



Special Board Meeting

Discussion Regarding Post-2026 Colorado River Reservoir Operations Guidelines

Item 10-2

December 5, 2023

Item #10-2 Discussion Regarding Post- 2026 Colorado River Operations Guidelines

Subject

Discussion regarding the U.S. Bureau of Reclamation's development of post-2026 Colorado River reservoir operations guidelines and strategies for Lake Powell and Lake Mead.

Purpose

To update the Board on the development of the post-2026 Guidelines, including key provisions of the Law of the River, an overview of current conditions, and related activities.

Next Steps

Staff intend to bring additional discussion topics to the Board as development of the Post-2026 Colorado River Operations Guidelines proceed.

Open Session Discussion Outline

Discussion Purpose and Overview

Key Law of the Colorado River Provisions

Overview of Current Conditions

Post-2026 Guideline Process and Parallel
Activities

Colorado River Reservoir Management

- The U.S. Bureau of Reclamation (Reclamation) owns and operates Glen Canyon Dam and Hoover Dam
- Reclamation operates the dams and manages Lake Powell and Lake Mead according to the 2007 Interim Guidelines
- The 2007 Interim Guidelines include the requirement that Reclamation operates the reservoirs consistently with various elements of the “Law of the River”



Colorado River Governance

“Law of the River”- agreements, statutes, regulations and treaty that govern use of the Colorado River. Since the Colorado River Compact was signed in 1922, the Law of the River has continued to evolve.

Law of the River

- 1922 Colorado River Compact
- 1928 Boulder Canyon Project Act
- 1944 Treaty with Mexico
- 1948 Upper Colorado River Basin Compact
- 1963 *Arizona v. California*
- 1968 Colorado River Basin Project Act
- 1970 Long Range Operating Criteria
- 2001 Surplus Guidelines
- 2007 Interim Guidelines
- 2019 Colorado River Drought Contingency Plan Authorization Act

1922 Colorado River Compact

- Provides the Upper Basin and Lower Basin each have the right to beneficially use:
 - 7.5 maf annually
 - +1.0 maf in the Lower Basin
- The Upper Basin has an obligation:
 - Not to deplete more than 75 maf on a rolling 10-year average. Art. III (c)
 - To provide half of the Mexico Treaty deliveries when a surplus is not available. Art. III(d)



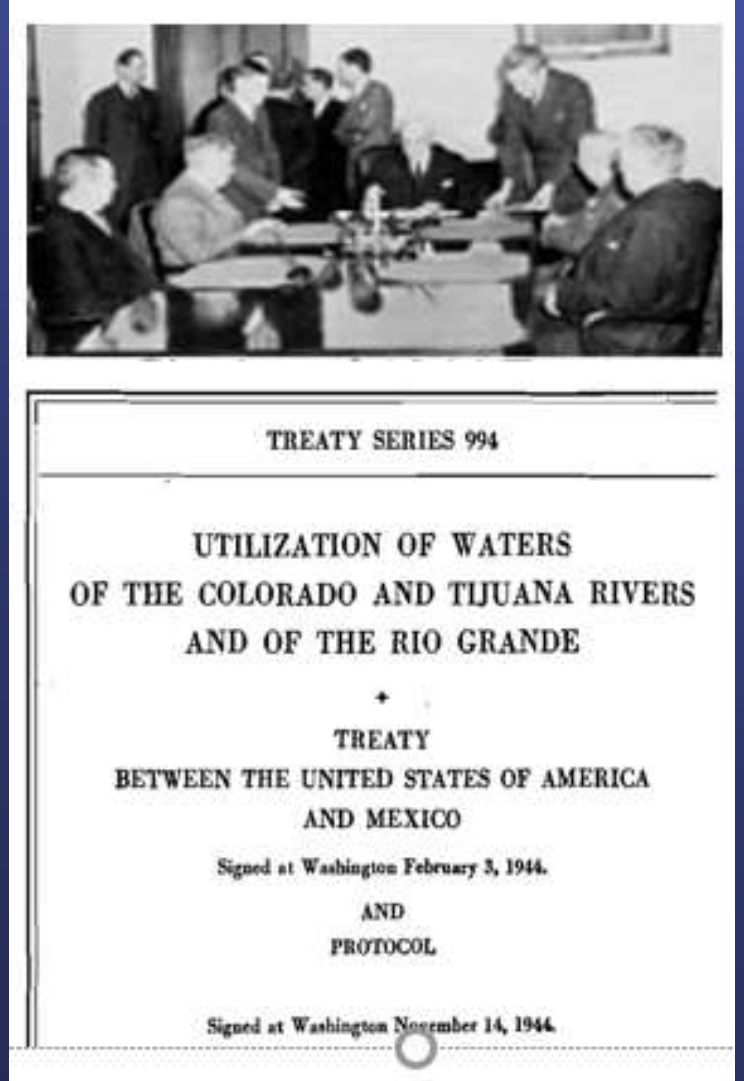
1928 Boulder Canyon Project Act

- Apportioned the Lower Basin's 7.5 maf Colorado River Compact allocation to:
 - California – 4.4 maf
 - Arizona – 2.8 maf
 - Nevada – 300,000 af
- Specifies that the Lower Basin's share of the Mexico Treaty delivery will be split 50/50 between Arizona and California, if the Lower Division States adopt an interstate compact



1944 Treaty with Mexico

- US delivers 1.5 maf to Mexico in normal years
- Treaty provides that Mexico's surplus and shortage sharing will be proportional with the US
- Treaty Minute 323 establishes current surplus and shortage sharing with Mexico
- Minute 323 expires in 2026 and negotiation of the successor Minute will happen in parallel with development of the Post-2026 Operational Guidelines



1968 Colorado River Basin Project Act

- Authorizes construction of the Central Arizona Project (CAP)
- Provides that when less than 7.5 maf is available for Lower Basin consumptive use that CAP deliveries will be limited in the amount needed to make up the deficiency



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1931 Seven Party Agreement

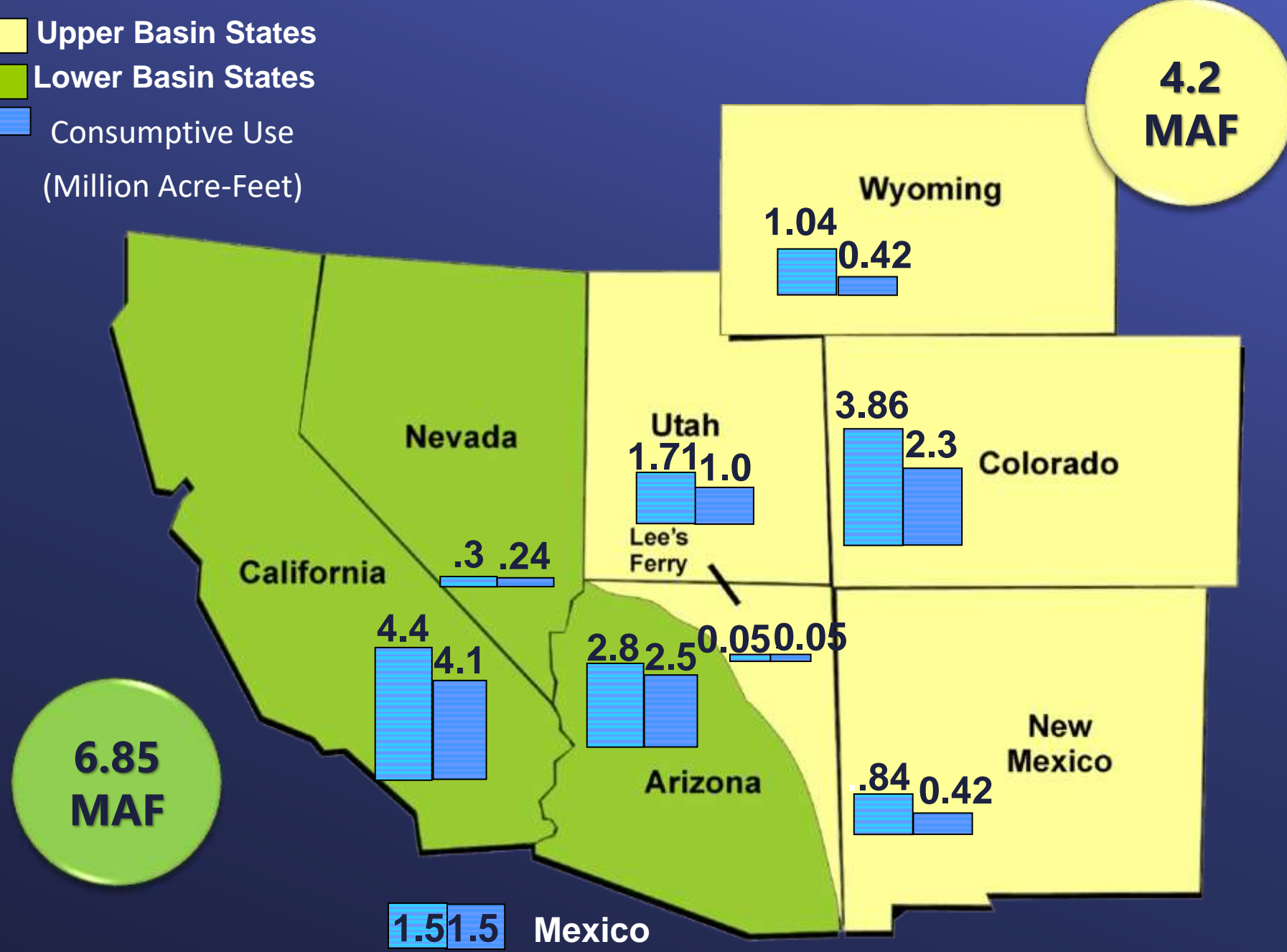
Apportioned California's Colorado River allocation with the following priorities:

1. Palo Verde Irrigation District (PVID)
2. Yuma Project (Bard Water District)
- 3.a. Imperial Irrigation District (IID) and part of PVID
- 3.b. Coachella Valley Water District
4. Metropolitan

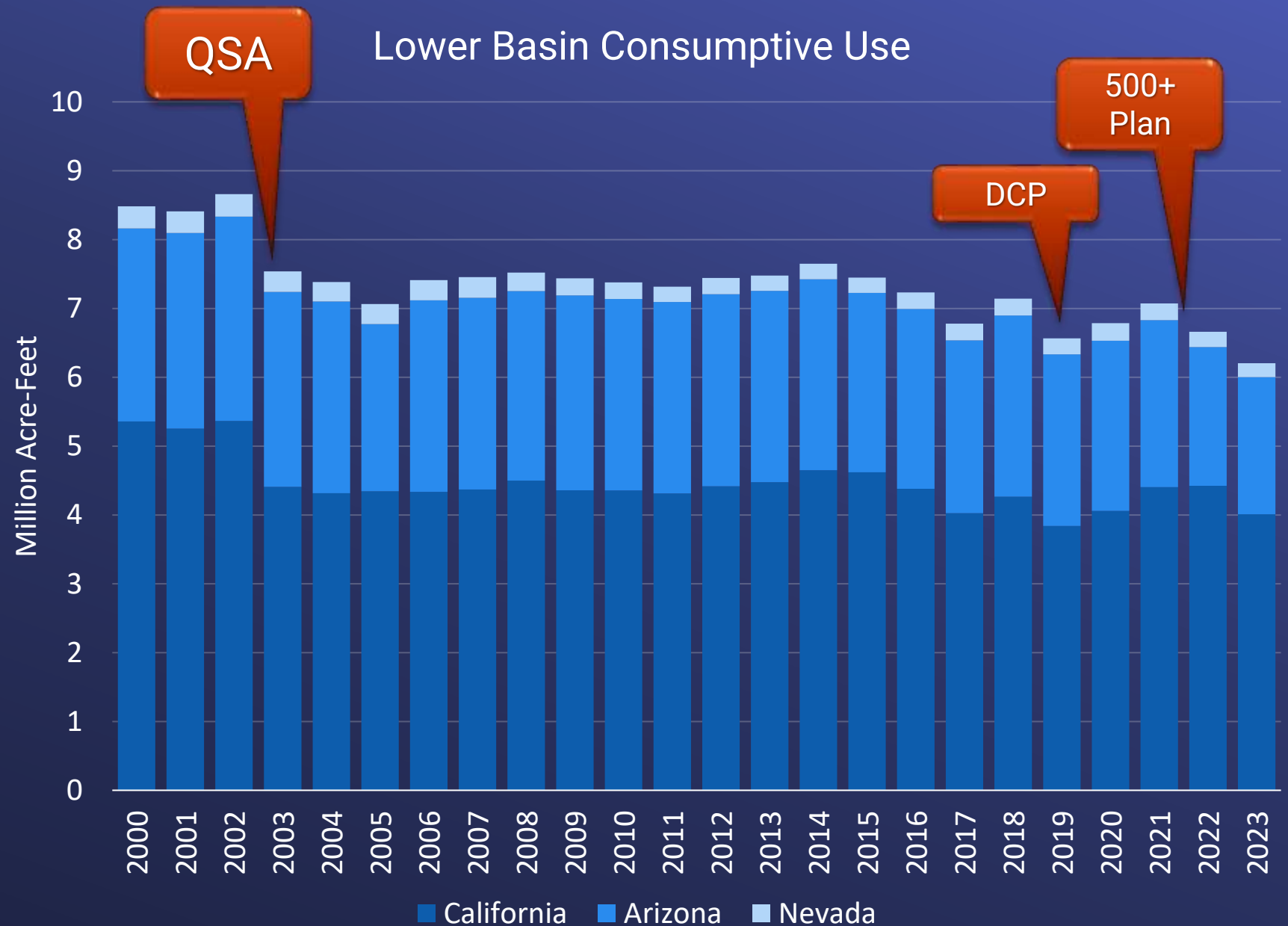


How Much: Colorado River Water Use 2016-2020 Average

Upper Basin States
Lower Basin States
Consumptive Use
(Million Acre-Feet)



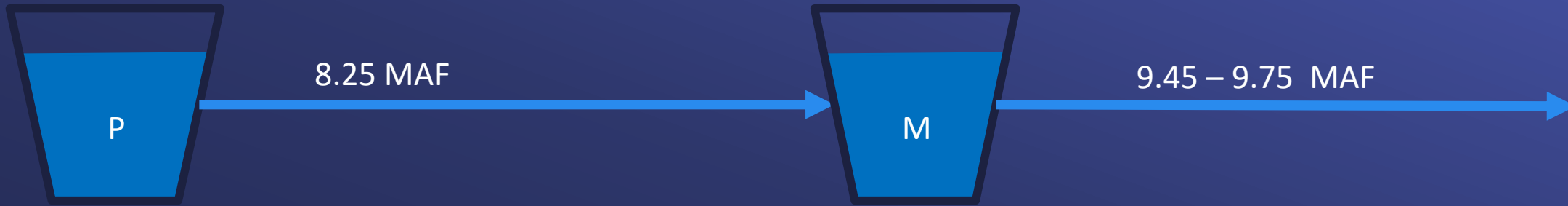
Lower Basin
Demands
Have
Declined
Over Time



Existing Water
Supply and
Demand
Imbalance
(Structural
Deficit)



Basic Structural Deficit Calculation



Compact Release	7.5 MAF
<u>Half of Mexico</u>	<u>0.75 MAF</u>
Total Release	8.25 MAF

Arizona	2.8 MAF
California	4.4 MAF
Nevada	0.3 MAF
Mexico	1.5 MAF
<u>Net System Losses</u>	<u>0.45 – 0.75 MAF</u>
Total Water Demand	9.45 – 9.75 MAF

$8.25 - 9.45 = -1.2$ Million Acre-feet


$8.25 - 9.75 = -1.5$ Million Acre-feet

“The Structural Deficit”

Colorado River Regulated by Operating Guidelines



2007 Interim Guidelines




THE SECRETARY OF THE INTERIOR
WASHINGTON

Record of Decision


Colorado River Interim Guidelines for Lower Basin Shortages and the
Coordinated Operations for Lake Powell and Lake Mead

December 2007

Recommending Official:

 December 13, 2007
ROBERT JOHNSON Date
Commissioner, Bureau of Reclamation

Approved:

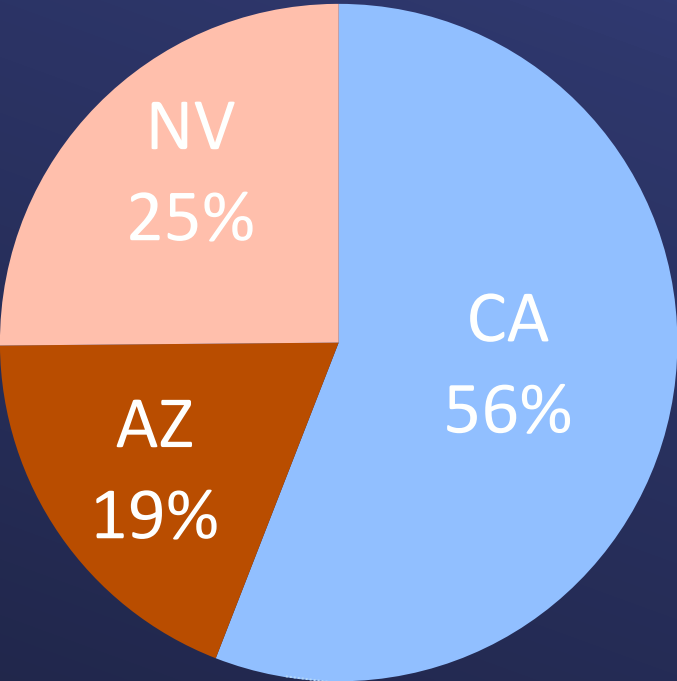
 December 13, 2007
DIRK KEMPTHORNE Date

- Effective through 2026
 - 20-year term
- Key Guidelines Provisions
 - Established Lower Basin Surplus and Shortage Triggers
 - Coordinated Reservoir Operations
 - Developed Intentionally Created Surplus (ICS)

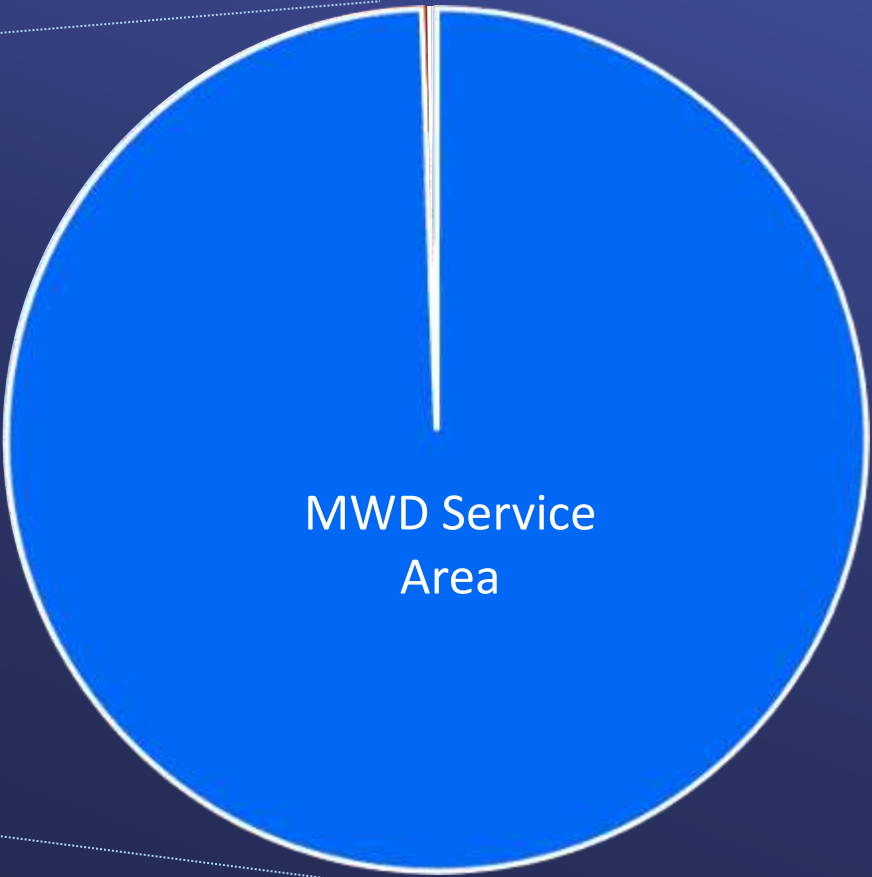
Current Handling of the Structural Deficit



Hoover Power Allocation



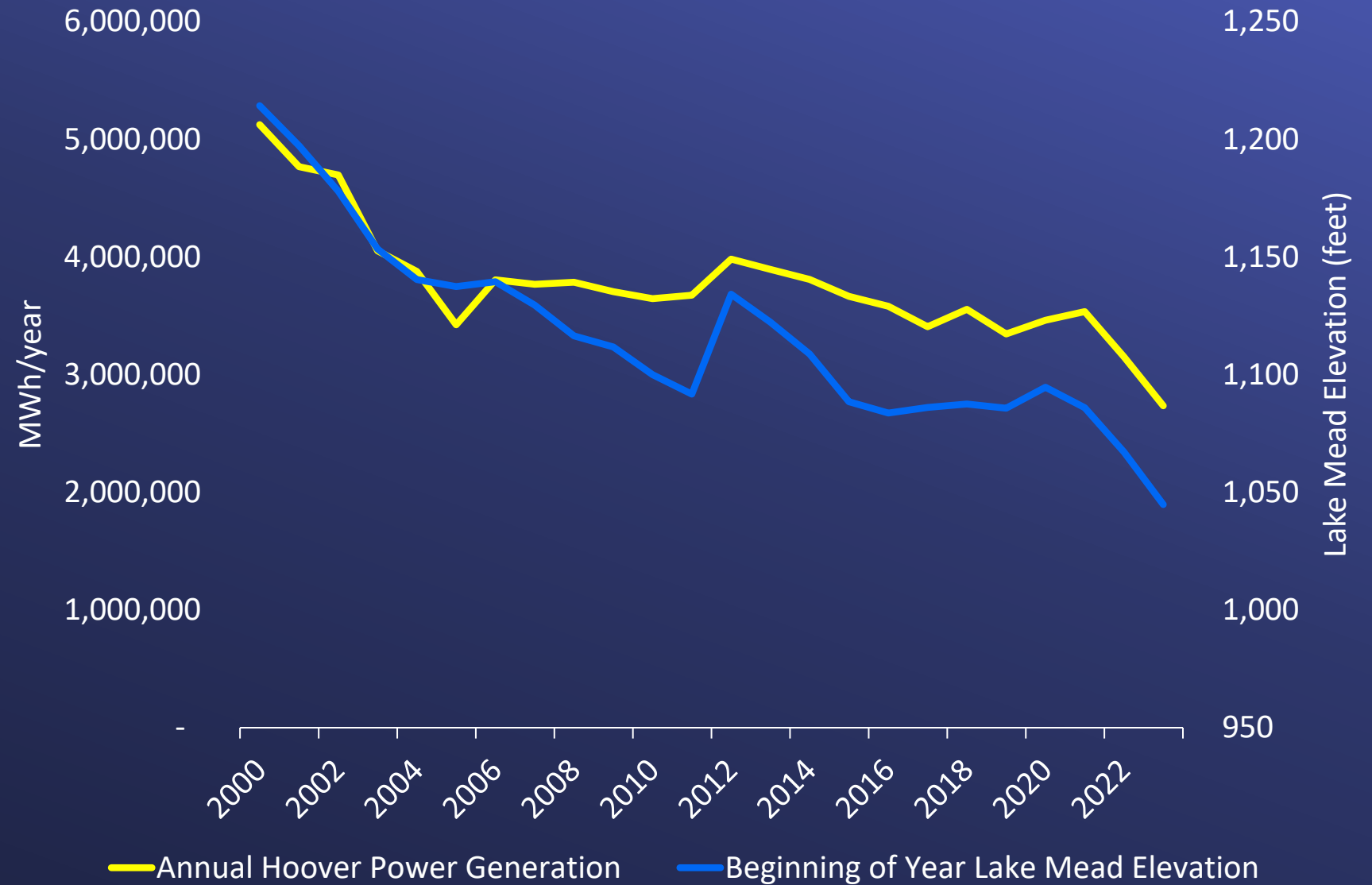
By State



Within California

- MWD
- City of Los Angeles
- Southern California Edison
- City of Glendale
- City of Pasadena
- City of Anaheim
- City of Riverside
- City of Vernon
- City of Burbank
- City of Azusa
- City of Colton
- City of Banning

Hoover Power Production Declines with Lake Mead Elevation



Climate
Change will
Worsen the
Supply
Demand
Imbalance

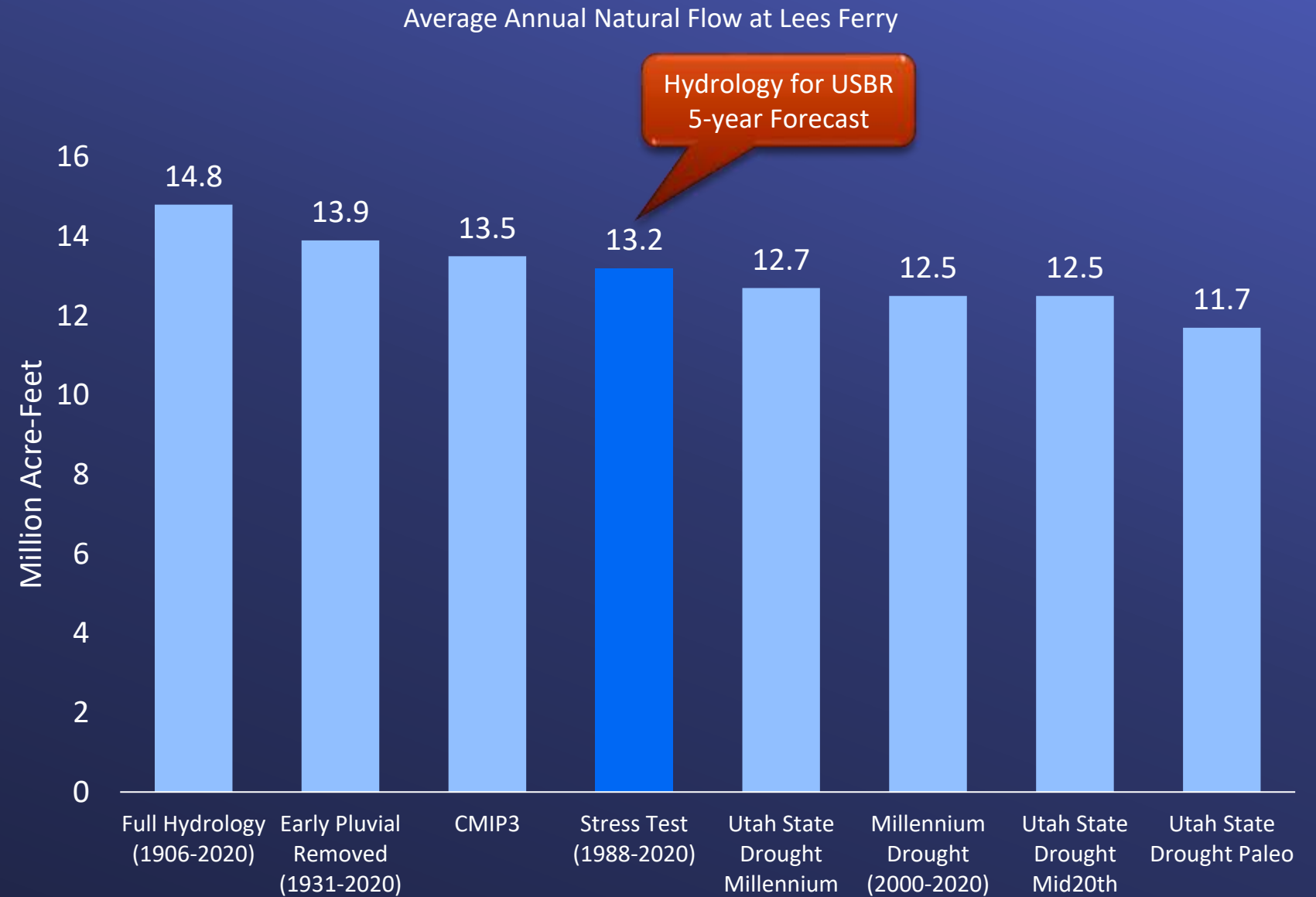
Climate Change Forces Difficult Decisions Along the Colorado River

A River in Crisis

A Path through the Brewing Climate Crisis
on the Colorado River

**COLORADO RIVER BASIN HAS LOST WATER EQUAL TO
LAKE MEAD DUE TO CLIMATE CHANGE**

Flow Expected to Decline with Climate Change



Post-2026 Timeline



Mexico Minutes



Previous Minutes: Minute 319, Minute 323

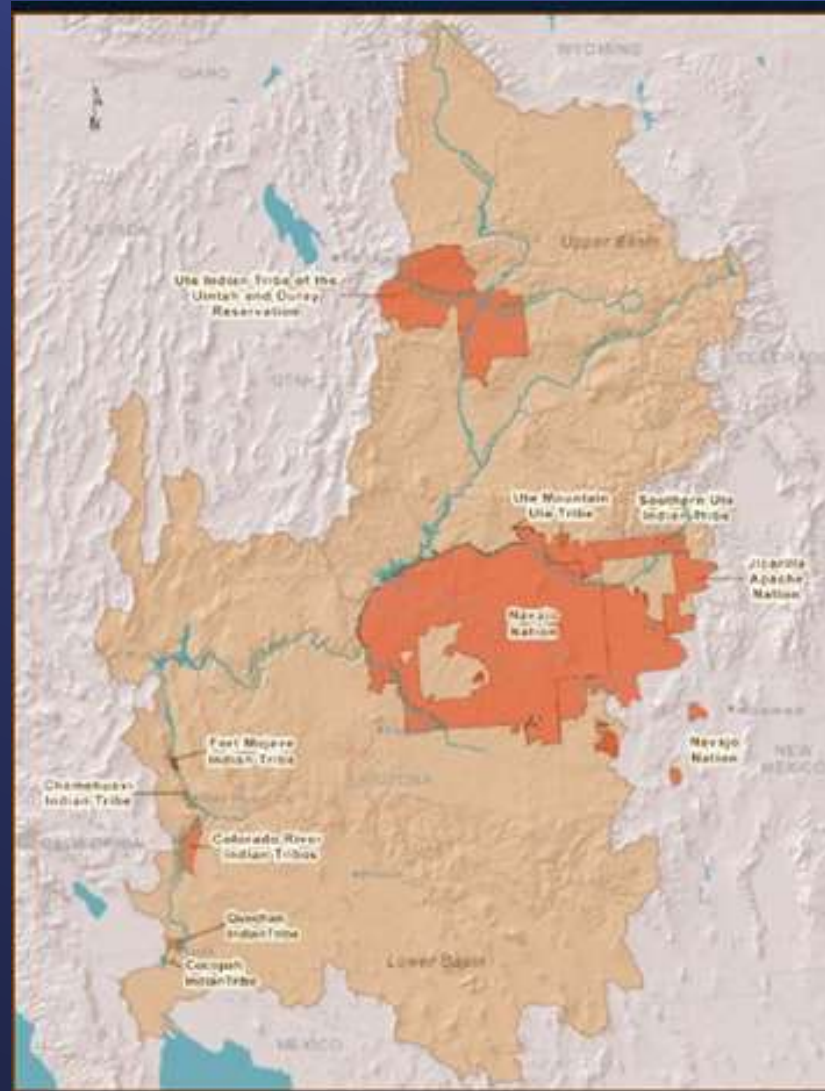
Process lead: The International Boundary and Water Commission, U.S. and Mexico Sections

Goal: A new Minute to include additional measures to protect the Colorado River system that would be in proportion to the actions taken in the Lower Basin states.

Colorado River Basin Tribes

30 Tribes

2.8 Million Acre-Feet
of Unsettled Water
Rights



Improved Tribal Engagement

- Substantial input received through scoping process
- Single update meetings for all interested parties
- Inclusive modeling tool that allows all interested parties to develop potential alternatives
- Participation in development of a consensus alternative

Non-Governmental Organizations



In Progress

- Input received through scoping process
- Single update meetings for all interested parties
- Inclusive modeling tool that allows all interested parties to develop potential alternatives
- Participation in development of a consensus alternative



