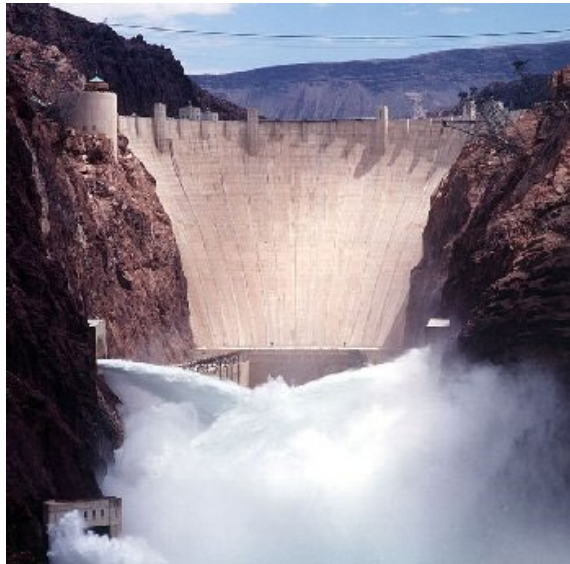


# ***COLORADO RIVER BASIN UPDATE AND STATUS***

Presented to

**Arizona Water Banking Authority**  
**March 17, 2021**



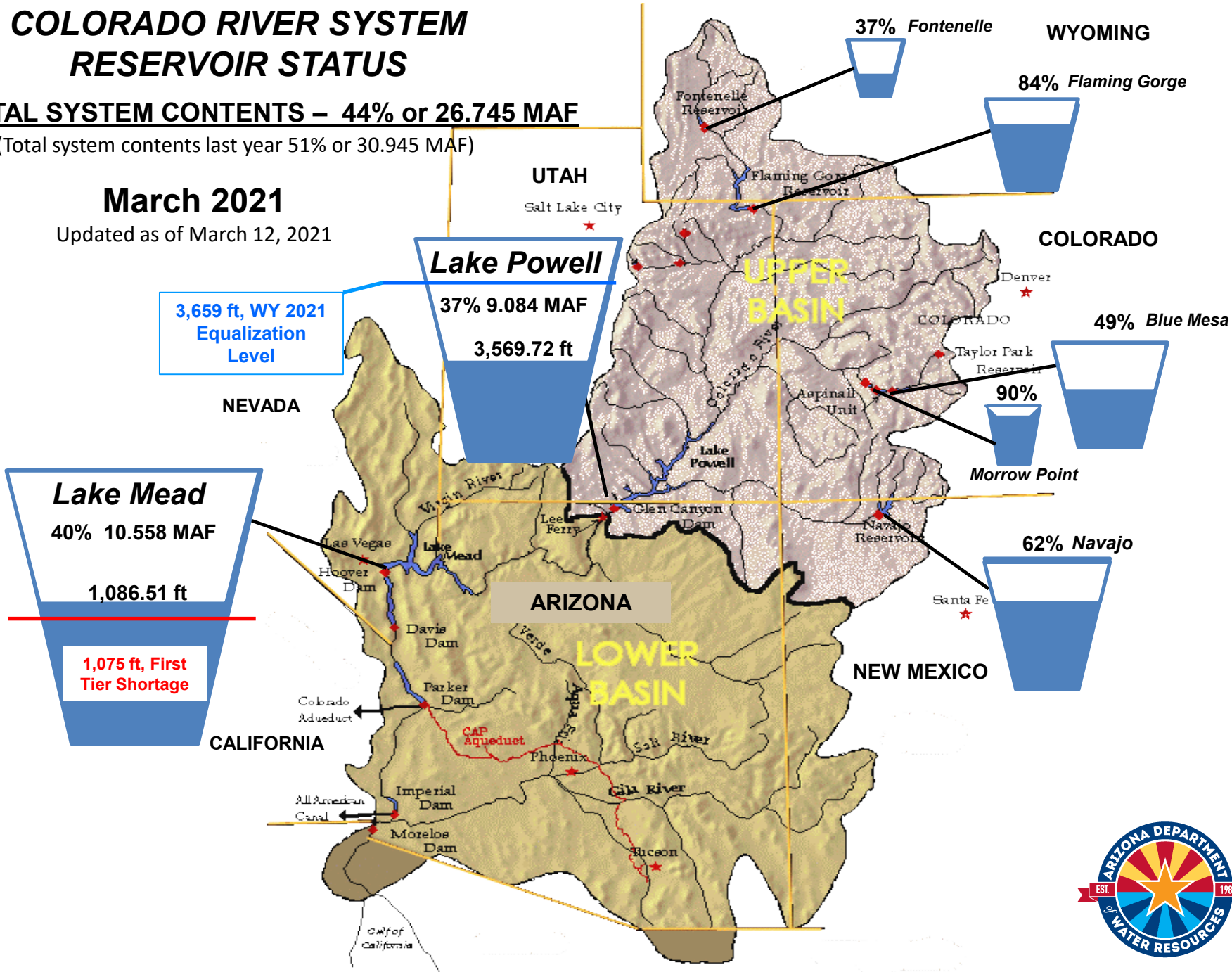
# COLORADO RIVER SYSTEM RESERVOIR STATUS

**TOTAL SYSTEM CONTENTS – 44% or 26.745 MAF**

(Total system contents last year 51% or 30.945 MAF)

**March 2021**

Updated as of March 12, 2021

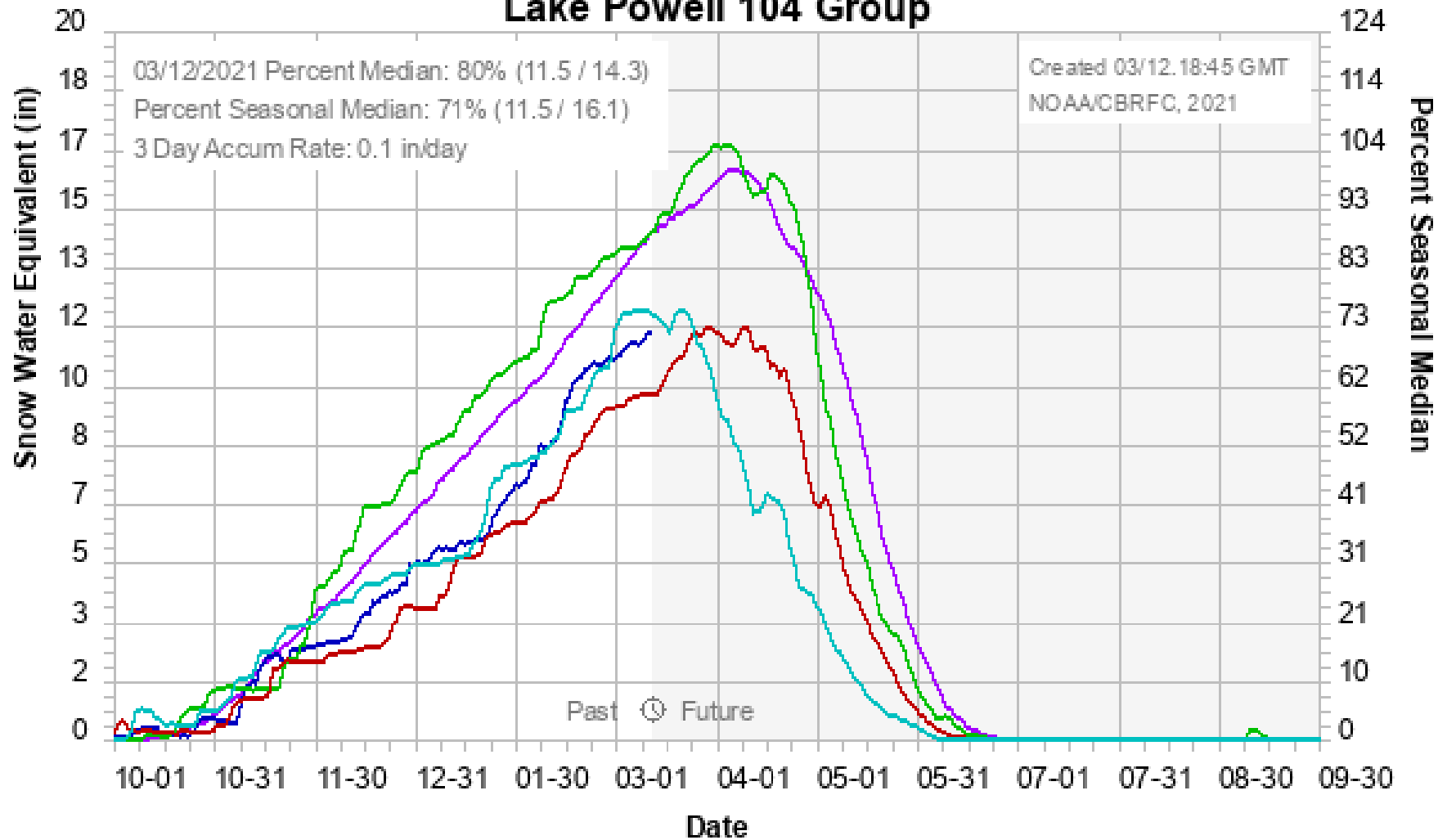


# Snow Water Equivalent

Conditions as of March 12, 2021

Colorado Basin River Forecast Center

## Lake Powell 104 Group

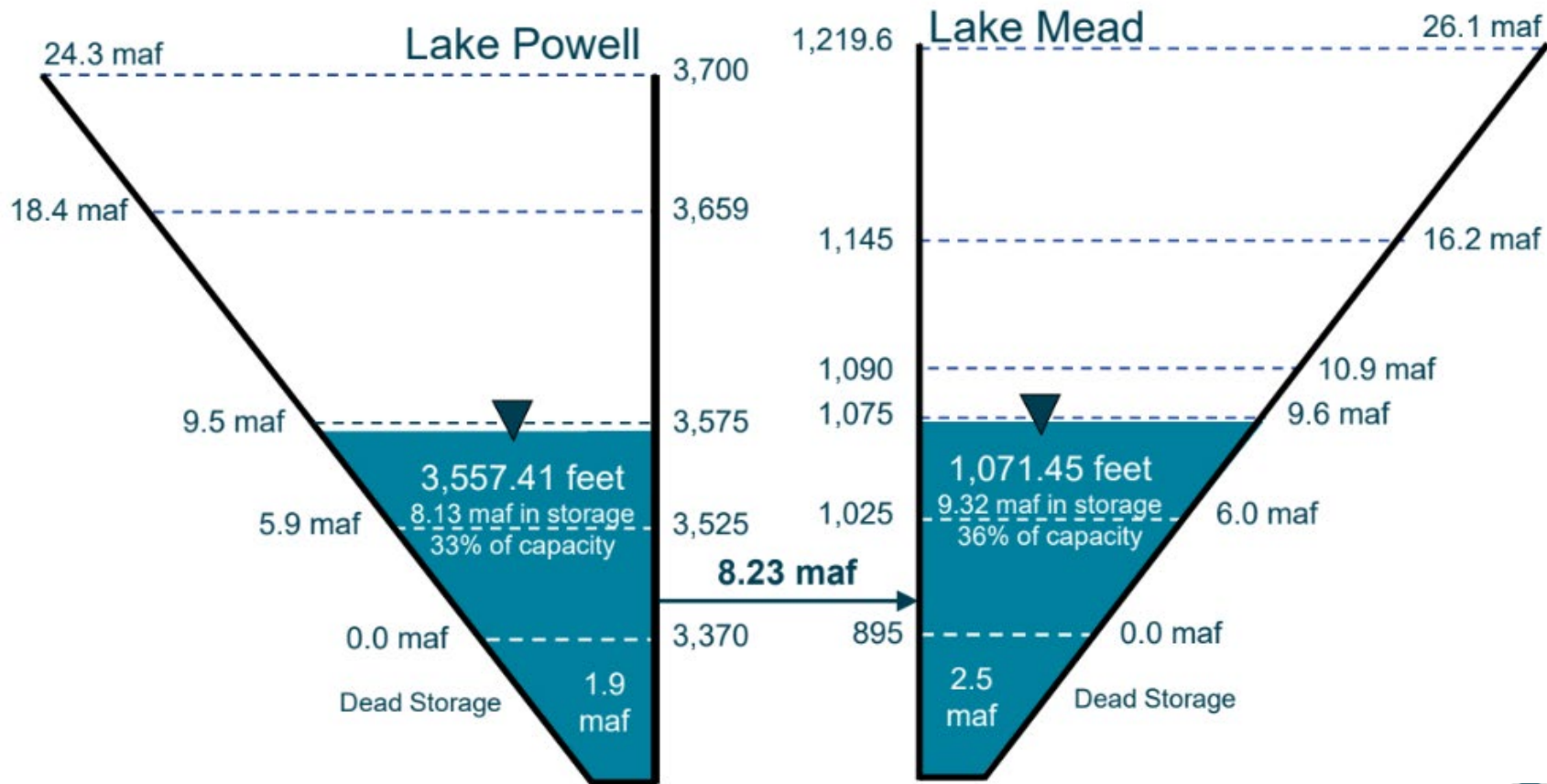


Median 1981-2010 — 2021 — 2020 — 2018 — 2012 —

# End of Water Year 2021 Projections

## February 2021 24-Month Study Most Probable Inflow Scenario<sup>1</sup>

Based on a Lake Powell Unregulated Inflow Forecast of 5.15 maf (48% of average)



Not to Scale

<sup>1</sup> WY 2021 unregulated inflow into Lake Powell is based on the CBRFC forecast dated 2/3/21.

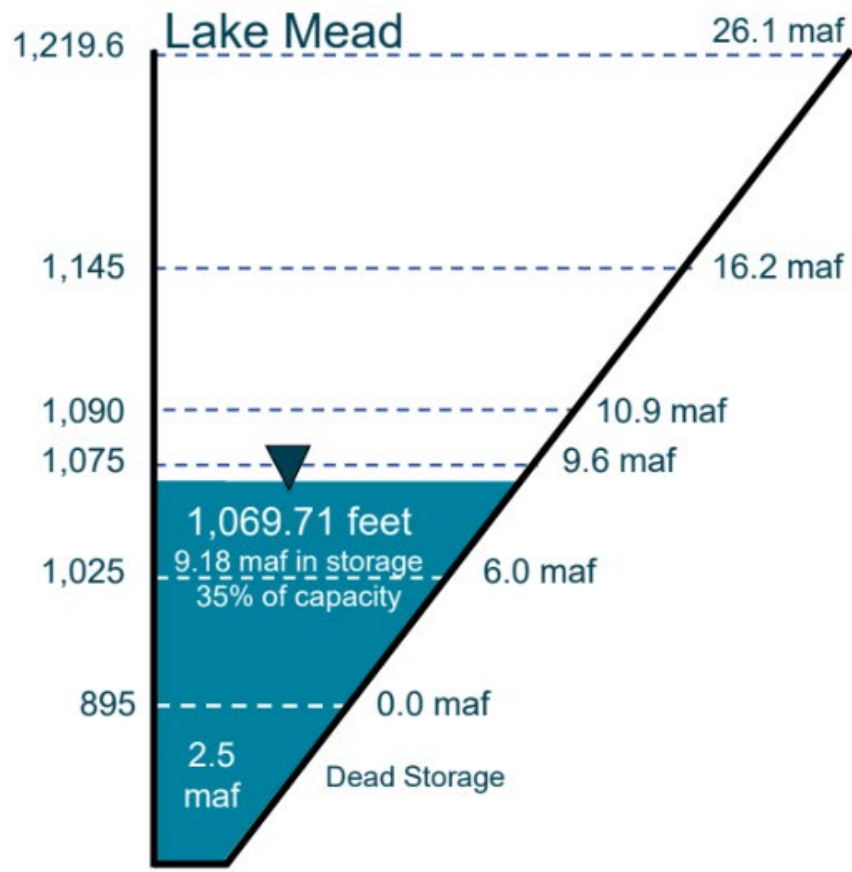
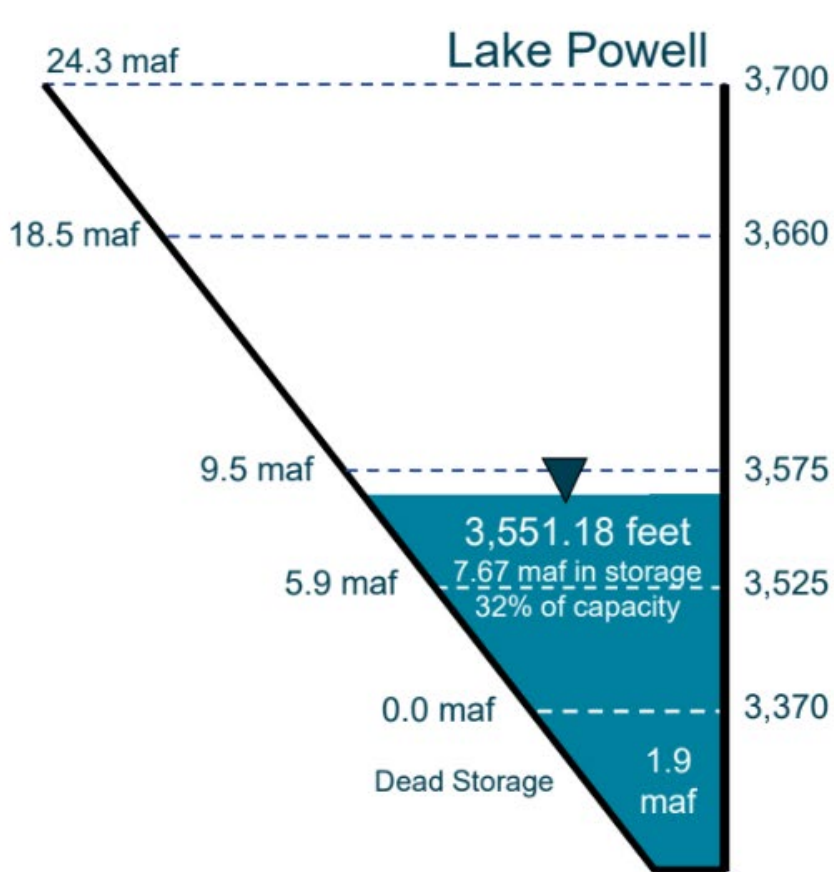




# End of Calendar Year 2021 Projections

## February 2021 24-Month Study Most Probable Inflow Scenario<sup>1</sup>

Based on a Lake Powell release of 8.23 maf in WY 2021 and 7.48 maf in WY 2022



Not to Scale

<sup>1</sup> WY 2021 unregulated inflow into Lake Powell is based on the CBRFC forecast dated 2/3/21.



# Lake Powell & Lake Mead Operational Table

Operational Tiers for Water/Calendar Year 2021<sup>1</sup>

| Lake Powell                  |  |                                 | Lake Mead                       |  |                                 |
|------------------------------|--|---------------------------------|---------------------------------|--|---------------------------------|
| Elevation (feet)             | Operation According to the Interim Guidelines  | Live Storage (maf) <sup>2</sup> | Elevation (feet)                | Operation According to the Interim Guidelines  | Live Storage (maf) <sup>2</sup> |
| 3,700                        | <b>Equalization Tier</b><br>Equalize, avoid spills or release 8.23 maf   | 24.3                            | 1,220                           | <b>Flood Control Surplus or Quantified Surplus Condition</b><br>Deliver > 7.5 maf                            | 25.9                            |
| 3,636 - 3,666<br>(2008-2026) | <b>Upper Elevation Balancing Tier<sup>4</sup></b><br>Release 8.23 maf<br>if Lake Mead < 1,075 feet, balance contents with a min/max release of 7.0 and 9.0 maf | 15.5 - 19.3<br>(2008-2026)      | 1,200<br>(approx.) <sup>3</sup> | <b>Domestic Surplus or ICS Surplus Condition</b><br>Deliver > 7.5 maf  | 22.9<br>(approx.) <sup>3</sup>  |
|                              |  |                                 | 1,145                           | <b>Normal or ICS Surplus Condition</b><br>Deliver ≥ 7.5 maf  | 15.9                            |
| 3,575                        |  | 9.5                             | 1,105                           |  | 11.9                            |
|                              |  |                                 | 1,075                           |  | 9.4                             |
|                              | <b>Mid-Elevation Release Tier</b><br>Release 7.48 maf, if Lake Mead < 1,025 maf, release 8.23 maf  |                                 | 1,050                           | <b>Shortage Condition</b><br>Deliver 7.167 <sup>5</sup> maf  | 7.5                             |
| 3,525                        |  | 5.9                             | 1,025                           | <b>Shortage Condition</b><br>Deliver 7.083 <sup>6</sup> maf  | 5.8                             |
|                              | <b>Lower Elevation Balancing Tier</b><br>Balance contents with a min/max release of 7.0 and 9.0 maf  |                                 | 1,000                           | <b>Shortage Condition</b><br>Deliver 7.0 <sup>7</sup> maf<br>Further measures may be undertaken <sup>8</sup> | 4.3                             |
| 3,490                        |  | 4.0                             | 895                             |  | 0                               |
| 3,370                        |  | 0                               |                                 |  |                                 |

3,557.41'

1069.71'

Diagram not to scale

<sup>1</sup> Lake Powell and Lake Mead operational tier determinations were based on November 2020 24-Month Study projections.

<sup>2</sup> Acronym for million acre-feet

<sup>3</sup> This elevation is shown as approximate as it is determined each year by considering several factors including Lake Powell and Lake Mead storage, projected Upper Basin and Lower Basin demands, and an assumed inflow.

<sup>4</sup> Subject to April adjustments which may result in a release according to the Equalization Tier

<sup>5</sup> of which 2.48 maf is appropriated to Arizona, 4.4 maf to California, and 0.287 maf to Nevada

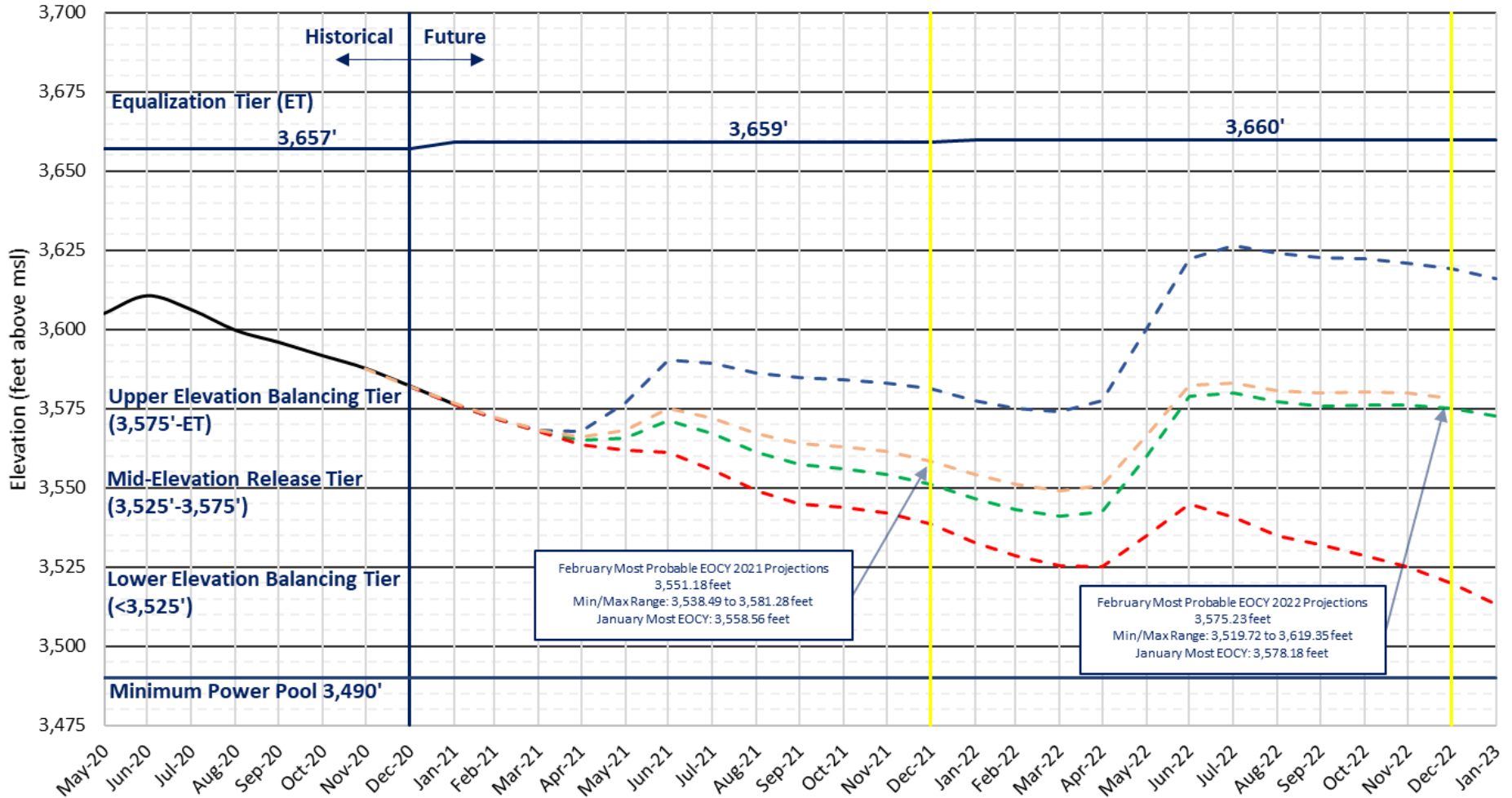
<sup>6</sup> of which 2.40 maf is appropriated to Arizona, 4.4 maf to California, and 0.283 maf to Nevada

<sup>7</sup> of which 2.32 maf is appropriated to Arizona, 4.4 maf to California, and 0.280 maf to Nevada

<sup>8</sup> Whenever Lake Mead is below elevation 1,025 feet, the Secretary shall consider whether hydrologic conditions together with anticipated deliveries to the Lower Division States and Mexico is likely to cause the elevation at Lake Mead to fall below 1,000 feet. Such consideration, in consultation with the Basin States, may result in the undertaking of further measures, consistent with applicable Federal law.

# Lake Powell End of Month Elevations

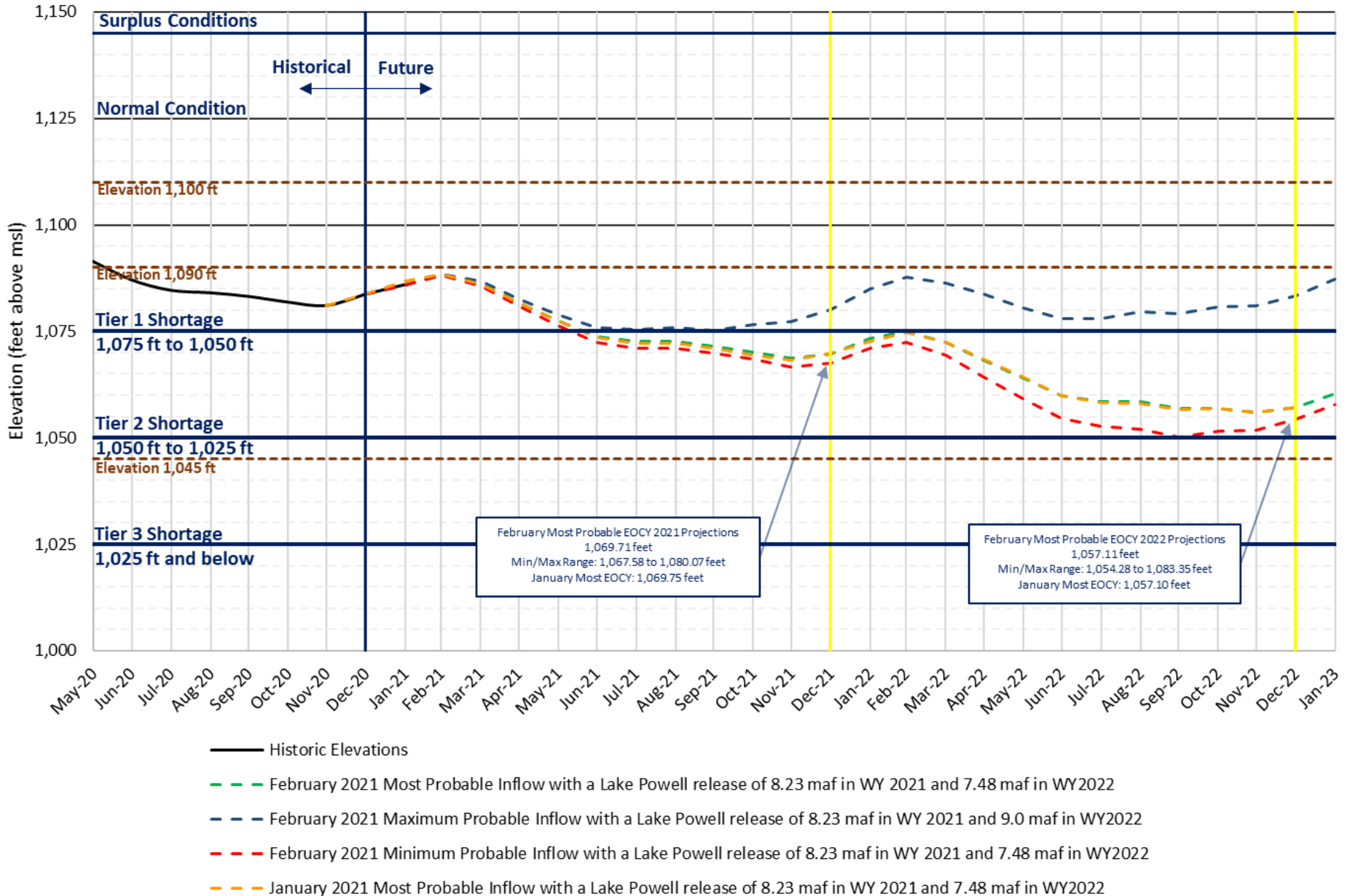
Historic and Projected based on February and January 2021 24-Month Study Inflow Scenarios



- Historic Elevations
- - - February 2021 Most Probable Inflow with a Lake Powell release of 8.23 maf in WY 2021 and 7.48 maf in WY2022
- - - February 2021 Maximum Probable Inflow with a Lake Powell release of 8.23 maf in WY 2021 and 9.0 maf in WY2022
- - - February 2021 Minimum Probable Inflow with a Lake Powell release of 8.23 maf in WY 2021 and 7.48 maf in WY2022
- - - January 2021 Most Probable Inflow with a Lake Powell release of 8.23 maf in WY 2021 and 7.48 maf in WY2022

# Lake Mead End of Month Elevations

Historic and Projected based on February and January 2021 24-Month Study Inflow Scenarios





# Questions?

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