Finding the Best Path Forward

Unpacking the proposals for managing the Colorado River

Amanda Erath
Former Program Analyst for
the U.S. Bureau of Reclamation
Moderator

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wra Western Resource Advocates®

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COLORADO RIVER BASIN

THE BASIC MATH

COLORADO RIVER COMPACT 1922

- River divided equally, sort of, 7.5 MAF to each basin
- Lower Basin gets 7.5 MAF + 1.0 MAF more
- Upper Basin gets 7.5 MAF, with a big catch
- If deliveries required to Mexico in future, split equally between Upper and Lower Basin

No. 6227

United States of America

DEPARTMENT OF STATE

To whom these presents shall come, Greeting:

I Certify That the document annexed is a true copy of the River Compact," signed 24th November, 1922, at the Santa Fe, New Mexico, the original of which is on file in this Department.

In testimony whereof I, Charles E. Hughes, Secretary of State, have hereunto caused the Seal of the Department of State to be affixed and my name subscribed by the Chief Clerk of the said Department, at the City of Washington, this twenty-second day of December, 1922.

Charles E. Hughes
Secretary of State.

By Wm. C. Davis
Chief Clerk.

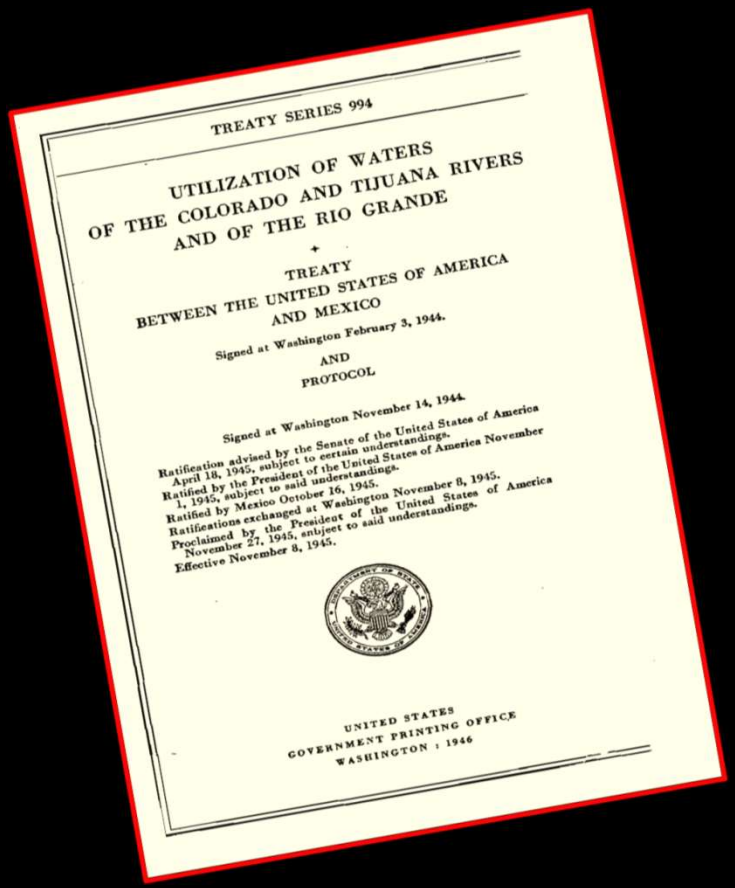
Compact Language

There is hereby apportioned to the Upper Basin and the Lower Basin, respectively, the exclusive use of 7,500,000 acre-feet of water per annum

The Lower Basin is given the right to increase its use by one million acre-feet per annum

The Upper Basin will not cause the flow of the river at Lee Ferry to be depleted below 75,000,000 acre feet over any period of ten consecutive years

1944 TREATY
Mexico's Allocation



TREATY SERIES 994

UTILIZATION OF WATERS
OF THE COLORADO AND TIJUANA RIVERS
AND OF THE RIO GRANDE

TREATY
BETWEEN THE UNITED STATES OF AMERICA
AND MEXICO

Signed at Washington February 3, 1944.

AND

PROTOCOL

Signed at Washington November 14, 1944.

Ratification advised by the Senate of the United States of America April 18, 1945, subject to certain understandings.
Ratified by the President of the United States of America November 1, 1945, subject to said understandings.
Ratified by Mexico October 16, 1945.
Ratifications exchanged at Washington November 8, 1945.
Proclaimed by the President of the United States of America November 27, 1945, subject to said understandings.
Effective November 8, 1945.

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1946

- 1.5 MAF/year
- Reductions in event of extraordinary drought

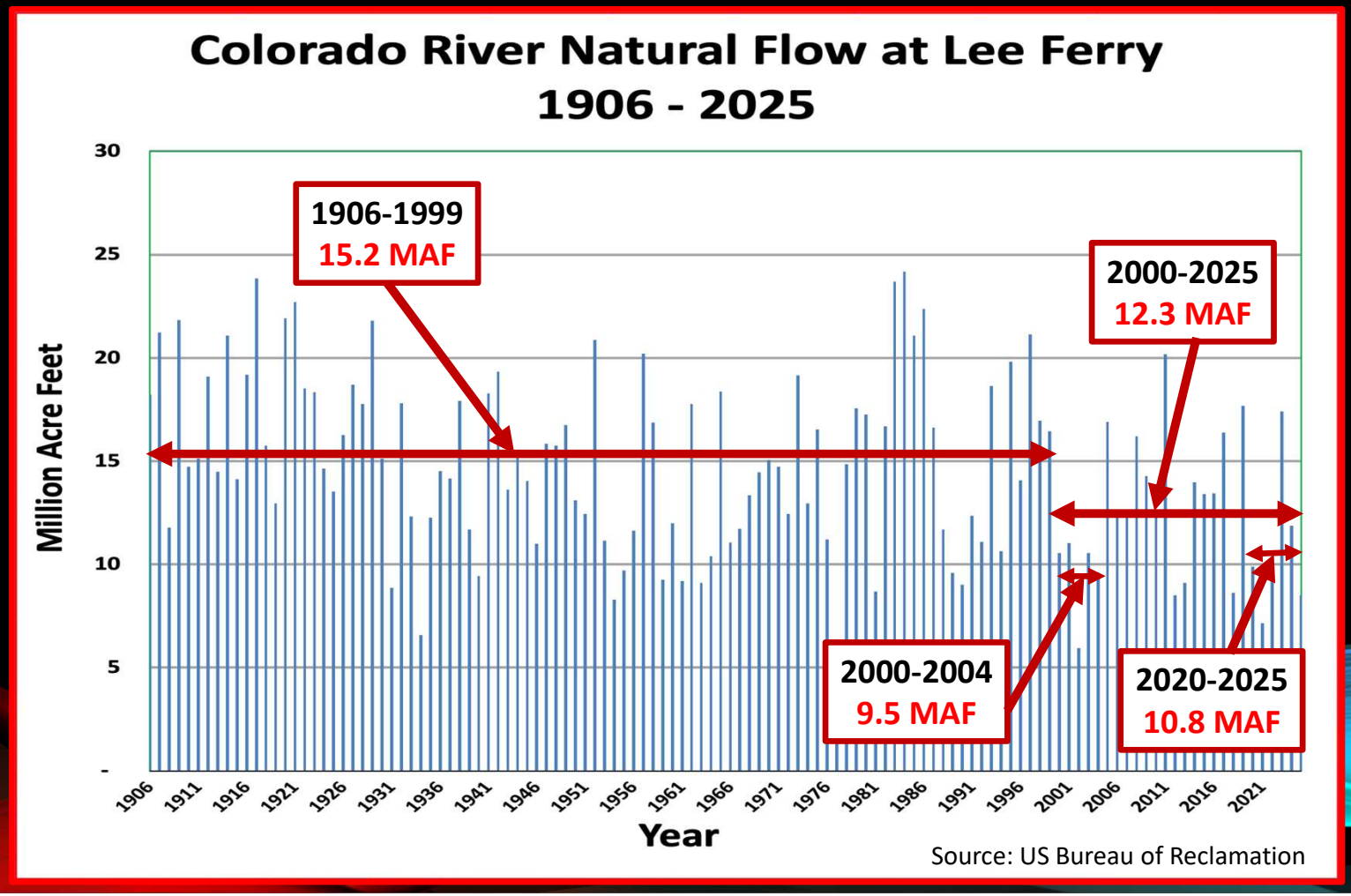
Legal Allocations

1922 Compact
7.5 MAF for Upper Basin
7.5 + 1.0 MAF for Lower Basin

1944 Mexico Treaty
1.5 MAF to Mexico

Compact	16.0 MAF
Treaty with Mexico	1.5
TOTAL	**17.5 MAF**

AVAILABLE SUPPLY



Source: US Bureau of Reclamation

Inflows and Outflows

(in millions of acre feet)

Natural Flow (2020-2025)		11.6 MAF
Outflows		
UB use	4.0-4.5	
LB mainstem use	6.0-7.5	
LB evap & losses	1.5	
Mexico	1.4-1.5	
		12.9 – 15.0
Deficit Balance		1.3 – 3.4 MAF

Results

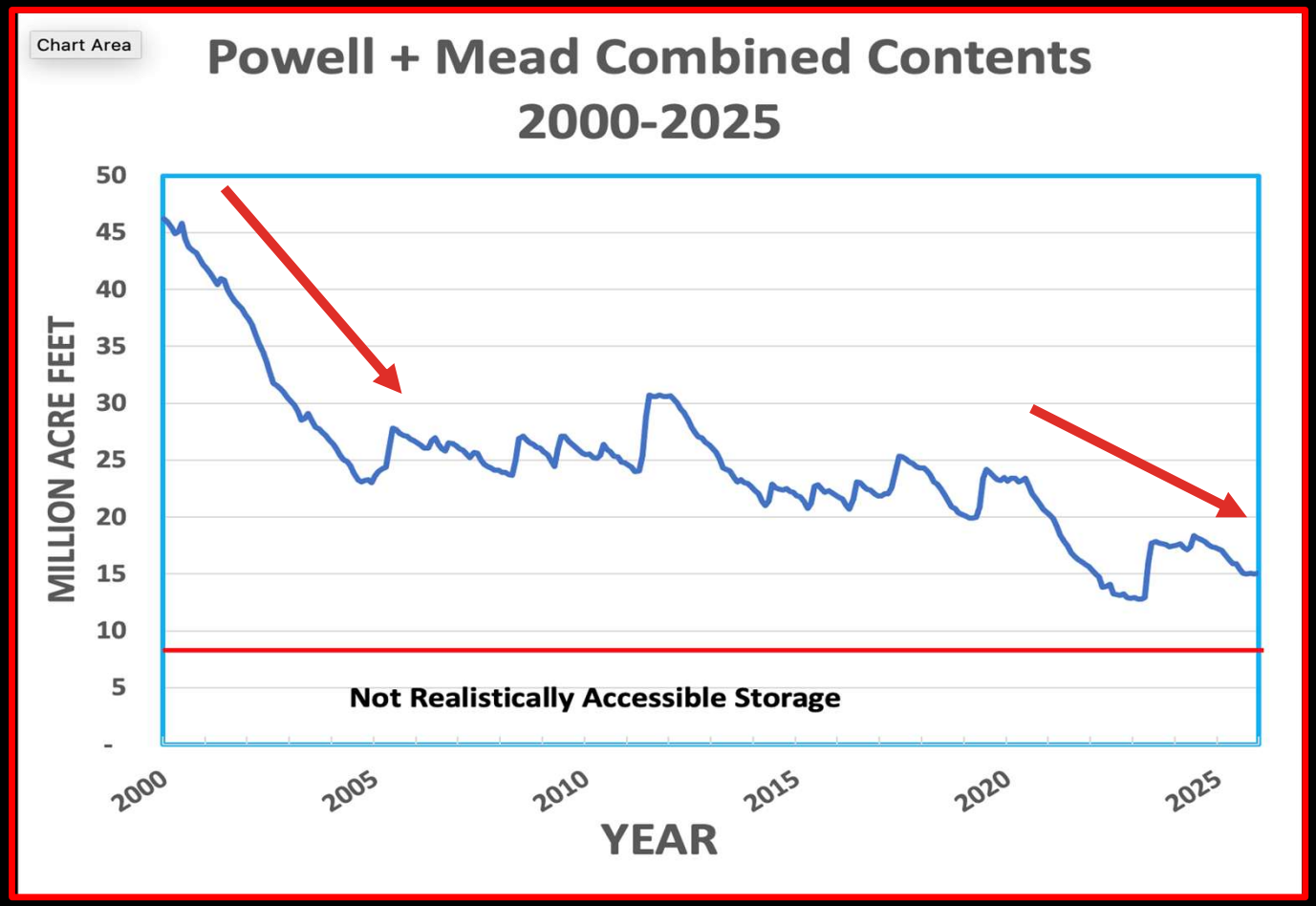
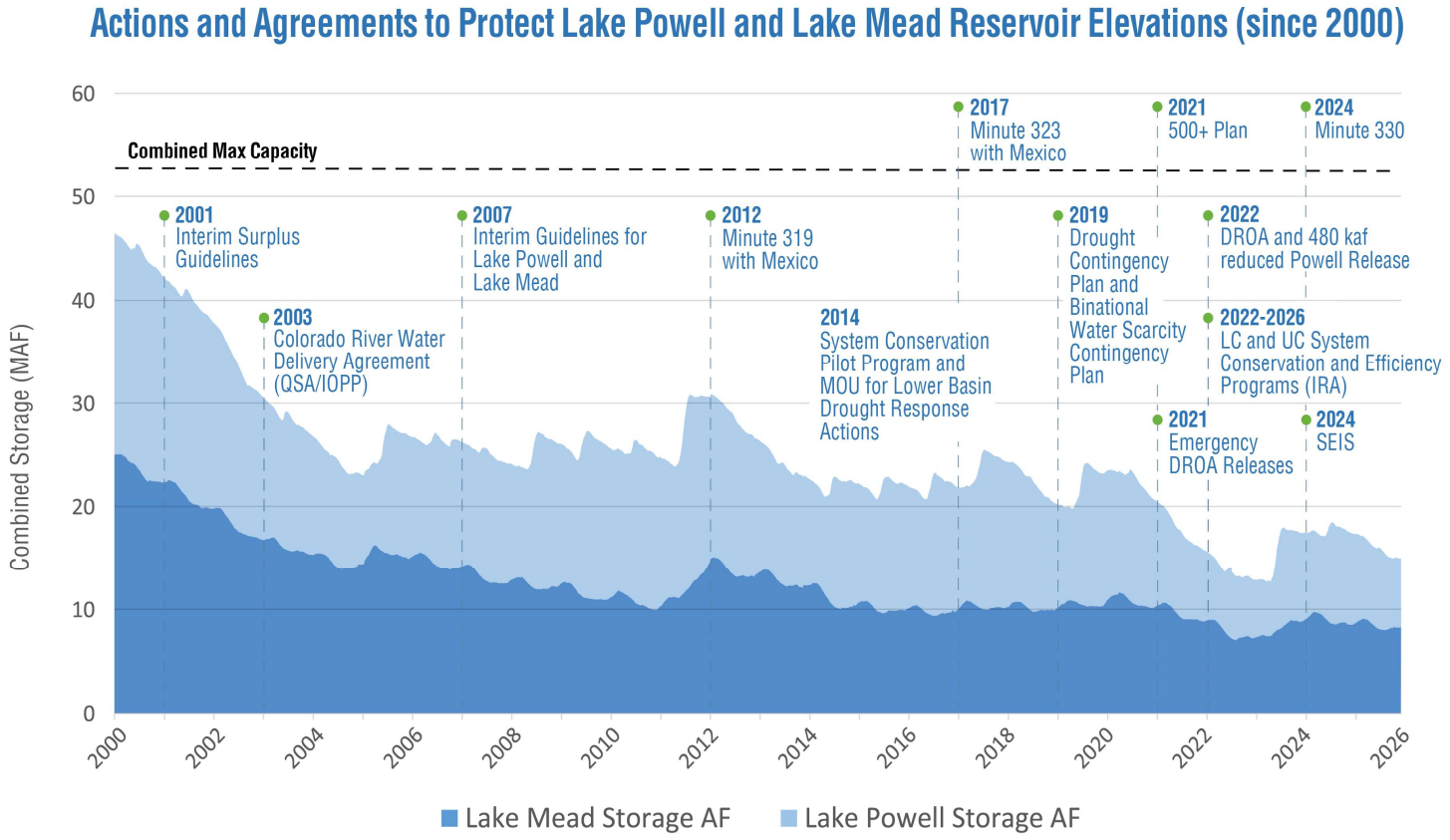


Chart Area
Powell + Mead Combined Contents
2000-2025
MILLION ACRE FEET
50
45
40
35
30
25
20
15
10
5
-
Not Realistically Accessible Storage
2000
2005
2010
2015
2020
2025
YEAR

Efforts to Address the Problem



COMMON FEATURES

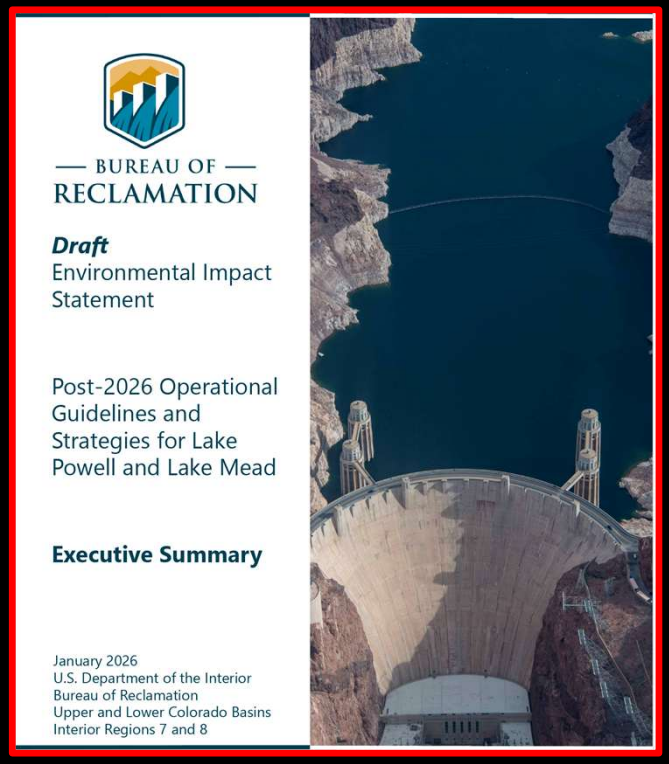
- Cuts to Lower Basin allocations based on elevations in Lake Mead
- Cuts to deliveries to Mexico
- Balancing of contents of Mead and Powell
- Voluntary, temporary, and compensated additional conservation
- All expire in 2026
- They've all made it better, but they haven't solved the problem!

THE NEXT CHALLENGE

Because all the agreements/guidelines expire in 2026, new process started in 2023 to determine future operations

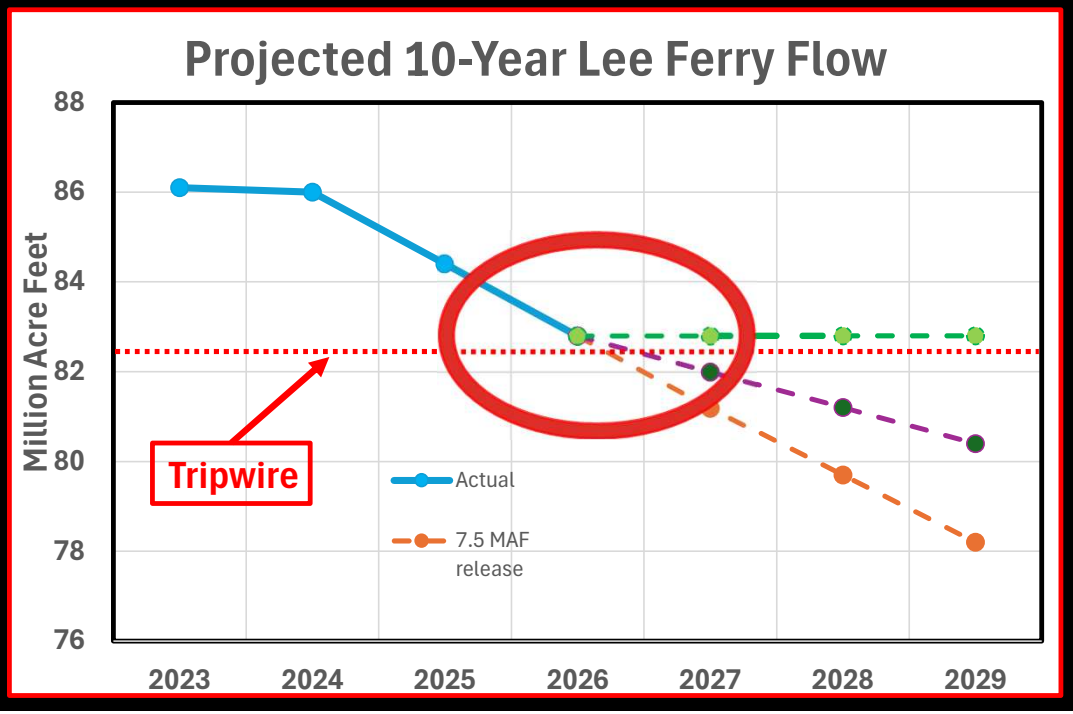
CURRENT STATUS

- Major federal action requiring analysis of environmental impacts
- Draft EIS released Jan. 9, 2026
- No agreement among Basin States
- States continuing to negotiate, deadline Feb. 14
- Agreement seems unlikely



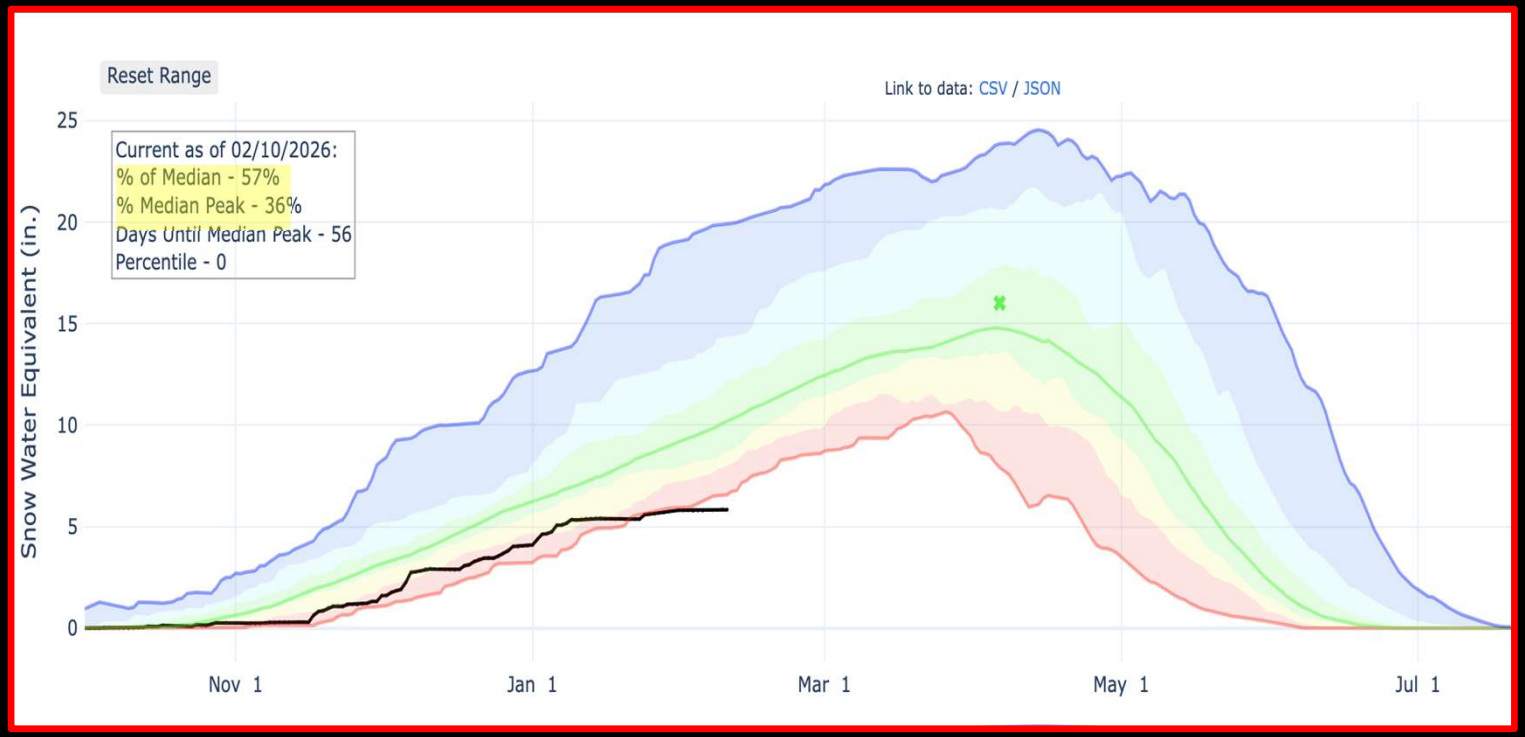
LITIGATION?

- Compact requires 75 MAF + ½ of obligation to Mexico to pass Lee Ferry every 10 years ≈ 82.5 MAF
- That "tripwire" will be triggered soon – 2026 or 2027
- To induce waiver of litigation, deal has to be sufficiently beneficial to all parties



Source: Reclamation, UCRC, Eric Kuhn

Snow Water Equivalent in Upper Colorado Basin



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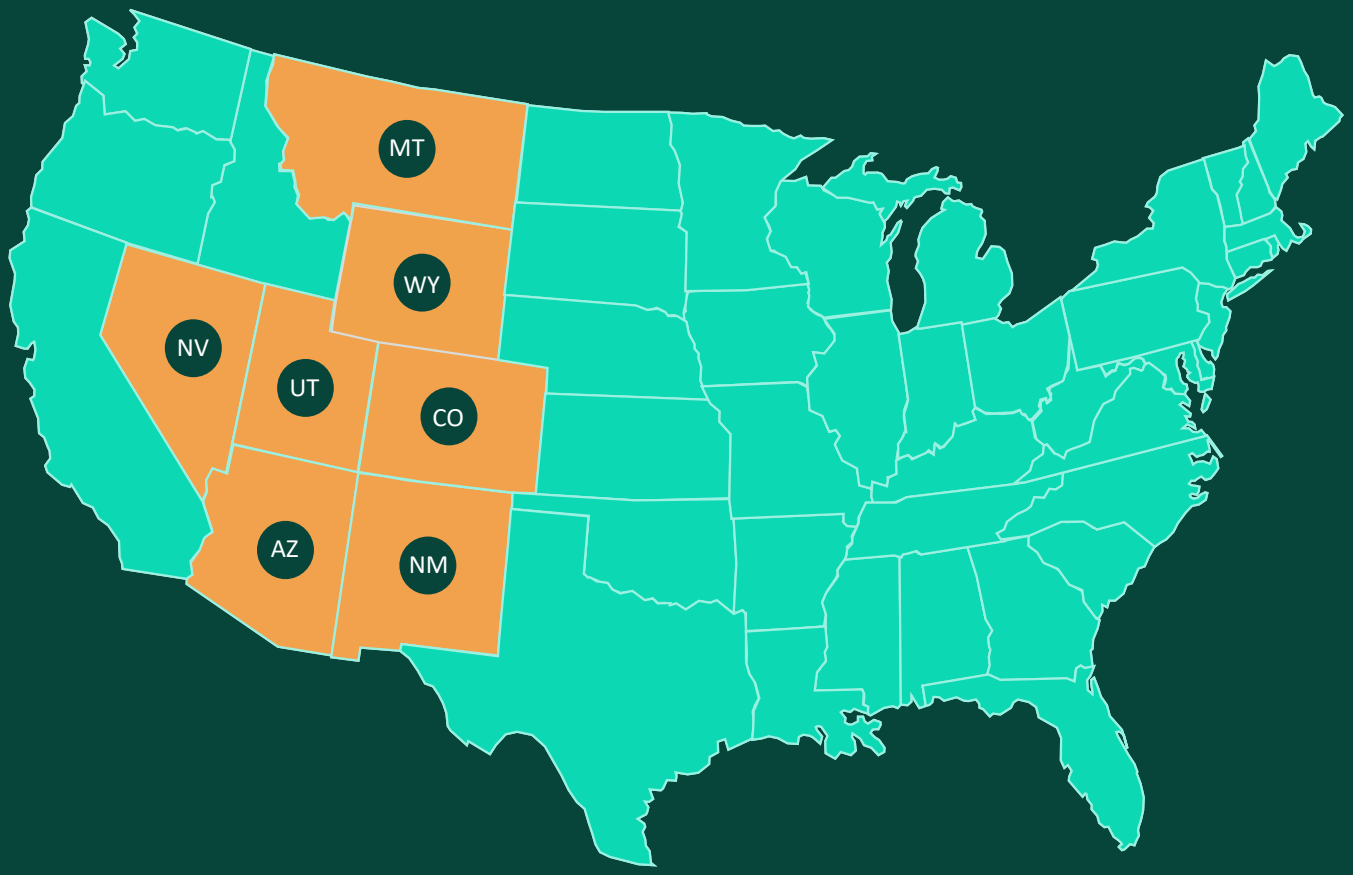


Where We Work

- Federal & Regional Collaboration
- State Legislatures
- State Agencies & Commissions
- Local Governments
- Electric Utilities
- Diverse Coalitions & Communities

WRA works across seven states in the **Interior West** to **protect our climate**, land, air, and water.

BUREAU OF
RECLAMATION

Draft
Environmental Impact Statement

Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead

Volume I

January 2026
U.S. Department of the Interior
Bureau of Reclamation
Upper and Lower Colorado Basins
Interior Regions 7 and 8

wra

Photo Credit: Dave Papineau (with support from Lighthawk)

Five Alternatives

Five Alternatives

No Action

- Required by NEPA; revert to decades old operating framework

Five Alternatives

Basic Coordination

- What Reclamation can do with existing authorities, without any new agreements

Five Alternatives

Enhanced Coordination

- Developed in coordination with NPS, FWS, and with input from Tribes and hydropower
- Designed to protect critical infrastructure and benefit key resources key resources

Five Alternatives

Maximum Operational Flexibility

- Based on NGO proposal
- Promotes flexibility in reservoir operations, embeds environmental stewardship, creates a new conservation tool, preserves opportunities for the Delta.

Five Alternatives

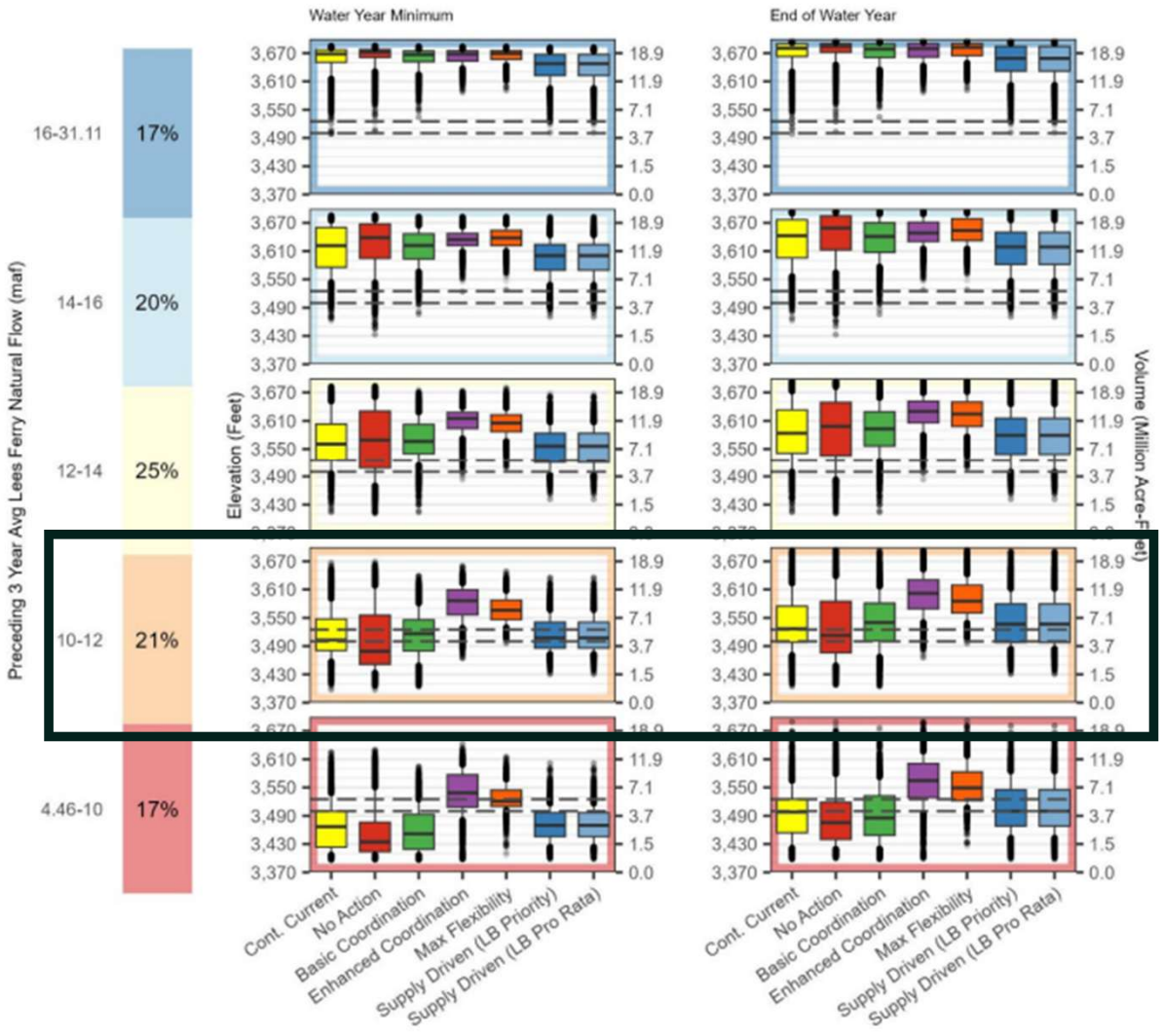
Supply Driven

- Base Lake Powell operations solely on a recent average in "natural flows“ at Lee Ferry
- Shortages distributed two ways

How do the alternatives perform?

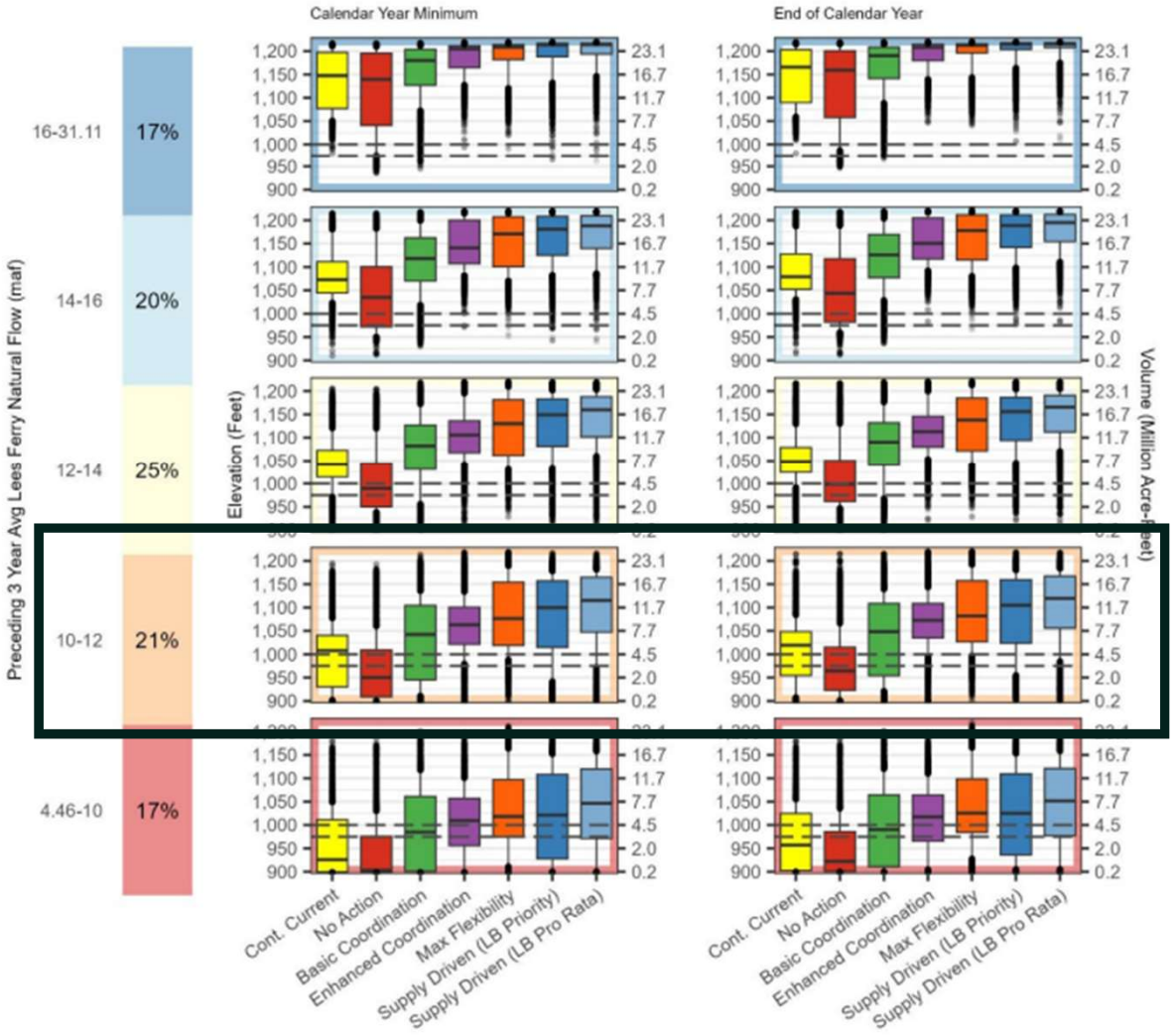
Impacts to Lake Powell

Figure 3-8
WY Minimum and EOWY Elevations and Storage Volumes of Lake Powell



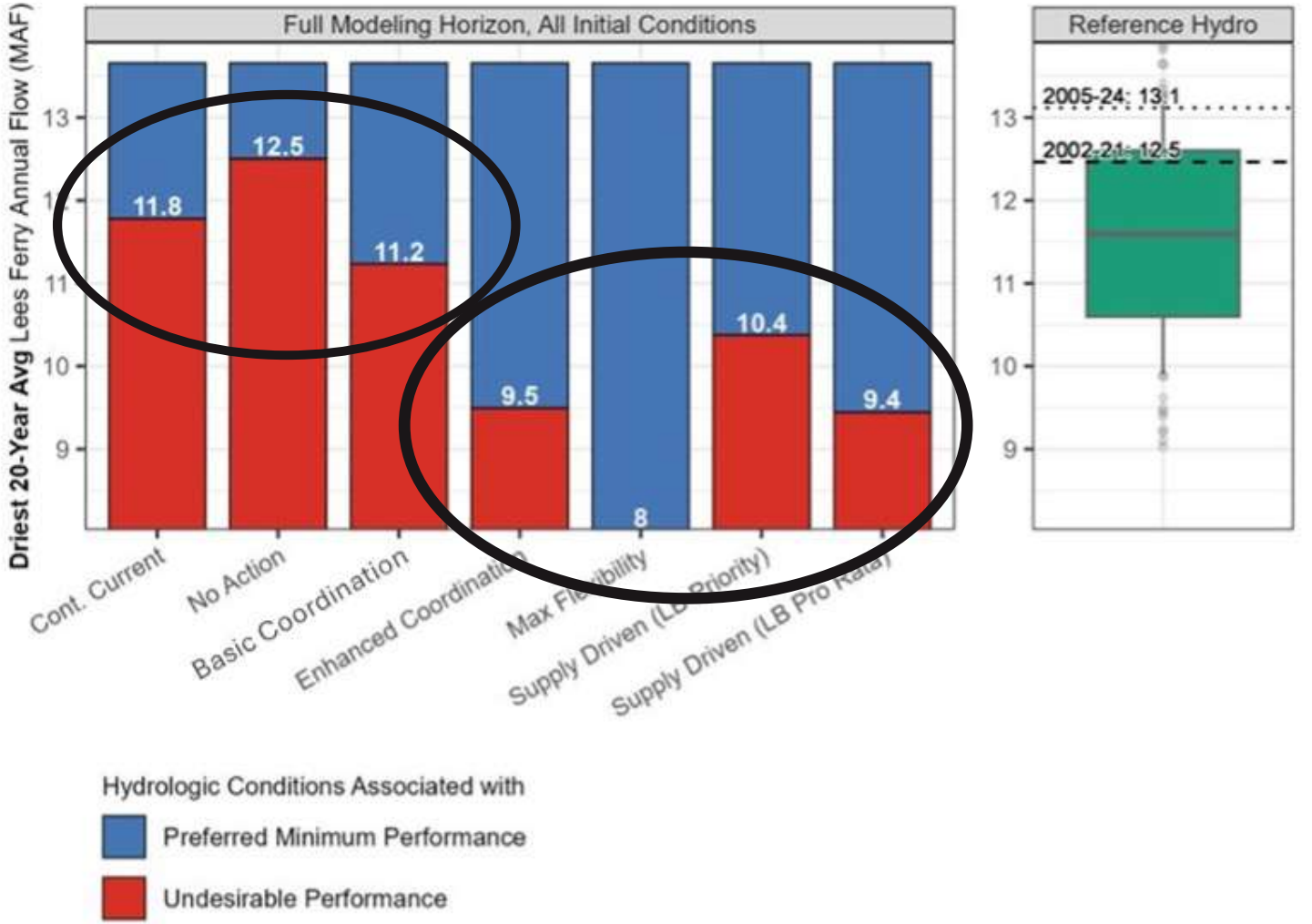
Impacts to Lake Mead

Figure 3-10
CY Minimum and EOCY Elevations and Storage Volumes of Lake Mead



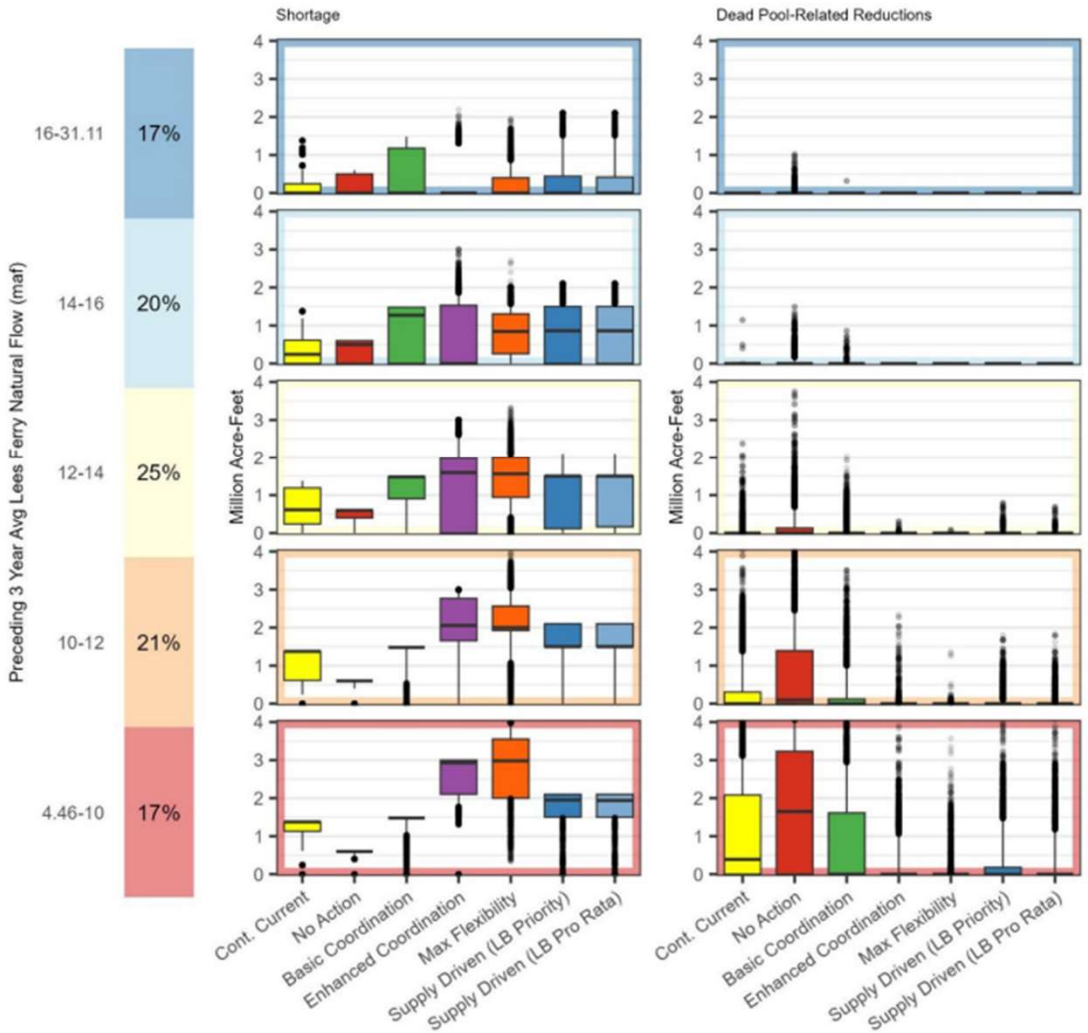
What river should we plan for?

Figure TA 4-3
Lake Mead Dead Pool–Related Reductions: Vulnerability.
Conditions that could cause Lake Mead Dead Pool–Related Reductions in Any Year



Hydrologic and shortage challenges?

Figure 3-12
Annual Lower Basin Reductions

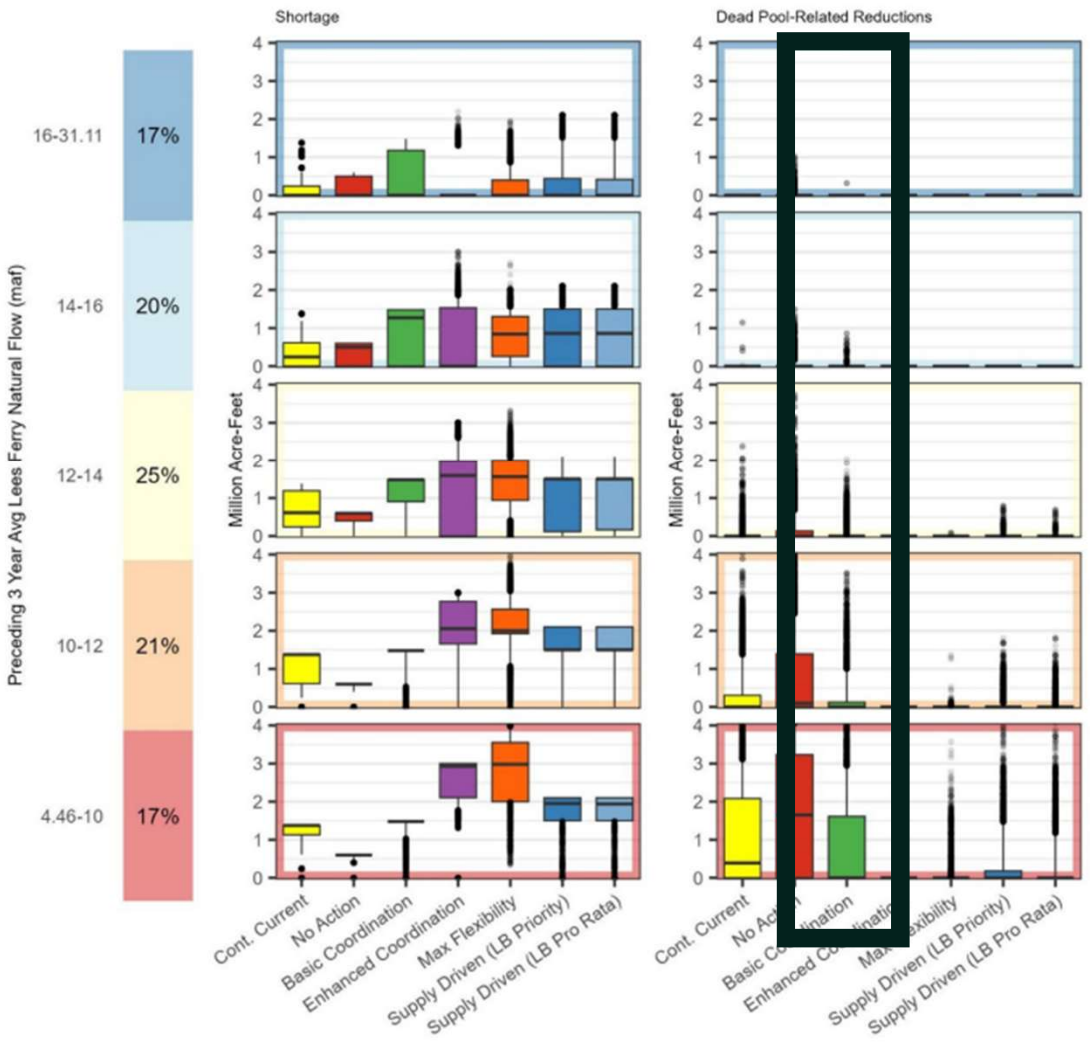


Lower Basin Shortages and Dead-Pool Related Reductions

Source: Bureau of Reclamation

What if no states agreement?

Figure 3-12
Annual Lower Basin Reductions



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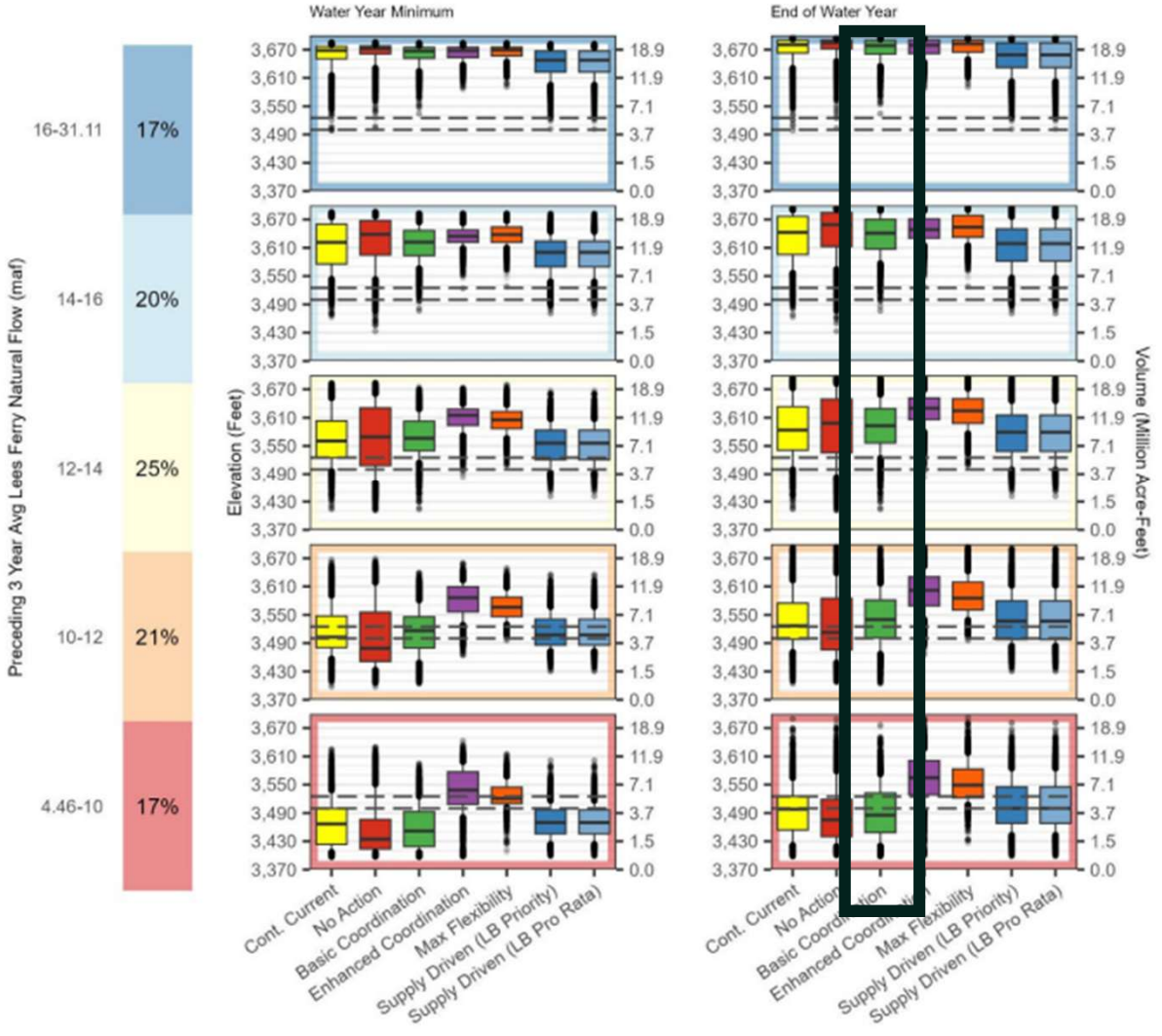
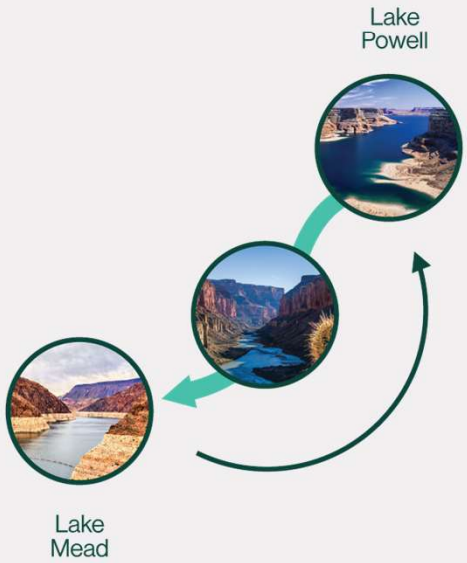
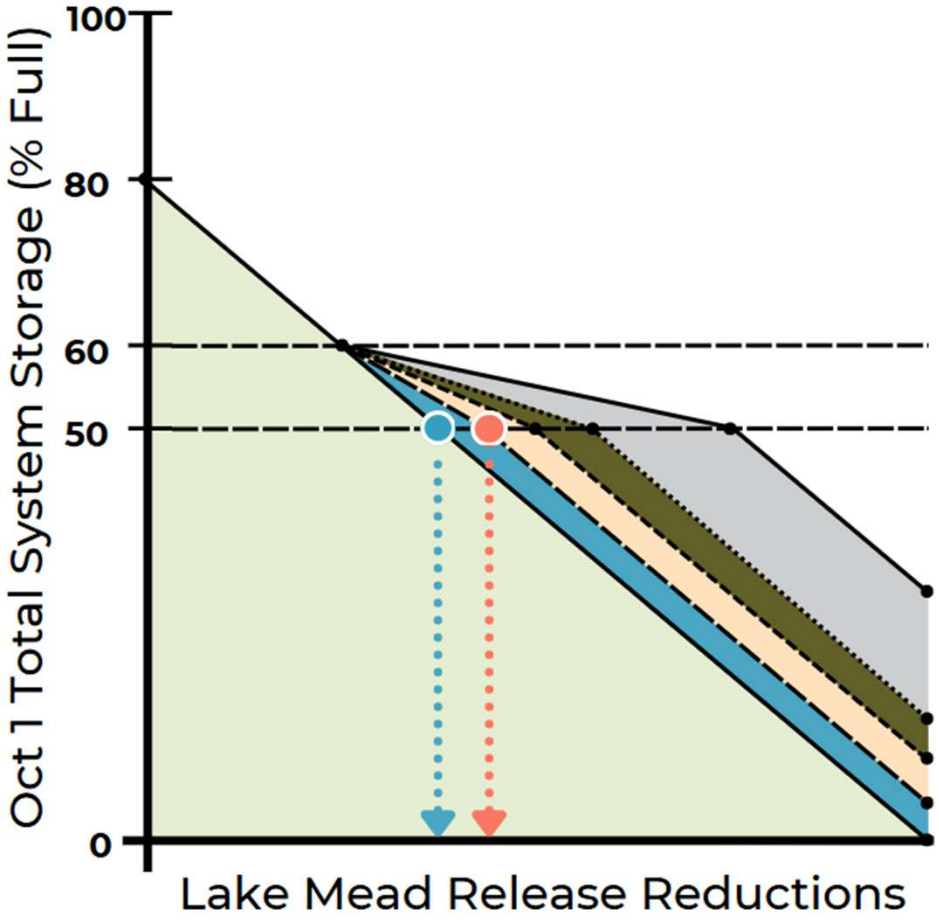
WY Minimum and EOWY Elevations and Storage Volumes of Lake Powell





What does this mean for the Preferred Alternative?

- Flexible conservation pools, with extensive storage and participation across the Basin, including Tribal



What does this mean for the Preferred Alternative?

- Responding to changing hydrological conditions, not just reservoir levels.

What does this mean for the Preferred Alternative?

- Embedding environmental considerations into annual operating plans.

Source: Jennifer Pitt, Audubon

Source: Claudio Contreras Koob, Audubon

What does this mean for the Preferred Alternative?

- Preserving binational opportunities for Delta restoration

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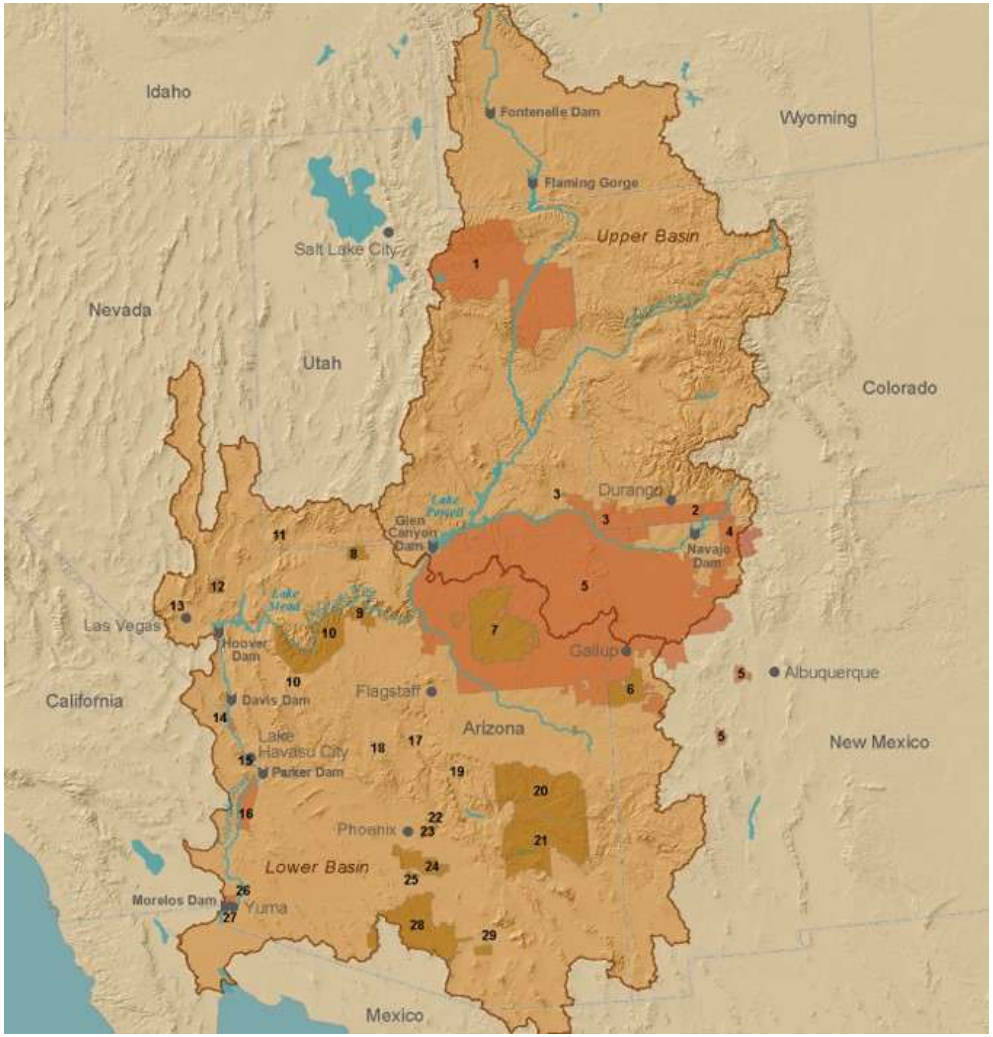
The Colorado River Basin is home to 30 federally recognized Tribal nations.

22 of the 30 Basin Tribes have recognized rights to use **~22-26%** of the Basin's annual average water supply.

11 Basin Tribes have unresolved claims and are different stages in the settlement process – majority of which are located in Arizona.

Tribal water rights are **accounted for within the apportionment of the states where the water use occurs.**



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Arizona Tribal Water Rights claims status

Resolved

1964: Cocopah Indian Tribe, Colorado River Indian Tribes, Fort Mohave Indian Tribe, and Fort Yuma Quechan Indian Tribe *(resolved via litigation)*
1978: Ak-Chin Indian Community
1982: Tohono O'odham Nation *(San Xavier, Schuk Toak, and Gila Bend Districts resolved)*
1988: Salt River Pima-Maricopa Indian Community
1990: Fort McDowell Yavapai Nation
1992: San Carlos Apache Tribe *(Salt, Black and San Pedro River claims resolved)*
1994: Yavapai-Prescott Indian Tribe
2003: Zuni Indian Tribe
2004: Gila River Indian Community
2010: White Mountain Apache Tribe *(pending full enactment)*
2014: Hualapai Tribe *(Bill Williams River tributary)*
2022: Hualapai Tribe *(CO River main stem)*

Unresolved

H.R.2025 - Northeastern Arizona Indian Water Rights Settlement Act of 2025 (see also H.R.2025)

1. Hopi Tribe
2. Navajo Nation
3. San Juan Southern Paiute Tribe

S.3617 - Yavapai-Apache Nation Water Rights Settlement Act of 2026 (see also H.R.6931)

1. Yavapai-Apache Nation

In various stages of settlement process:

1. Havasupai Tribe
2. Kaibab Band of Paiute Indians
3. Pascua Yaqui Tribe
4. Tohono O'odham Nation *(remaining districts)*
5. Tonto Apache Tribe

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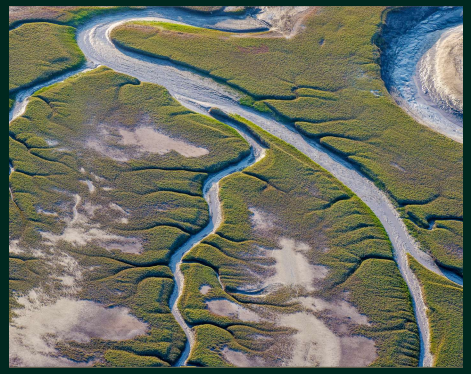
Celene Hawkins
Colorado River Program Director
The Nature Conservancy

Future Management of the Colorado River Basin

Celene Hawkins, Colorado River Program Director

Photo Credit: Rory Doyle

Left to right: J Houston; J Houston; J Houston (top) ; Zamora



Left to right: Hawkins; Maltzman; J. Houston; Dykinga

The Nature Conservancy

© Christi Bode, Rory Doyle

Left to right; Joe Leohard, Round River Design

© Top to Bottom: Shaun Stanley/Durango Herald, Bill Lucia/Route Fifty, Hart Von Denburg, TNC, Miracle Photography, Te
Wood, Jon Lamb/TNC, Jason Houston, Jennifer Wollman

Submitting Comments

Comments due March 2, 2026

E-mail: crbpost2026@usbr.gov

Mail:
Bureau of Reclamation
Attn: BCOO-1000
P.O. Box 61470
Boulder City, NV 89006

Colorado River Draft Environmental Impact Statement