Discussion of Lower Basin Drought Contingency Plan Implementation

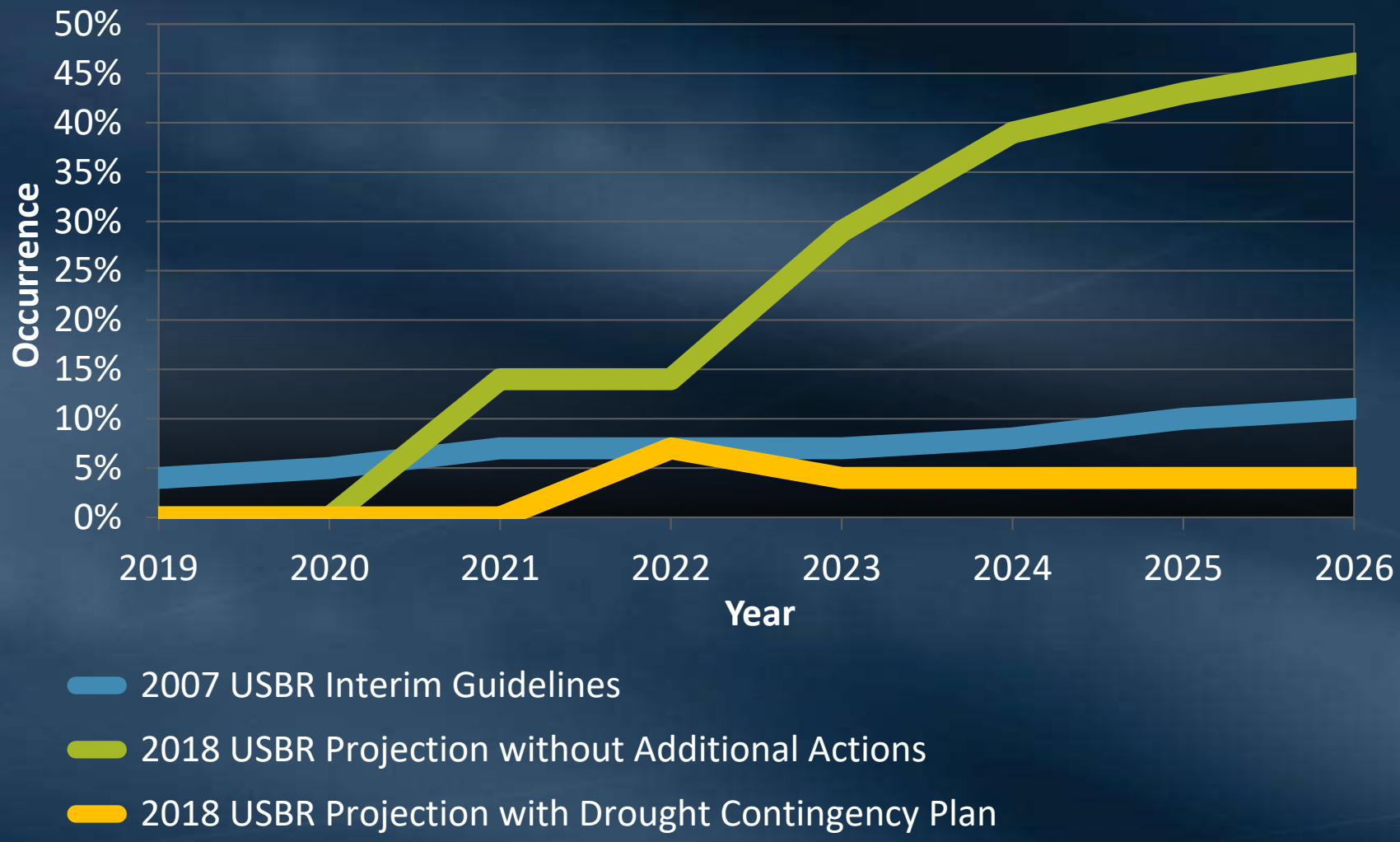
Water Planning and Stewardship Committee
Item # 6b
November 8, 2021

2019 Drought Contingency Plan

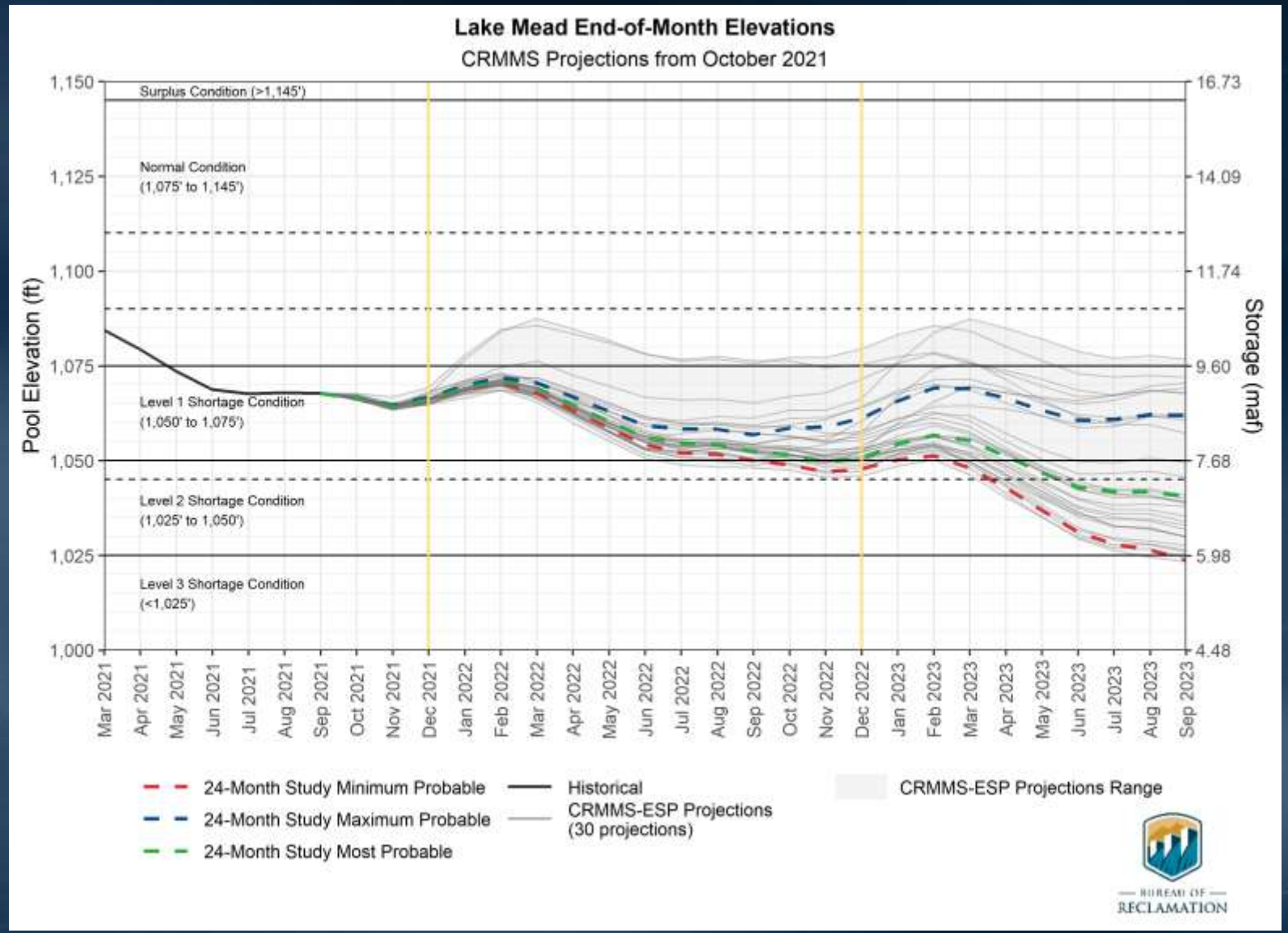
- Spring of 2019 - the seven Colorado River Basin States asked Congress to pass legislation directing the Secretary of the Department of Interior (DOI) to implement both the Upper and Lower Basin Drought Contingency Plans (DCP). Congress passed DCP authorization only weeks later. Within a month, the agreements were signed.
- The Lower Basin DCP is intended to keep Lake Mead above critical reservoir elevations to preserve power generation and the ability make full water deliveries.

December 2018 Probability of Lake Mead Elevation

Less than 1,020’ in any month



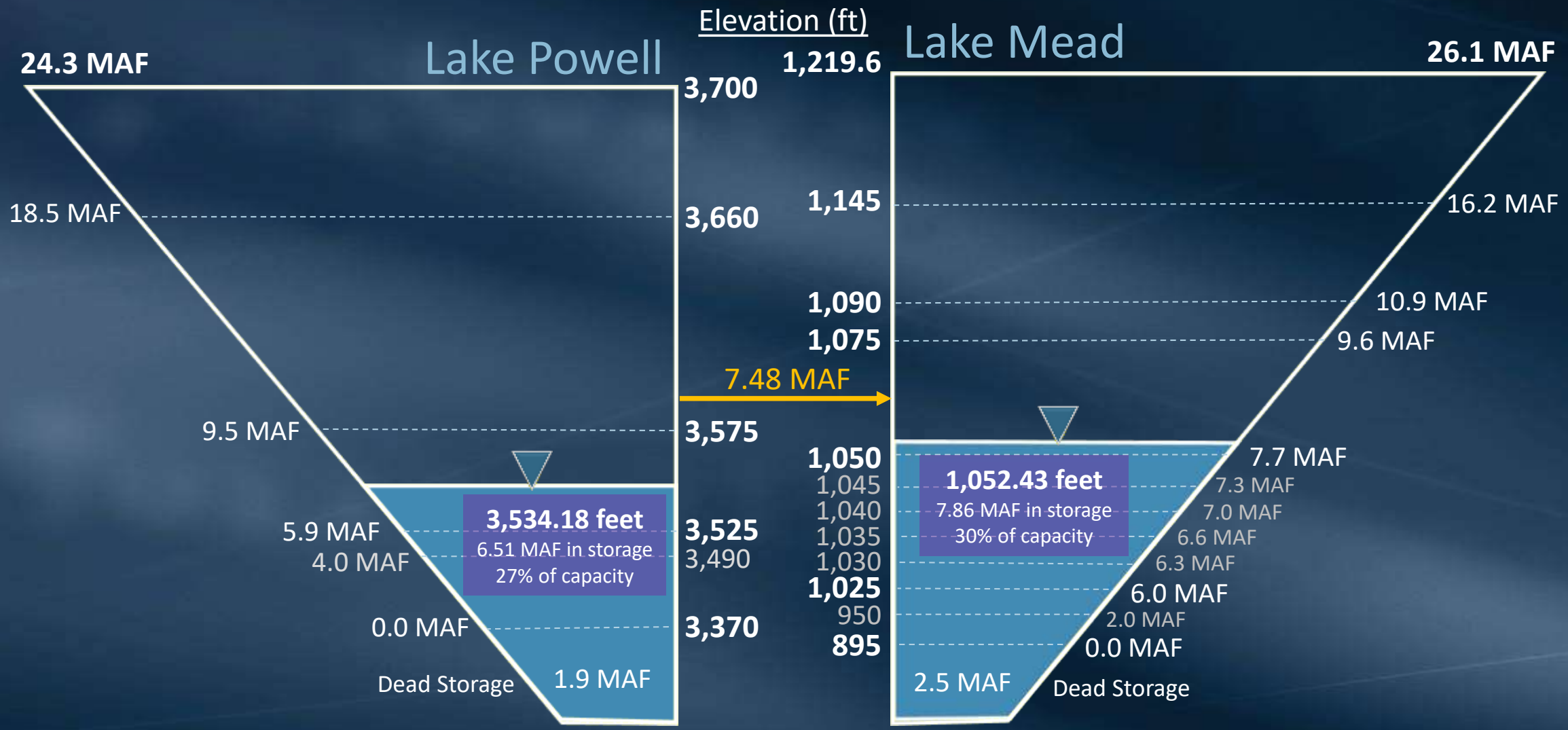
October 24-Month Study and 2-Year Probabilistic Projections



Lower Basin DCP Implementation to Date

- Operation of Lake Mead is determined by January 1 elevation
  - 1/1/2020 - elevation 1,090.49 feet. Above the first Lower Basin DCP trigger of 1,090 feet.
  - 1/1/2021 - elevation 1,083.72 feet. Below elevation 1,090 feet, triggering the DCP requirement for Arizona, Nevada and Mexico store additional water in Lake Mead.
  - August 24-Month Study projects Lake Mead to be at or below 1,075 feet on 1/1/2022. This projection triggered the first Shortage Declaration, requiring Arizona, Nevada and Mexico to take shortages in addition to the DCP storage requirements.

End of Water Year 2022 Projections
October 2021 24-Month Study Most Probable Inflow Scenario



Lower Basin DCP Implementation Going Forward

- Based on the U.S. Bureau of Reclamation's August 2021 5-Year Probabilistic Study:
  - Lake Mead will be in shortage through 2026
  - In 2024, Lake Mead is likely to be at:
    - DCP Contribution triggers for California, and
    - Tier 2 Shortage for Arizona, Nevada and Mexico
  - In 2025, 41% of traces show Lake Mead at or below the critically low elevation of 1,025 feet
- These are the risks without proactive actions

Metropolitan Is Prepared

- Even with the forecasts showing significantly lower Lake Mead elevations through 2026, Metropolitan has:
  - Sufficient supply to maintain a full Colorado River Aqueduct
  - Approximately 1.3 million acre-feet (maf) of Intentionally Created Surplus stored in Lake Mead
  - Ability to make required DCP Contributions forecasted for 2024 -2026

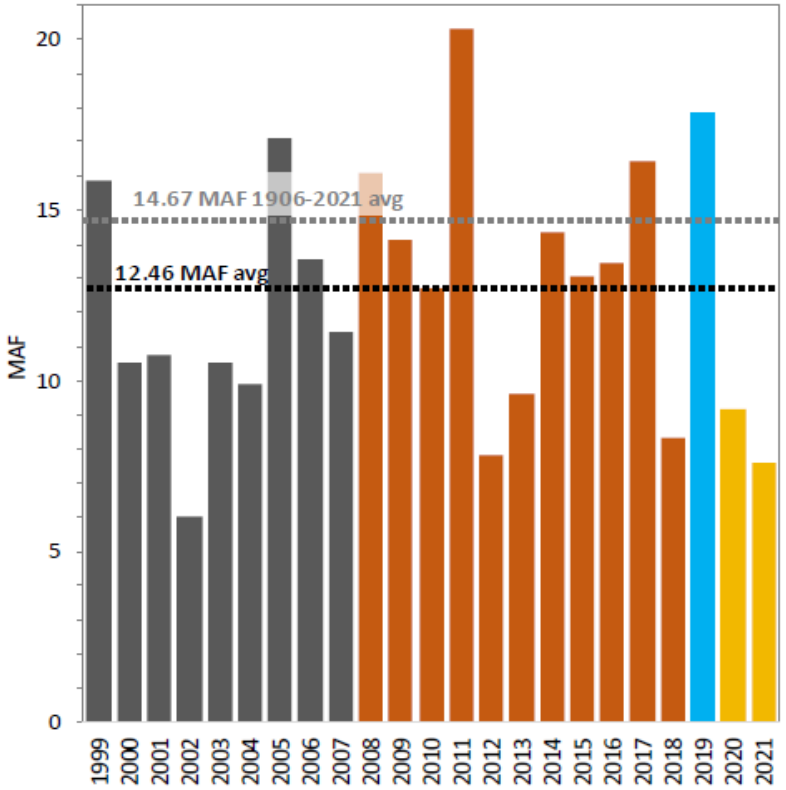
Lower Basin DCP "1030 Consultation" Provision

- Lower Basin Drought Operations Section V.B.2:

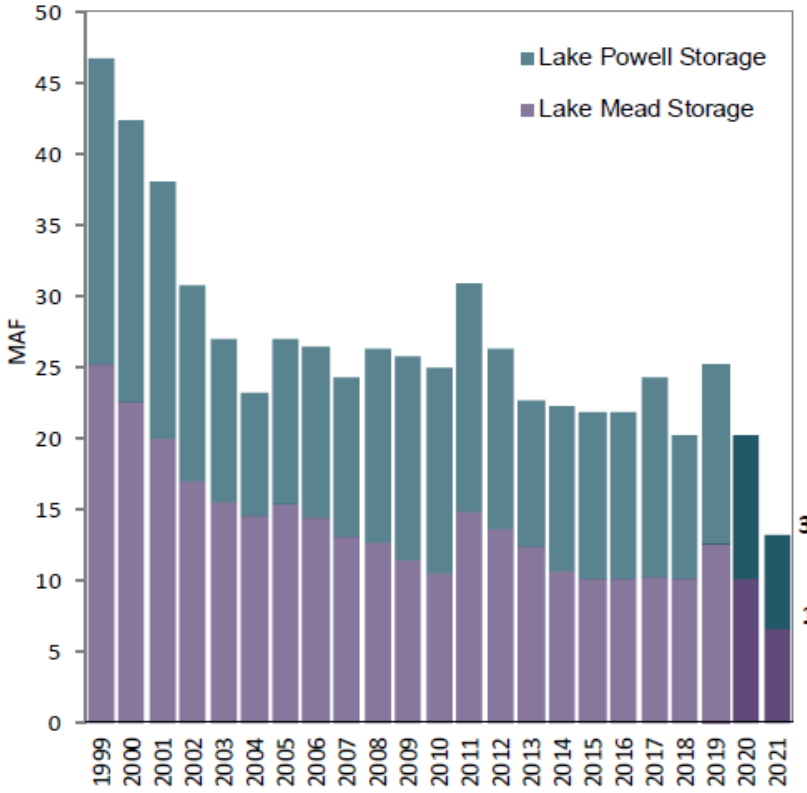
  If any 24-Month Study for the minimum probable inflows projects that Lake Mead elevations will be at or below 1,030 feet anytime within the succeeding two Years, *the Secretary and Lower Division States shall consult and determine what additional measures will be taken by the Secretary and Lower Division States to avoid and protect against the potential for Lake Mead to decline below 1,020 feet.*

Changing Hydrology, Storage, and Risk

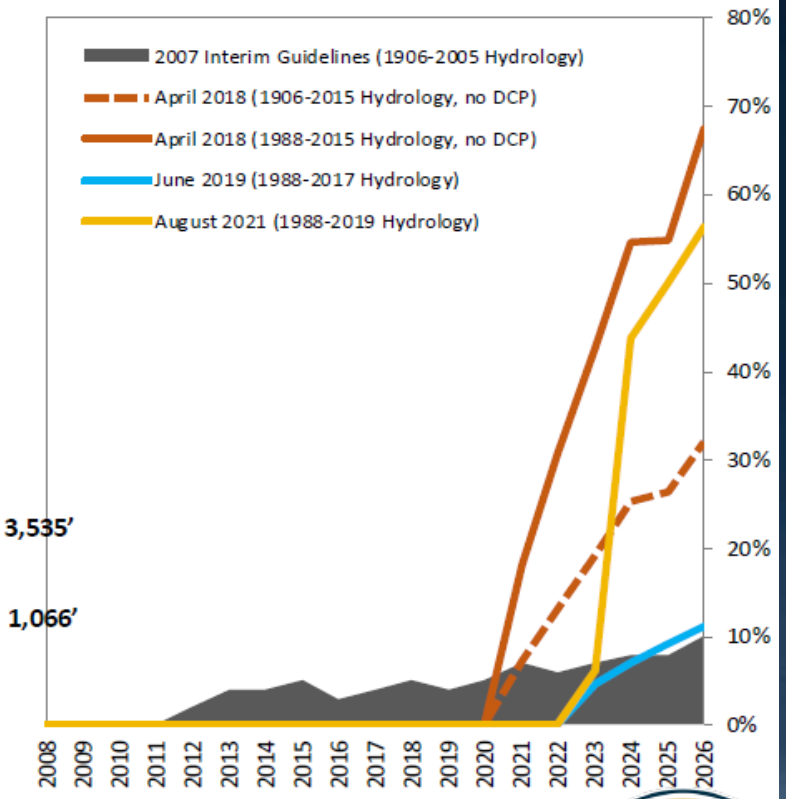
Lees Ferry Natural Flow



Lake Powell and Lake Mead Storage & Elevation



Risk of Lake Mead < 1,020' in Any Month



1,030’ Consultation Potential Additional Measures

- Arizona, Nevada and California contractors are discussing additional measures that could keep Lake Mead above elevation 1,030 feet
- Options may include additional system conservation, Intentionally Created Surplus creation and funding
- Potential partners may include Mexico, Tribes and NGOs

Next Steps

- Metropolitan staff will continue to be engaged in the 1,030' Consultation
- Additional measures to respond to the 1030' Consultation may include Metropolitan cooperating with partners in Nevada and Arizona
- If discussions among the Lower Basin States are successful, a board action item will be brought to the Board in December


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
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