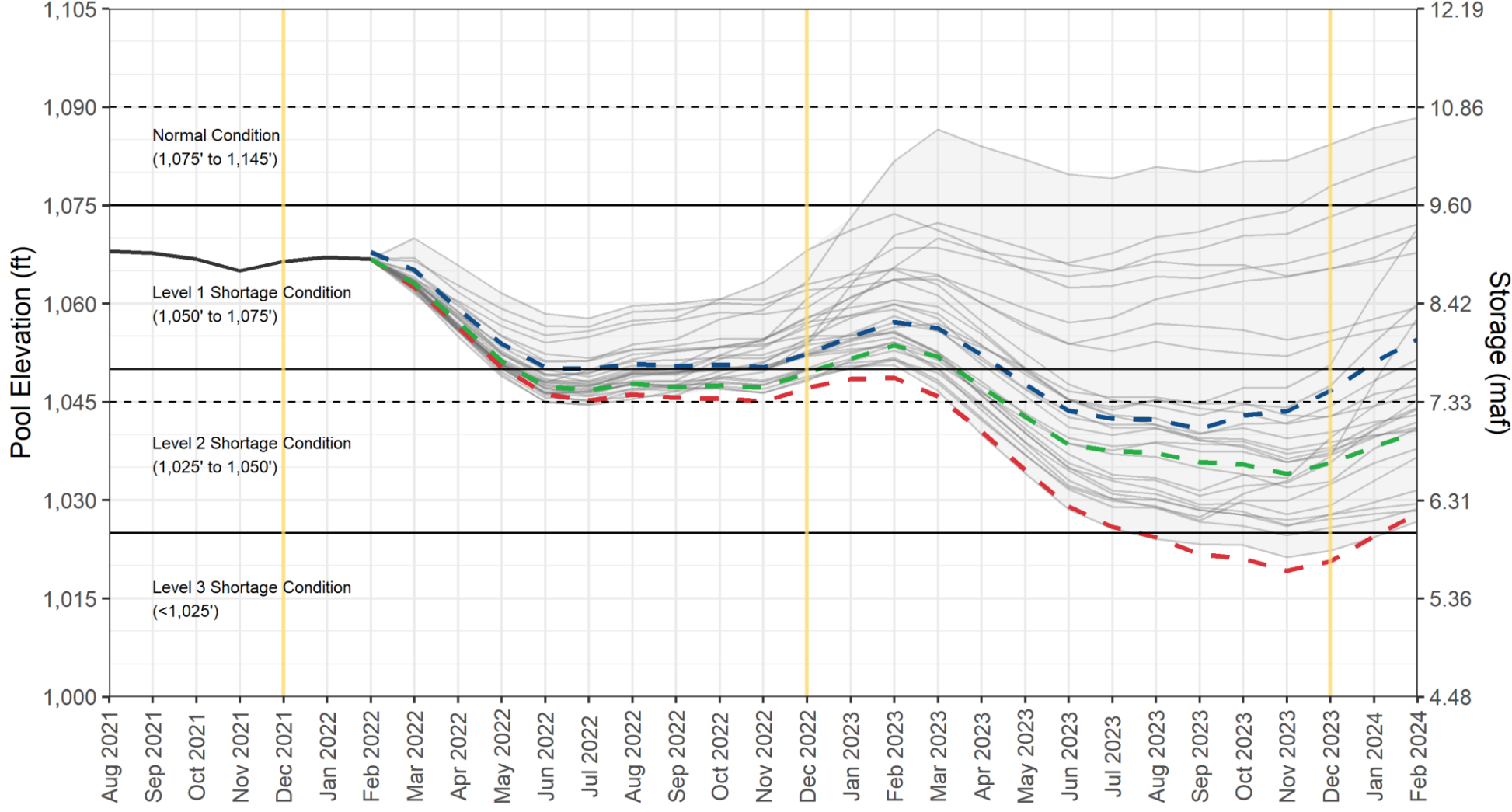
Probable Min:
3,499.31 feet

- February 2022 DROA Probable Maximum 24-Month Study
- March 2022 Most Probable 24-Month Study
- March 2022 DROA Probable Minimum 24-Month Study
- Historical
- CRMMS-ESP Projection (30 traces)
- CRMMS-ESP Projection Range



Lake Mead End-of-Month Elevations

CRMMS Projections from February and March 2022



End of CY 2022 Projections

Most Probable:
1,049.37 feet (29% full)

Probable Min:
1,047.10 feet

End of CY 2023 Projections

Most Probable:
1,035.63 feet (26% full)

Probable Min:
1,020.63 feet

- February 2022 DROA Probable Maximum 24-Month Study
- March 2022 Most Probable 24-Month Study
- March 2022 DROA Probable Minimum 24-Month Study
- Historical
- CRMMS-ESP Projection (30 traces)
- CRMMS-ESP Projection Range



Lower Basin – Lake Mead
Percent of Traces with Event or System Condition
Results from February 2022 CRMMS-ESP (values in percent)

Event or System Condition	2022	2023	2024	2025	2026	
Surplus Condition – any amount (Mead ≥ 1,145 ft)	0	0	0	0	0	
Surplus – Flood Control	0	0	0	0	0	
Normal or ICS Surplus Condition (Mead < 1,145 and > 1,075 ft)	0	0	7	7	7	
Recovery of DCP ICS / Mexico’s Water Savings (Mead >/≥ 1,110 ft)	0	0	0	0	0	
DCP Contribution / Mexico’s Water Savings (Mead ≤ 1,090 and > 1,075 ft)	0	0	7	3	0	Tier 0
Shortage Condition – any amount (Mead ≤ 1,075 ft)	100	100	93	93	93	
Shortage / Reduction – 1st level (Mead ≤ 1,075 and ≥ 1,050)	100	87	23	17	27	Tier 1
DCP Contribution / Mexico’s Water Savings (Mead ≤ 1,075 and > 1,050 ft)	100	87	23	17	27	
Shortage / Reduction – 2nd level (Mead < 1,050 and ≥ 1,025)	0	13	67	47	27	
DCP Contribution / Mexico’s Water Savings (Mead ≤ 1,050 and > 1,045 ft)	0	13	10	13	7	Tier 2a
DCP Contribution / Mexico’s Water Savings (Mead ≤ 1,045 and > 1,040 ft)						
DCP Contribution / Mexico’s Water Savings (Mead ≤ 1,040 and > 1,035 ft)	0	0	57	33	20	Tier 2b
DCP Contribution / Mexico’s Water Savings (Mead ≤ 1,035 and > 1,030 ft)						
DCP Contribution / Mexico’s Water Savings (Mead ≤ 1,030 and ≥/ > 1,025 ft)						
Shortage / Reduction – 3rd level (Mead < 1,025)	0	0	3	30	40	Tier 3
DCP Contribution / Mexico’s Water Savings (Mead </≤ 1,025 ft)	0	0	3	30	40	

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.

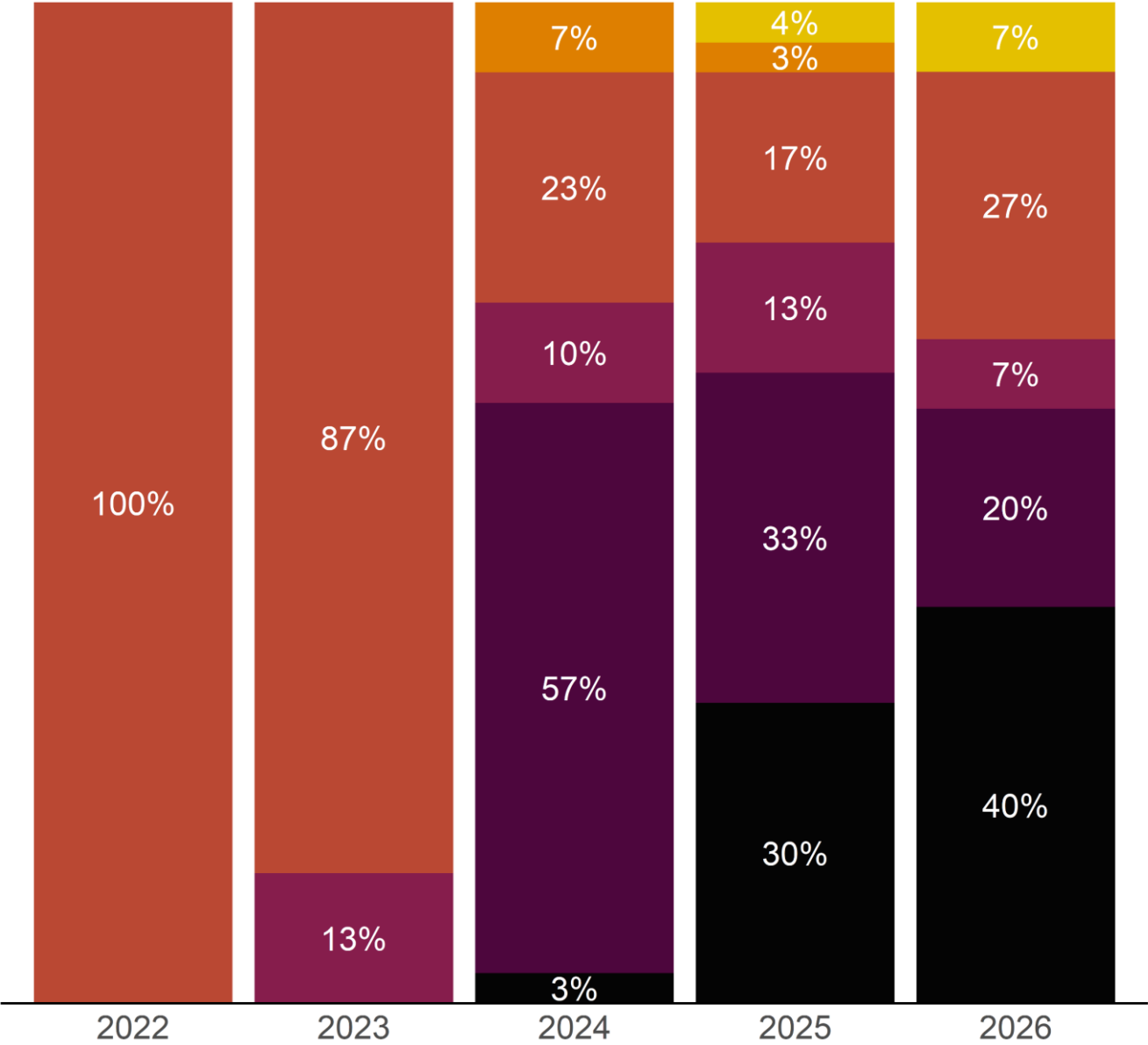
² Reservoir conditions for 2022-2026 were simulated using the February 2022 CRMMS in ensemble mode using the CBRFC unregulated inflow forecast ensemble dated February 3, 2022 (CRMMS-ESP).

³ Percentages shown in this table may not be representative of the full range of future possibilities that could occur with different modeling assumptions.

⁴ Percentages shown may not sum to 100% due to rounding to the nearest percent.

Percent of Traces with Event or System Condition - Lake Mead

February 2022 CRMMS-ESP Projections



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	≥ 1,025' and ≤ 1,045'	640 KAF
Tier 3	< 1,025'	720 KAF

Data Source: Bureau of Reclamation

Questions?

Rachel von Gnechten
rvongnechten@AZWater.gov

James Heffner
jheffner@AZWater.gov

Additional Resources

- Arizona Reconsultation Committee: <https://new.azwater.gov/arc>
- Colorado Basin River Forecast Center: <https://www.cbrfc.noaa.gov/>
- Lower Colorado Region River Operations: <https://www.usbr.gov/lc/riverops.html>
- Upper Colorado Region River Operations: <https://www.usbr.gov/uc/water/index.html>

