



One Water and Stewardship Committee

# Update on WSDM

Item 6c

November 13, 2023

# Item 6c

## Update on WSDM

### Subject

Update on WSDM

### Purpose

Provide updated supply and hydrologic information

# Water Year 2023: Drought to Abundance

*Shasta Lake (October 2022)*



*Lake Oroville (October 2022)*



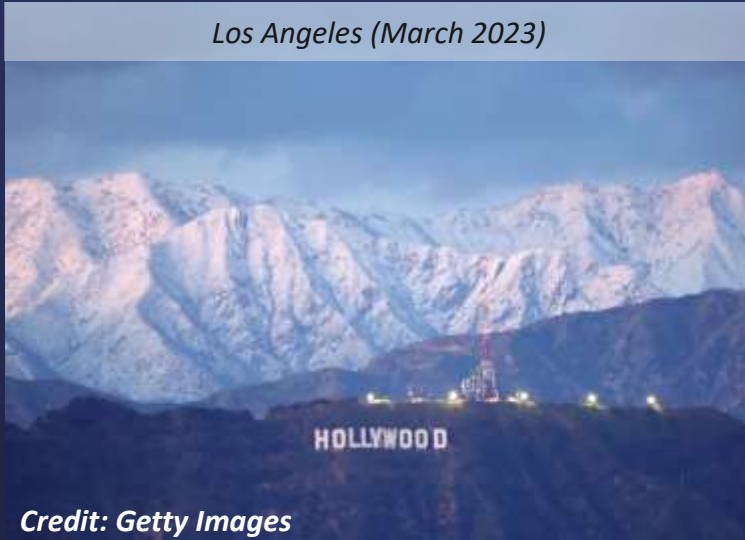
*Lake Mead (January 2023)*



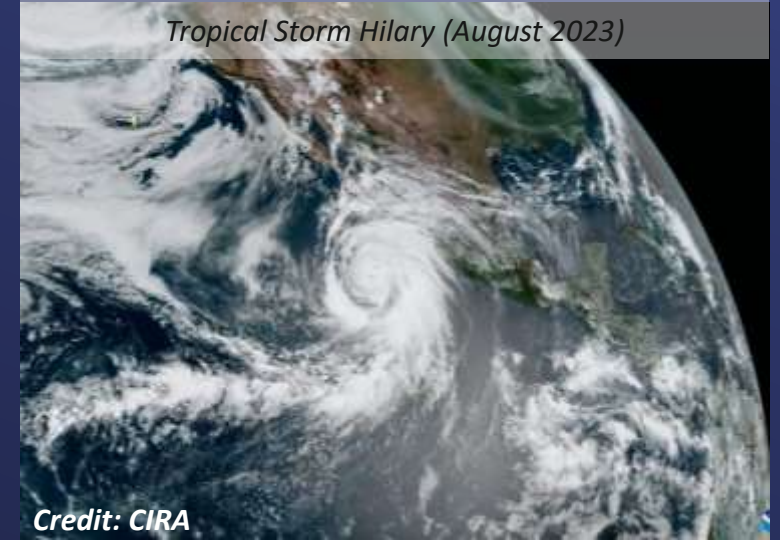
*Tulare Lake (May 2023)*



*Los Angeles (March 2023)*



*Tropical Storm Hilary (August 2023)*



# Word of the Water Year: **Whiplash**

2022



California's three-year drought continues with no relief in sight

*The Guardian, 2022*

Californians urged to save water as state faces dismal snowpack in Sierra Nevada

*Los Angeles Times, 2022*

**'The brink of disaster': 2023 is a critical year for the Colorado River as reservoirs sink toward 'dead pool'**

*CNN, 2022*

2023



*California Braces for More Heavy Snow and Rain*

*The New York Times, 2023*

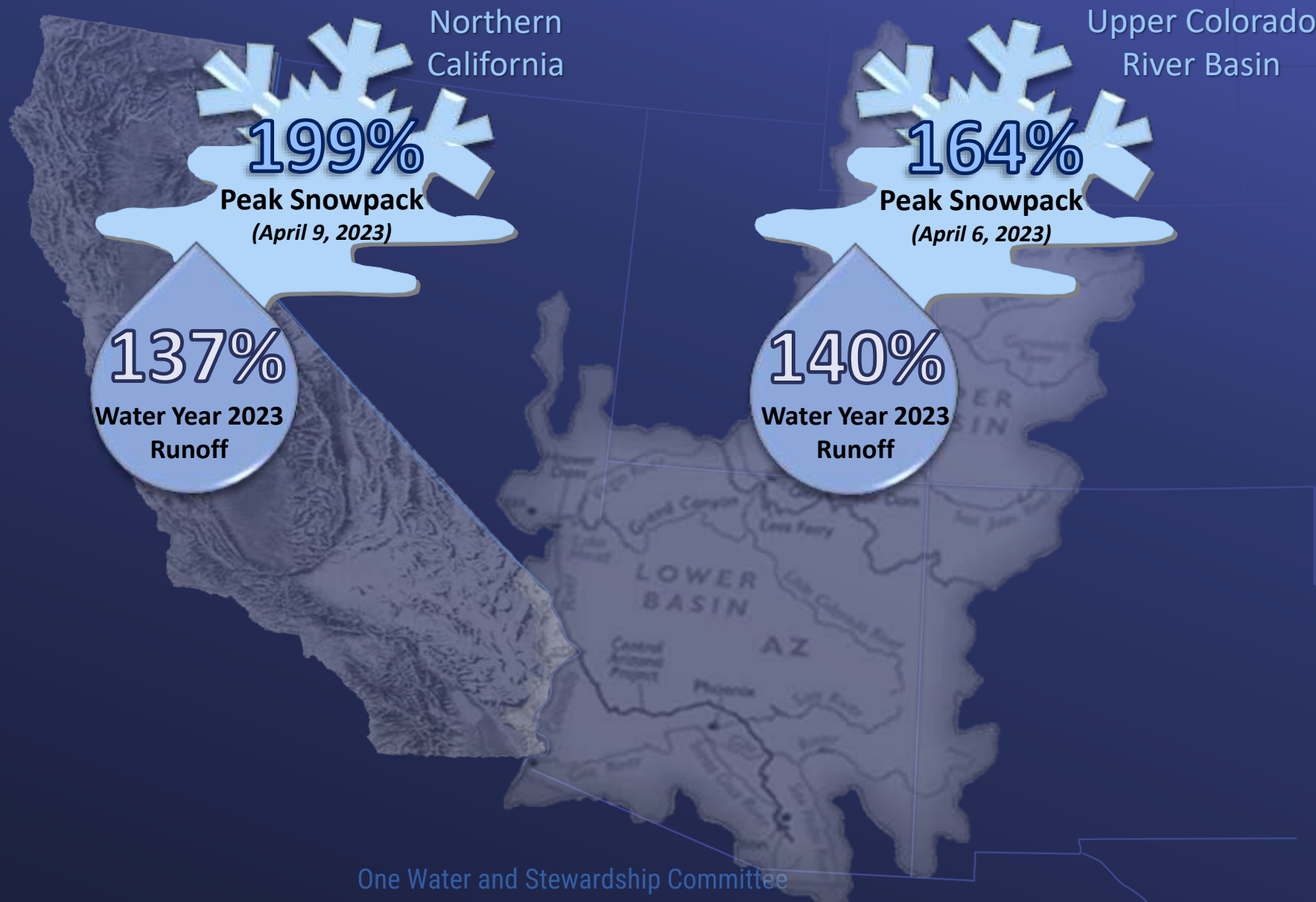
Epic California snowpack is now the deepest it's been in decades

*Los Angeles Times, 2023*

**Here's how much Lake Mead could rise after an epic winter and new water cuts**

*CNN, 2023*

# Water Year Hydrologic Conditions: **Near-Record Breaking**



Northern California

Upper Colorado River Basin

**199%**

**Peak Snowpack**  
*(April 9, 2023)*

**164%**

**Peak Snowpack**  
*(April 6, 2023)*

**137%**

**Water Year 2023**  
**Runoff**

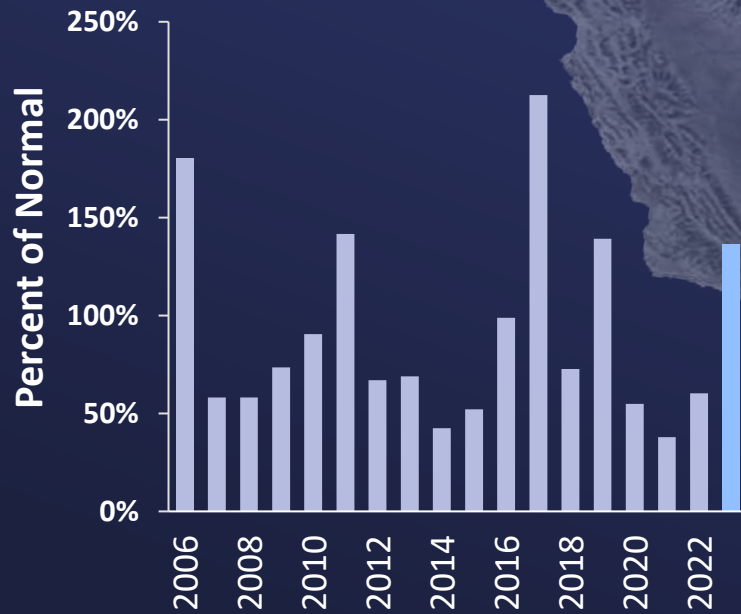
**140%**

**Water Year 2023**  
**Runoff**

# Water Year Hydrologic Conditions: **Near-Record Breaking**

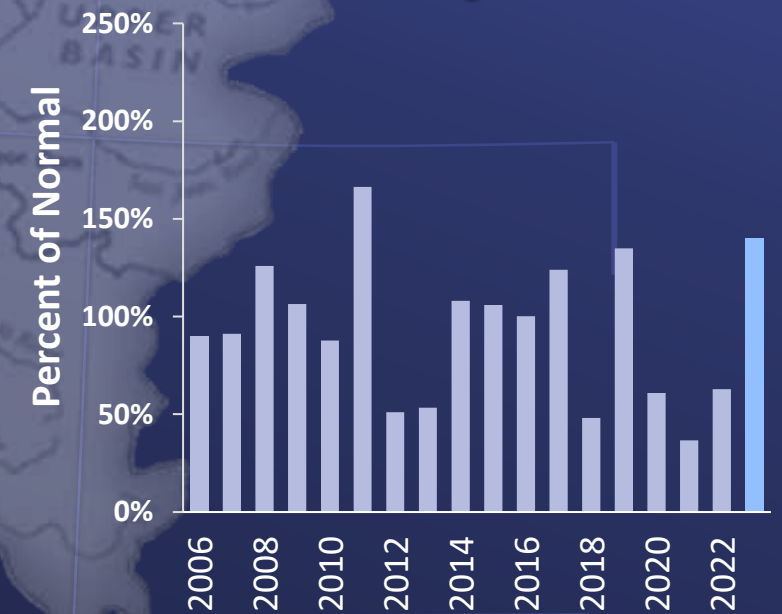
**137%**  
Water Year 2023  
Runoff

### Sacramento River Runoff



**140%**  
Water Year 2023  
Runoff

### Powell Unregulated Inflow



An aerial photograph of a winter landscape. The ground is covered in a thick layer of snow, with visible tracks and shadows. A small, dark-roofed cabin is nestled in the snow in the upper middle. A stream flows through the lower right portion of the image, partially obscured by snow. Several evergreen trees are scattered throughout the scene, casting long shadows. The overall atmosphere is serene and quiet.

# State Water Project

November 13, 2023

*Credit: DWR*

One Water and Stewardship Committee

Item #6c Slide 7



# Water Year Highlights: *State Water Project*

Over 30  
Atmospheric Rivers  
Hit California

Near-Record  
Breaking Snowpack

Allocation  
Climbs to 100% as  
Reservoirs Improve

Reversal in Drought  
Conditions



Over 30  
Atmospheric Rivers  
Hit California

Near-Record  
Breaking Snowpack

Allocation  
Climbs to 100% as  
Reservoirs Improve

Reversal in Drought  
Conditions

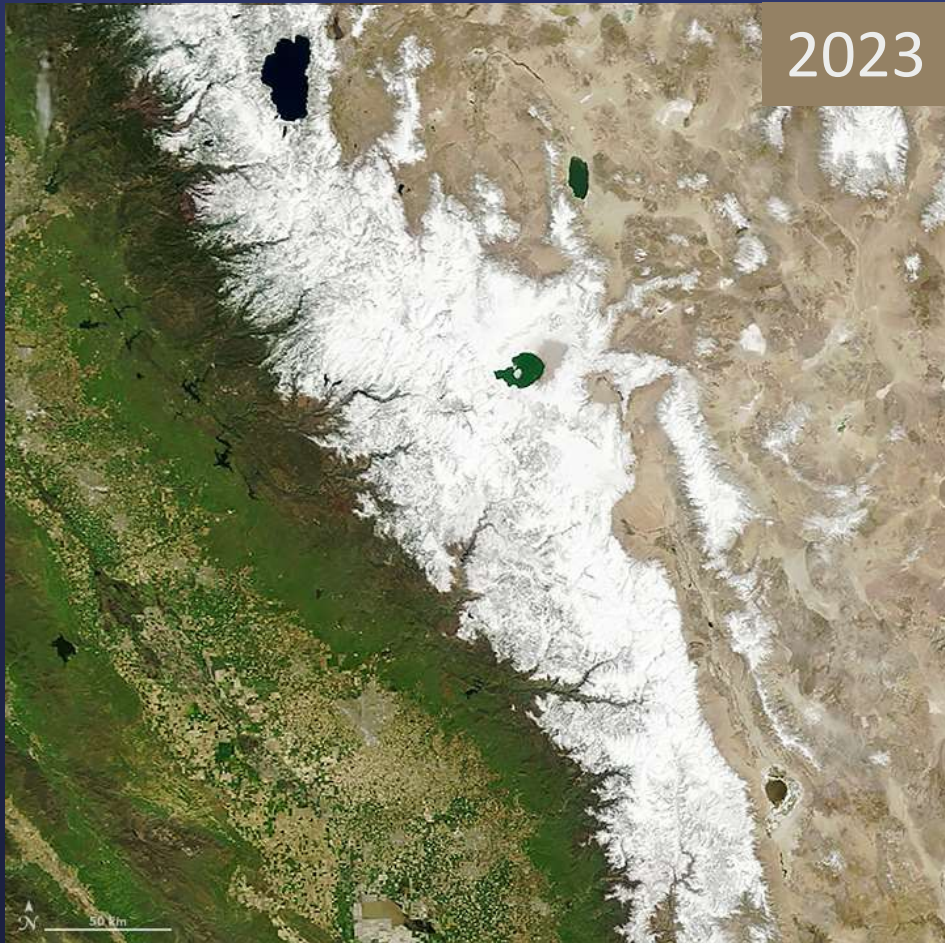


Near-Record  
Breaking Snowpack

Over 30  
Atmospheric Rivers  
Hit California

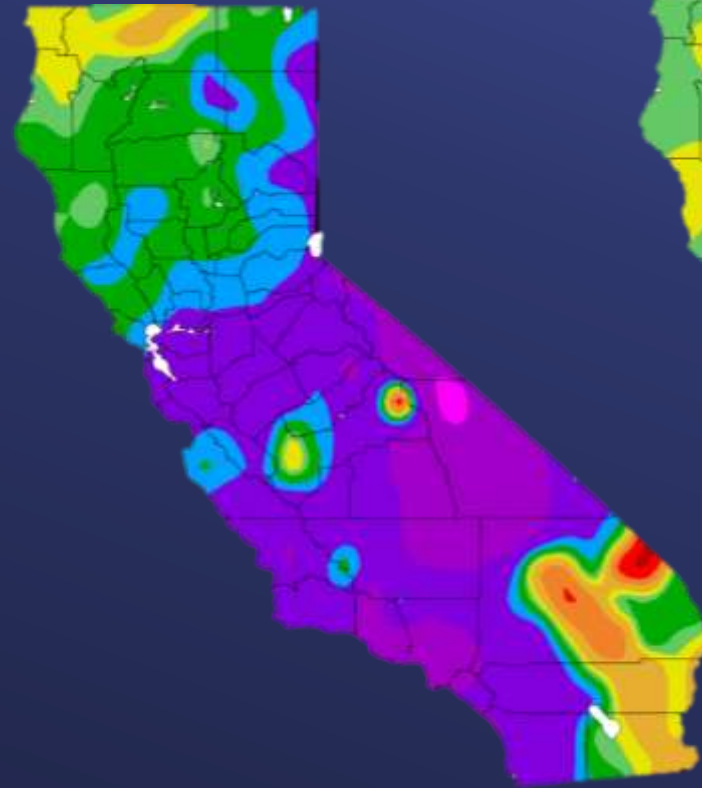
Allocation  
Climbs to 100% as  
Reservoirs Improve

Reversal in Drought  
Conditions



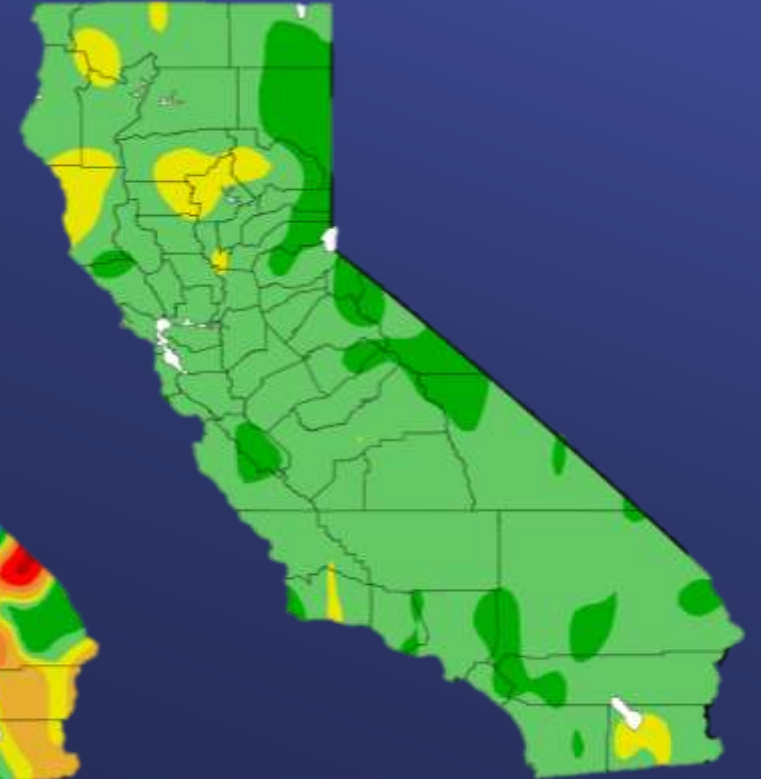
Credit: NASA Earth Observatory

% of Normal  
Precipitation



300 200 150 130 110 100 90 70 50 25 5

Departure from Normal  
Temperature (°F)



-4 -2 0 +4

November 13, 2023

One Water and Stewardship Committee

Slide 10

Allocation  
Climbs to 100% as  
Reservoirs Improve

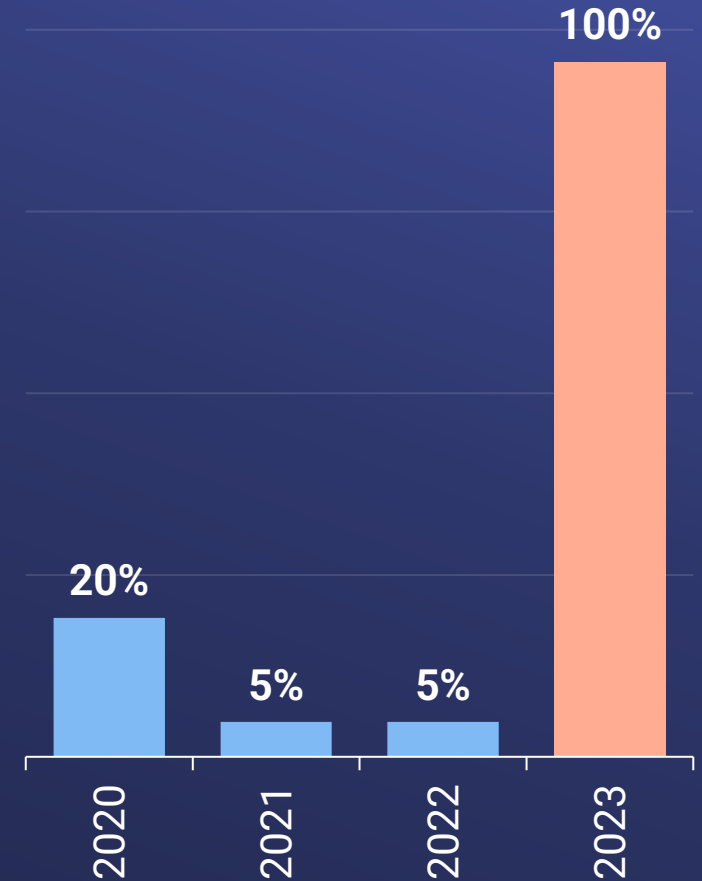
Over 30  
Atmospheric Rivers  
Hit California

Near-Record  
Breaking Snowpack

Reversal in Drought  
Conditions

## State Water Project to Further Increase Water Supply Allocation to 100%

Published: Apr 20, 2023



Allocation  
Climbs to 100% as  
Reservoirs Improve

Over 30  
Atmospheric Rivers  
Hit California

Near-Record  
Breaking Snowpack

Reversal in Drought  
Conditions

## Lake Oroville



**December 2022**  
**30% Full**



**March 2023**  
**75% Full**



**June 2023**  
**100% Full**

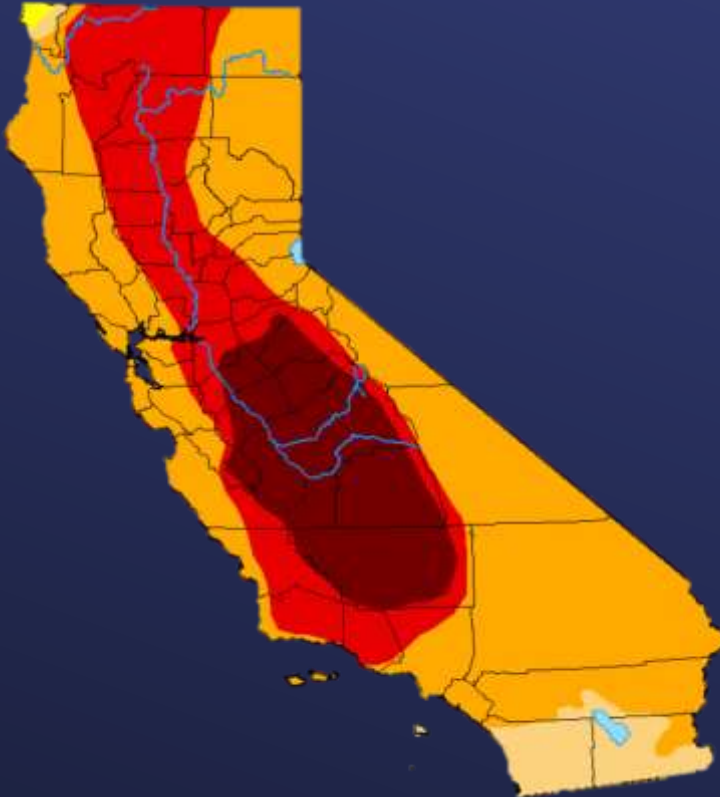
Reversal in Drought Conditions

Over 30 Atmospheric Rivers Hit California

Near-Record Breaking Snowpack

Allocation Climbs to 100% as Reservoirs Improve

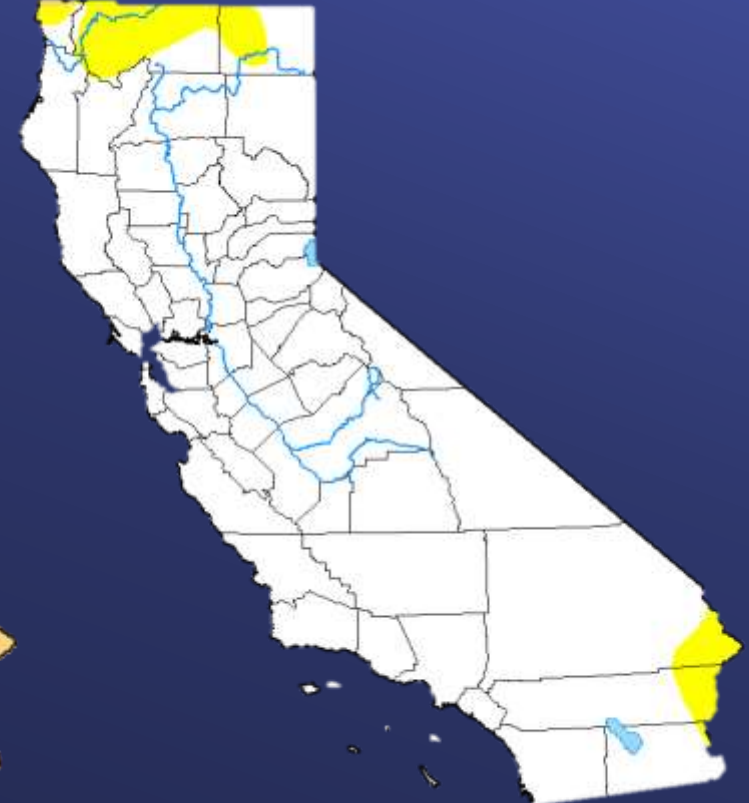
October 4, 2022



January 3, 2023



September 26, 2023



Intensity



November 13, 2023

One Water and Stewardship Committee

Slide 13



# Colorado River

# Water Year Highlights: Colorado River

Conditions &  
Negotiations

Significant Gains in  
Lake Mead &  
Lake Powell

USBR Declares  
Level 1 Shortage  
for CY 2024

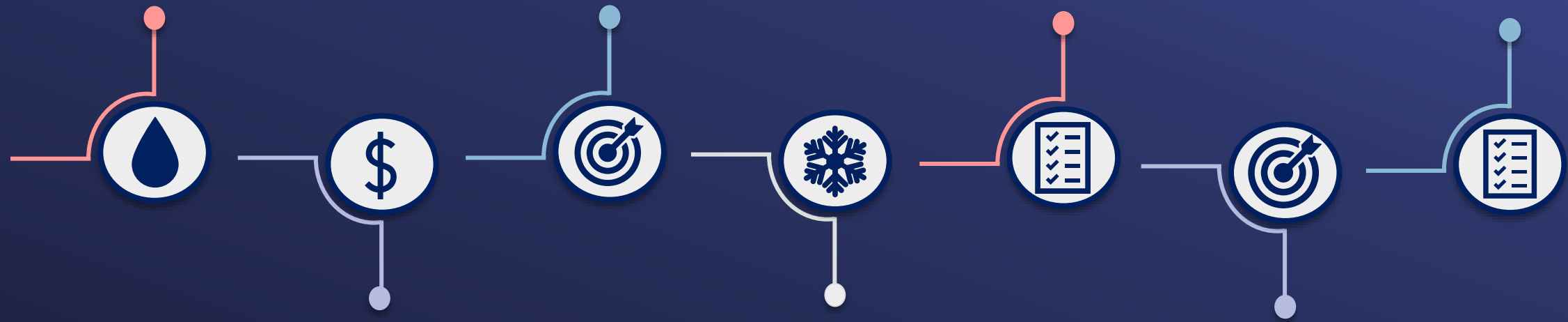
Conditions & Negotiations

**Spring/Summer 2022**  
USBR calls for 2-4 MAF of annual reductions in response to historic low reservoir elevations

**October 2022**  
California submits proposal to cut 400 TAF each year from 2023-2026

**April 2023**  
USBR publishes original Draft Supplemental Environmental Impact Statement (SEIS)

**October 2023**  
USBR publishes Revised Draft SEIS; designates Lower Basin Proposal as the "Proposed Action"



**August 2022**  
Congress appropriates \$4 billion for drought mitigation within Inflation Reduction Act

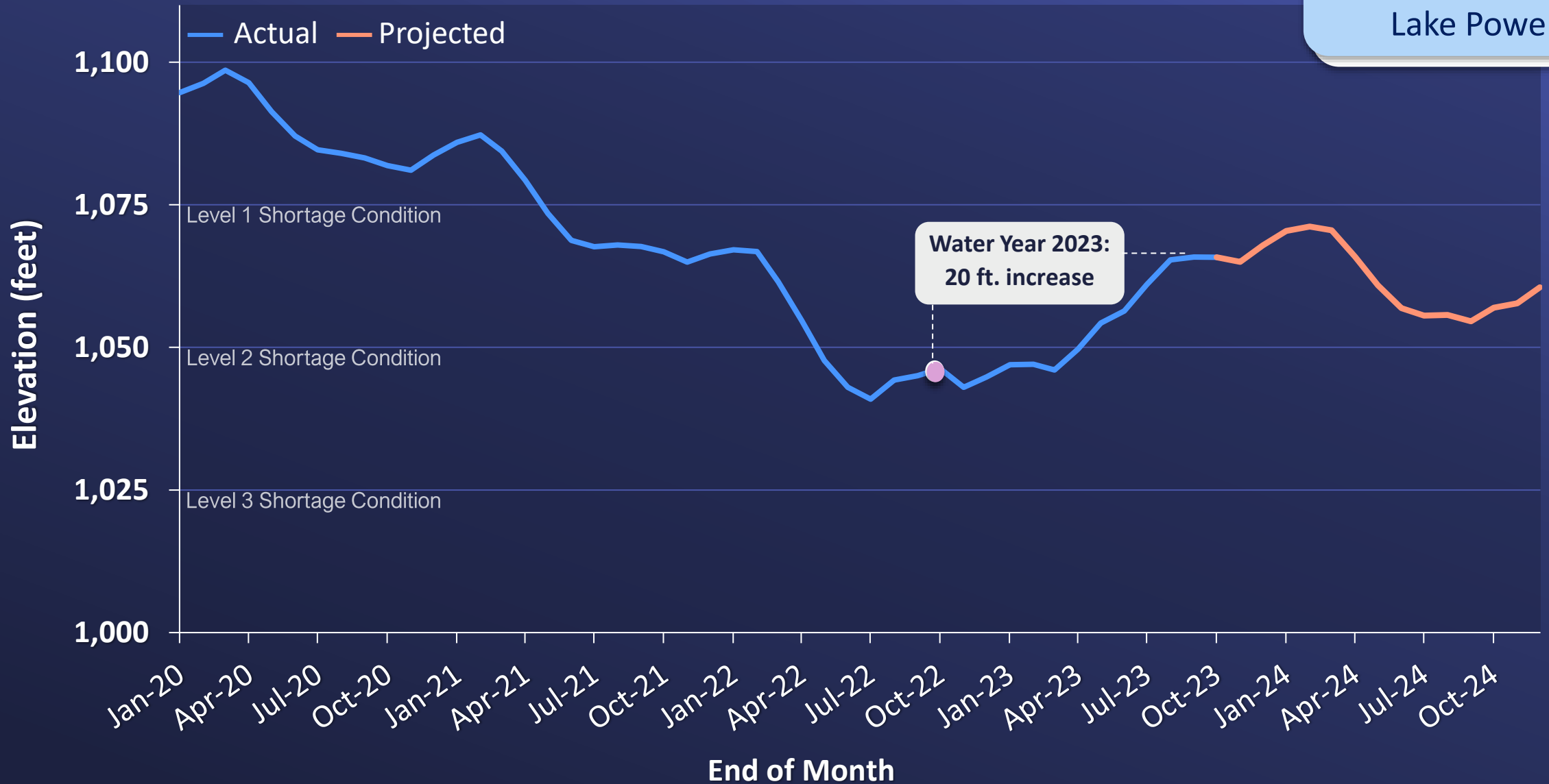
**Winter 2023**  
Upper Colorado River Basin receives near-record snowpack

**May 2023**  
Lower Basin Plan proposes to conserve at least 3 MAF from 2023-2026



# Lake Mead

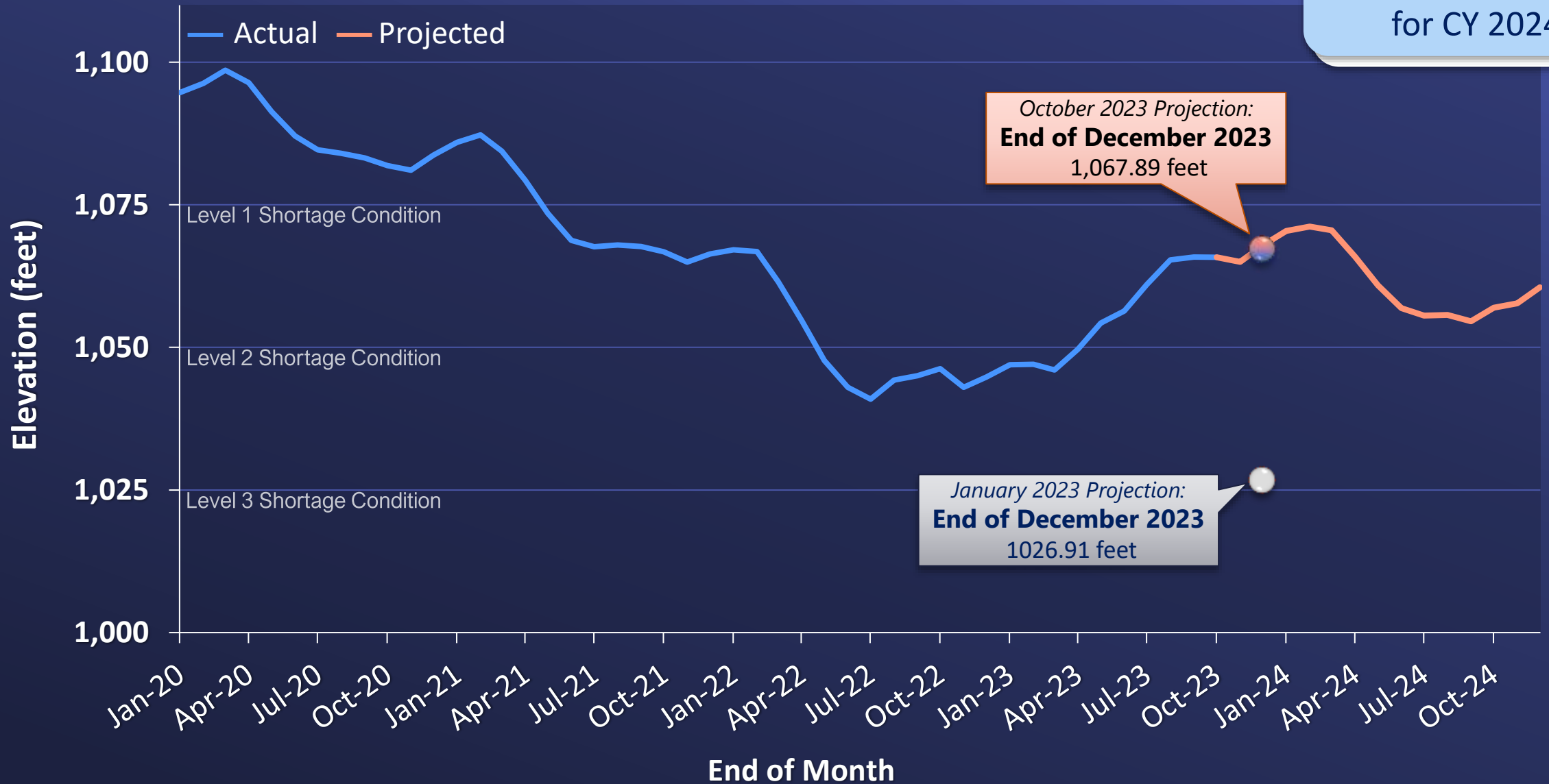
Significant Gains in  
Lake Mead &  
Lake Powell



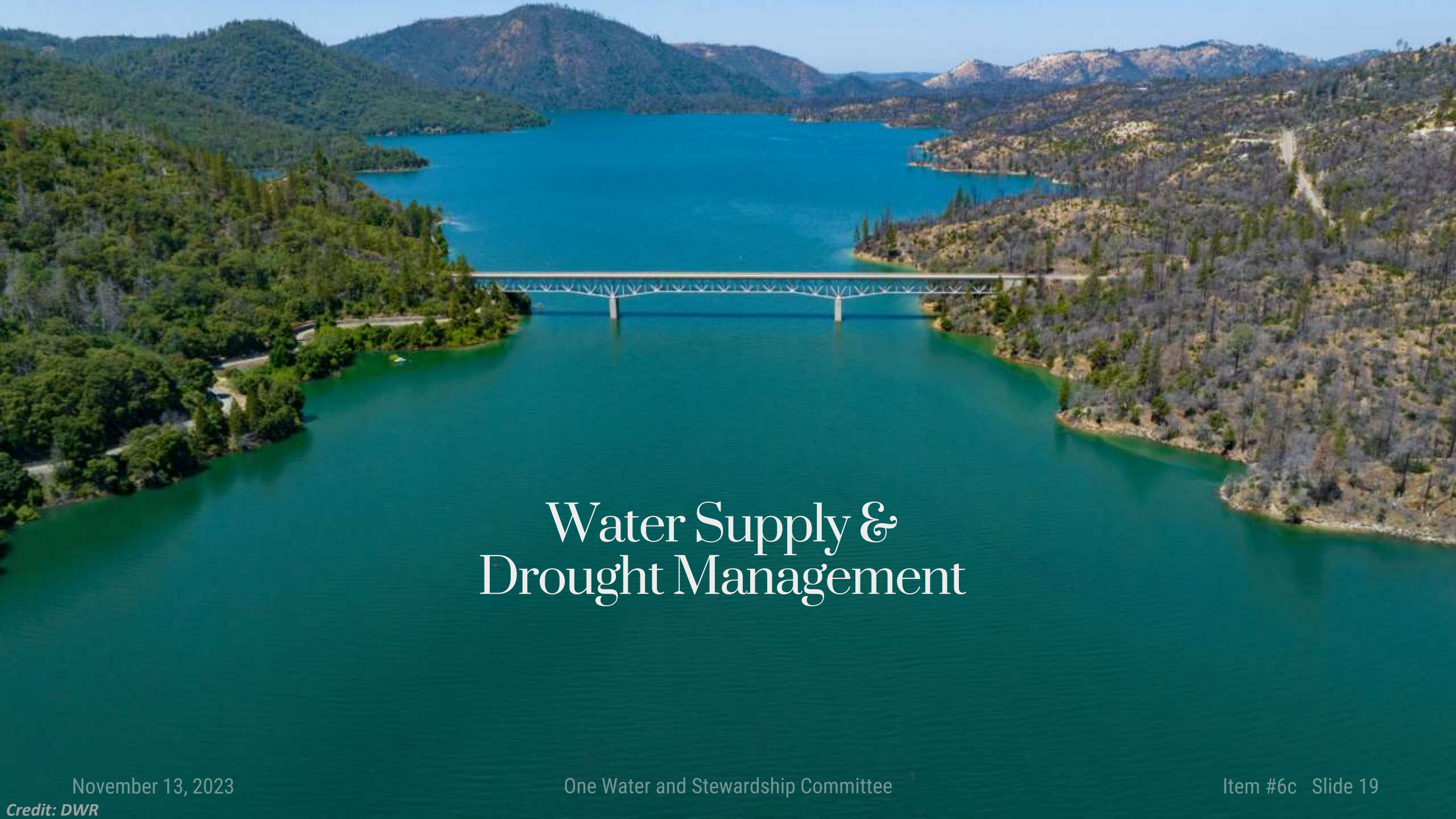
Source: USBR's October 2023 24-Month study

# Lake Mead

USBR Declares  
Level 1 Shortage  
for CY 2024



Source: USBR's October 2023 24-Month study



# Water Supply & Drought Management

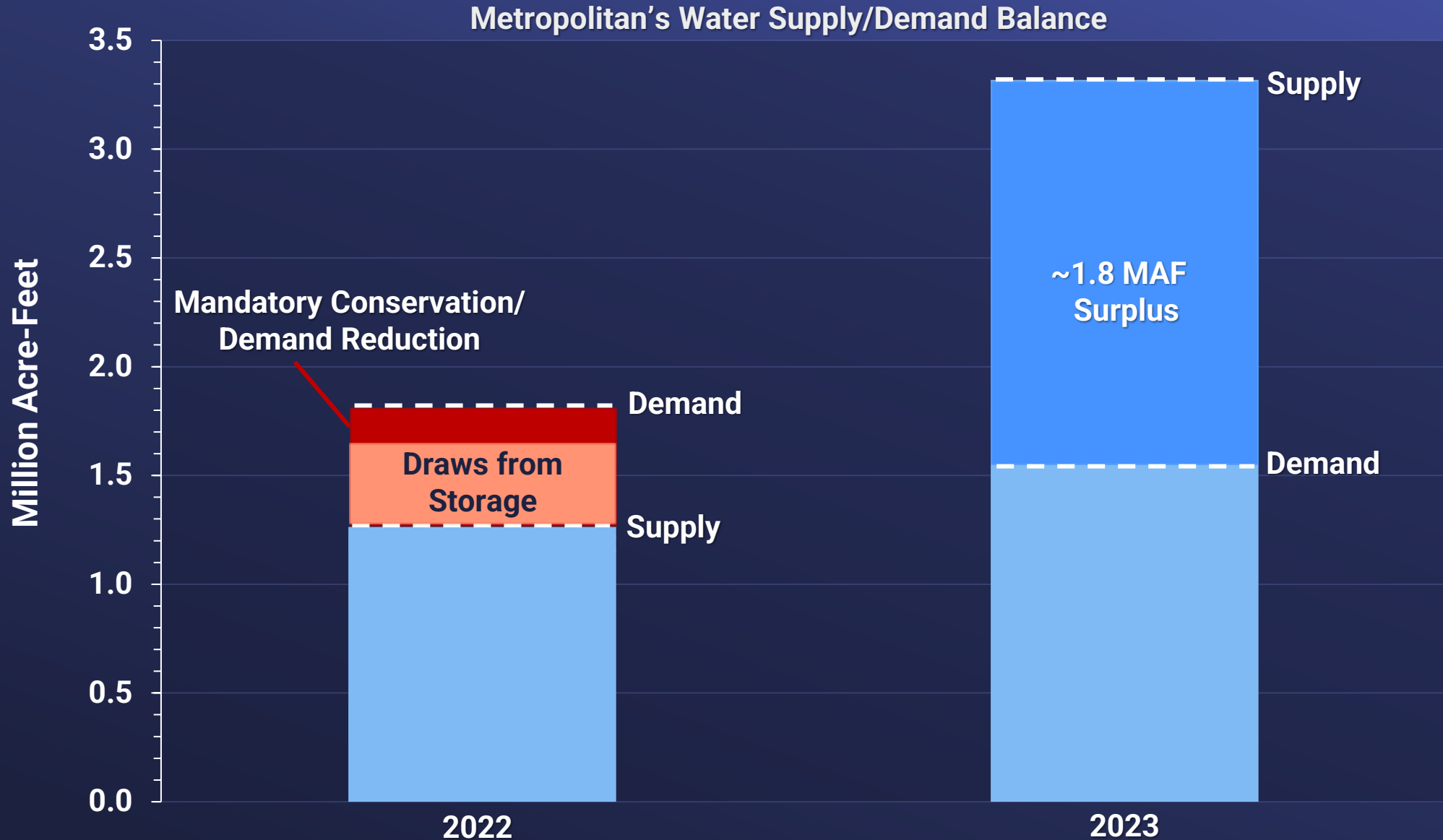
November 13, 2023

*Credit: DWR*

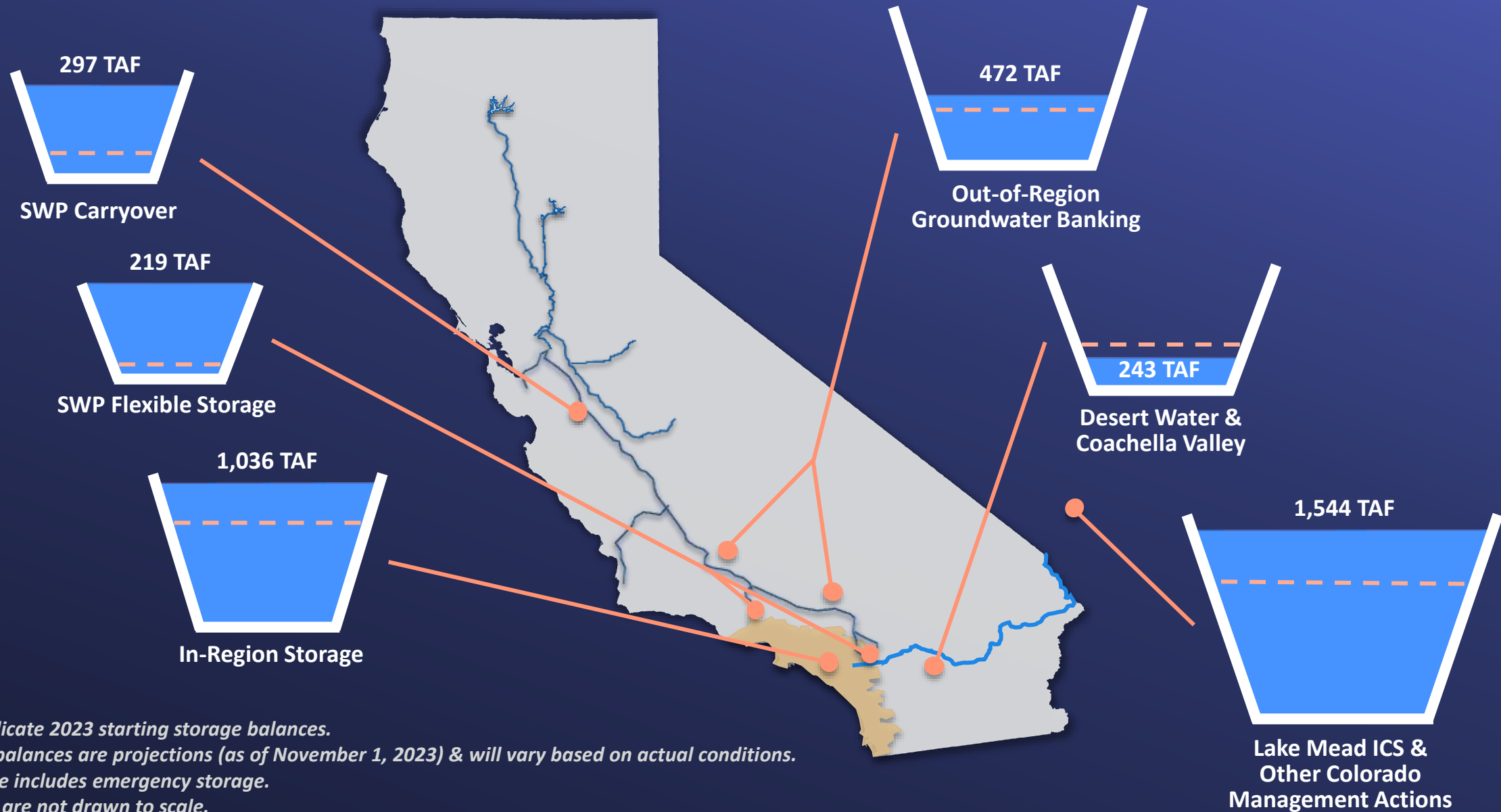
One Water and Stewardship Committee

Item #6c Slide 19

# The Tale of Two Years: Drought & Abundance



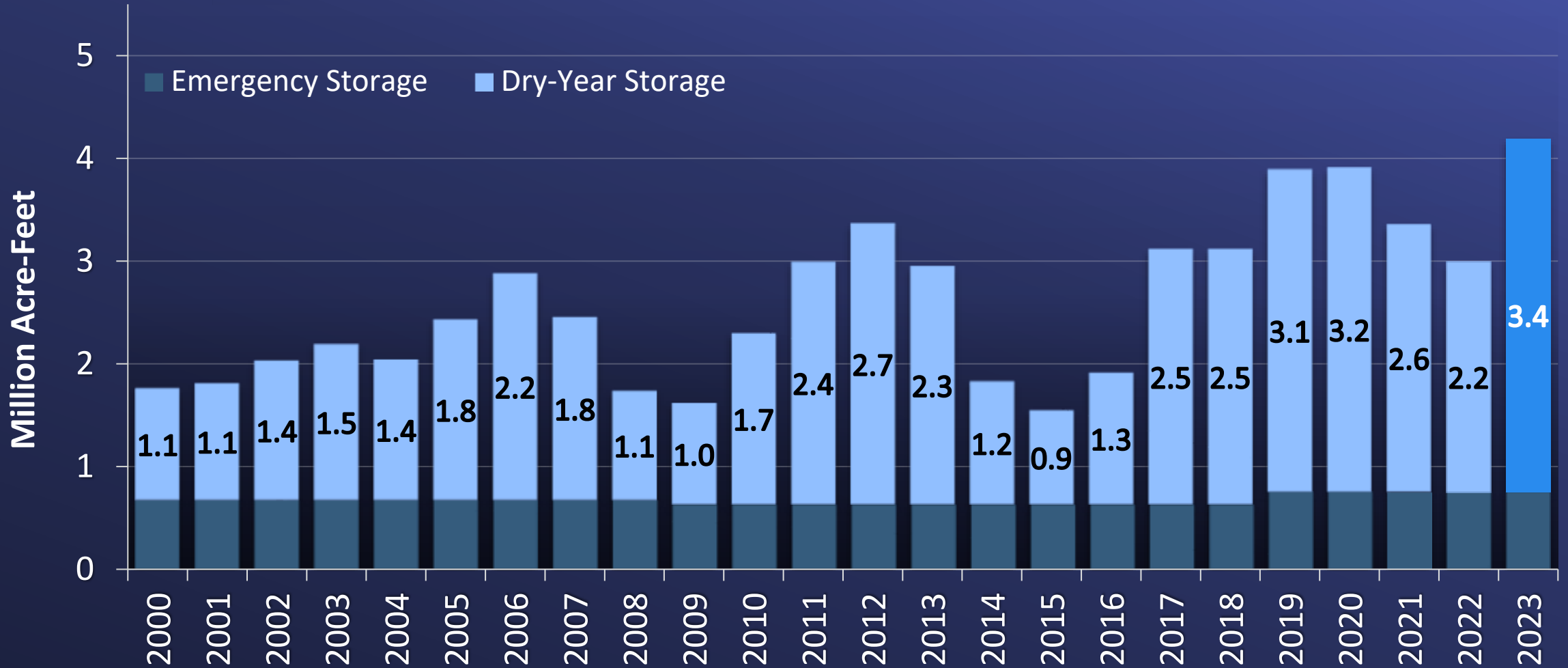
# Metropolitan's 2023 Storage Actions: ~1.2 MAF Increase



**Notes:**

- 1) Dashed lines indicate 2023 starting storage balances.
- 2) Ending storage balances are projections (as of November 1, 2023) & will vary based on actual conditions.
- 3) In-region storage includes emergency storage.
- 4) Storage buckets are not drawn to scale.

# Record-High Storage Projection for Metropolitan End-of-Year Balances



**Note:**

*2023 end-of-year balance is preliminary as they are subject to DWR adjustments and USBR final accounting.*



# Looking Ahead to 2024

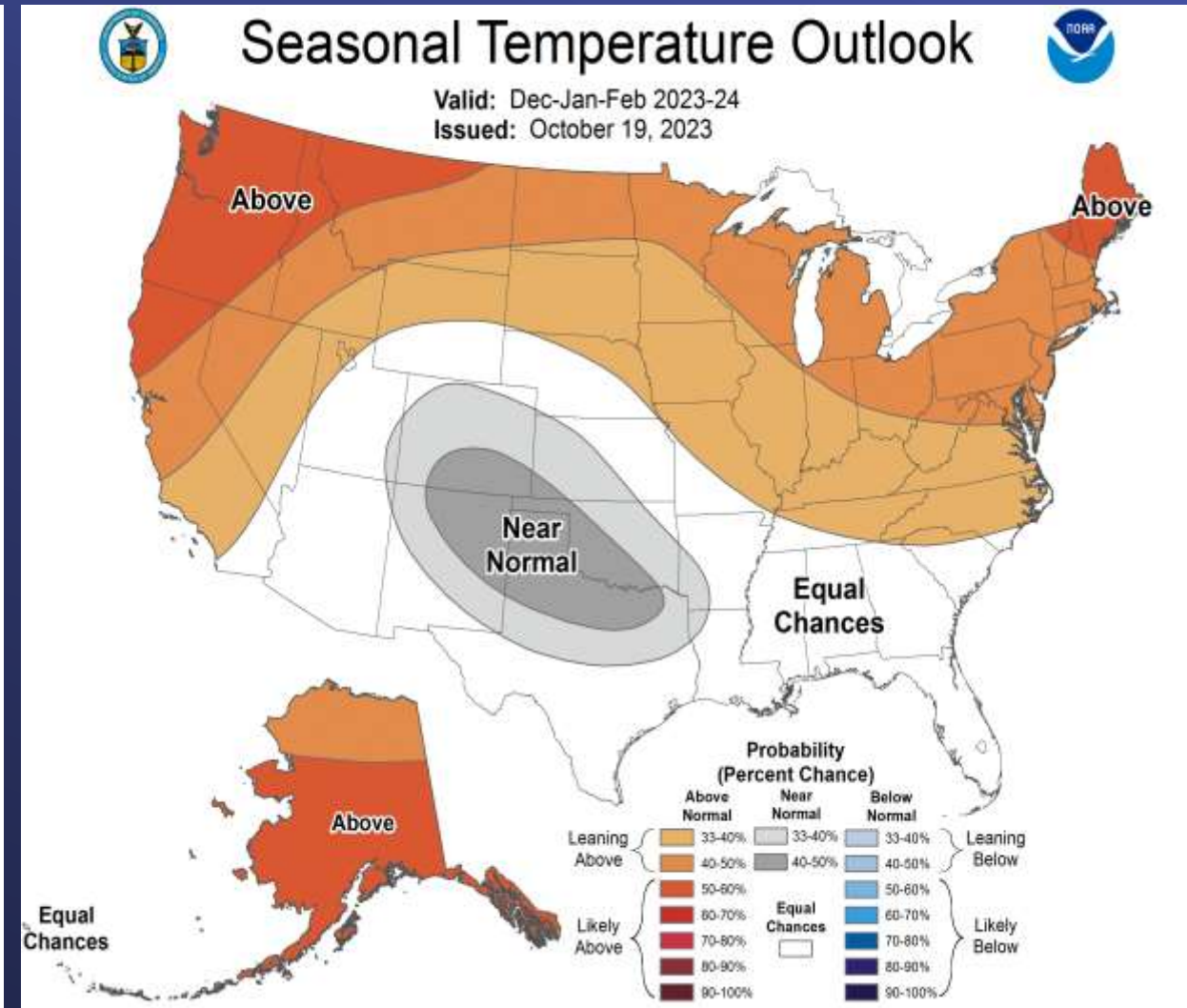
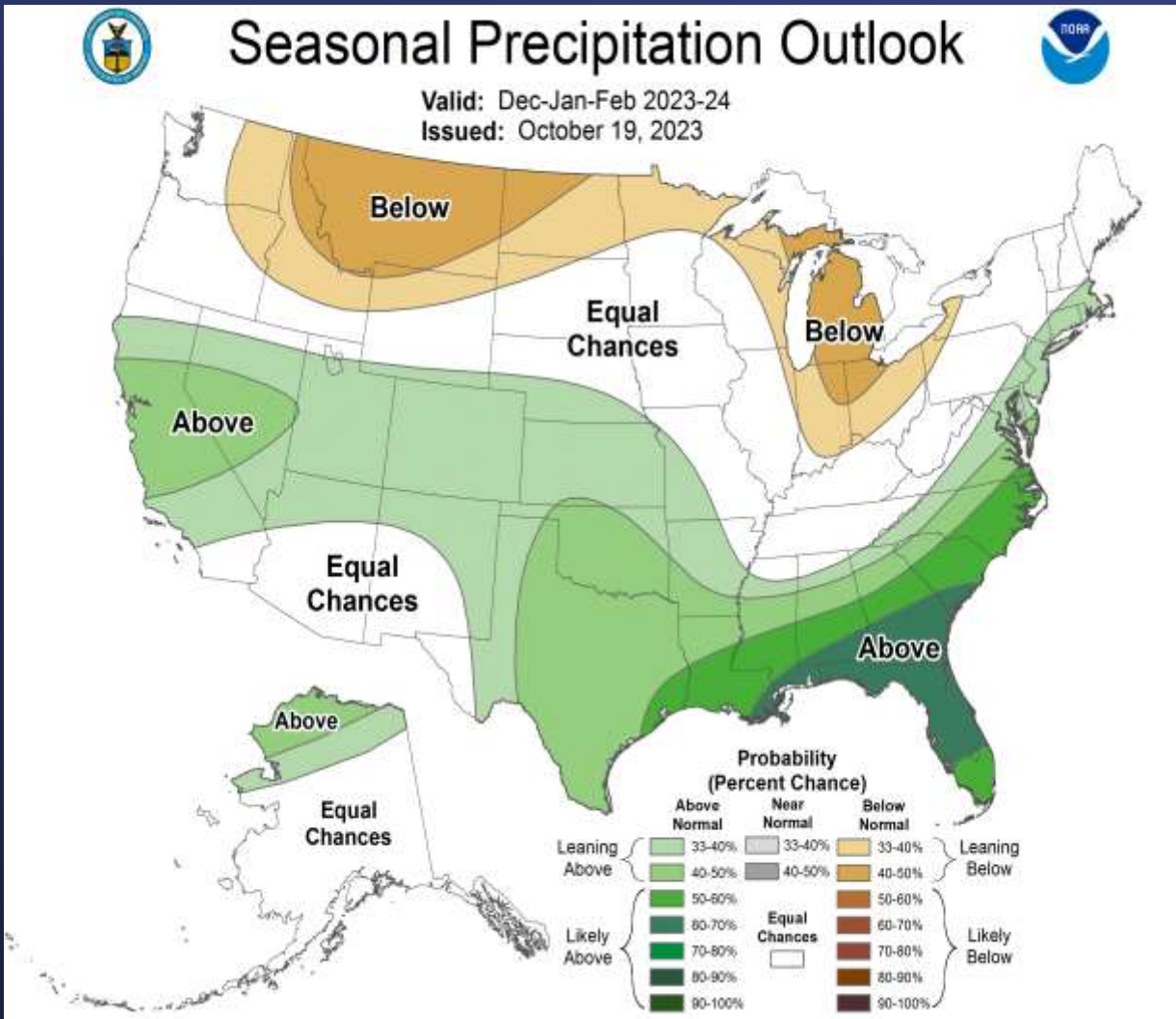
November 13, 2023

*Credit: DWR*

One Water and Stewardship Committee

Item #6c Slide 23

# El Niño Conditions on the Horizon





# Planning for 2024

- Initial 2024 SWP Table A Allocation will be announced on December 1<sup>st</sup>, 2023
  - Metropolitan submitted 2024 SWP Water Order in September 2023
- Projected end-of-year storage levels at San Luis Reservoir will impact initial 2024 SWP Table A Allocation
- December WSDM written report will include projected supply and demand gaps for 2024-2026

