

Colorado River Water Update

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Outline

- Background
 - Geography, hydrology, history
 - Law of the River
- Current situation
- Looking ahead – prospects for the future

Colorado River Watershed



- 1,450 mile river channel
- 244,000 sq. mile drainage
- greatest elevation drop in North America
- budgeted volume = **16.5 million acre-ft/year**
 - Columbia River: 192 million acre-ft/year
 - Mississippi River: 400 million acre-ft/year
- covers portions of **7 states** and **2 nations**
- **40M people w/ 30 American Indian Tribes**
- **~ 6.0M acres of farmland**

Colorado River Water Budget

- **16.5 MAF** Currently budgeted total
(7.5+7.5 MAF = 15 MAF + 1.5 MAF Mexico)
- Average annual flow:
14.8 MAF/year; 1906-2000

Rio Colorado – Sonora/Baja California/Arizona

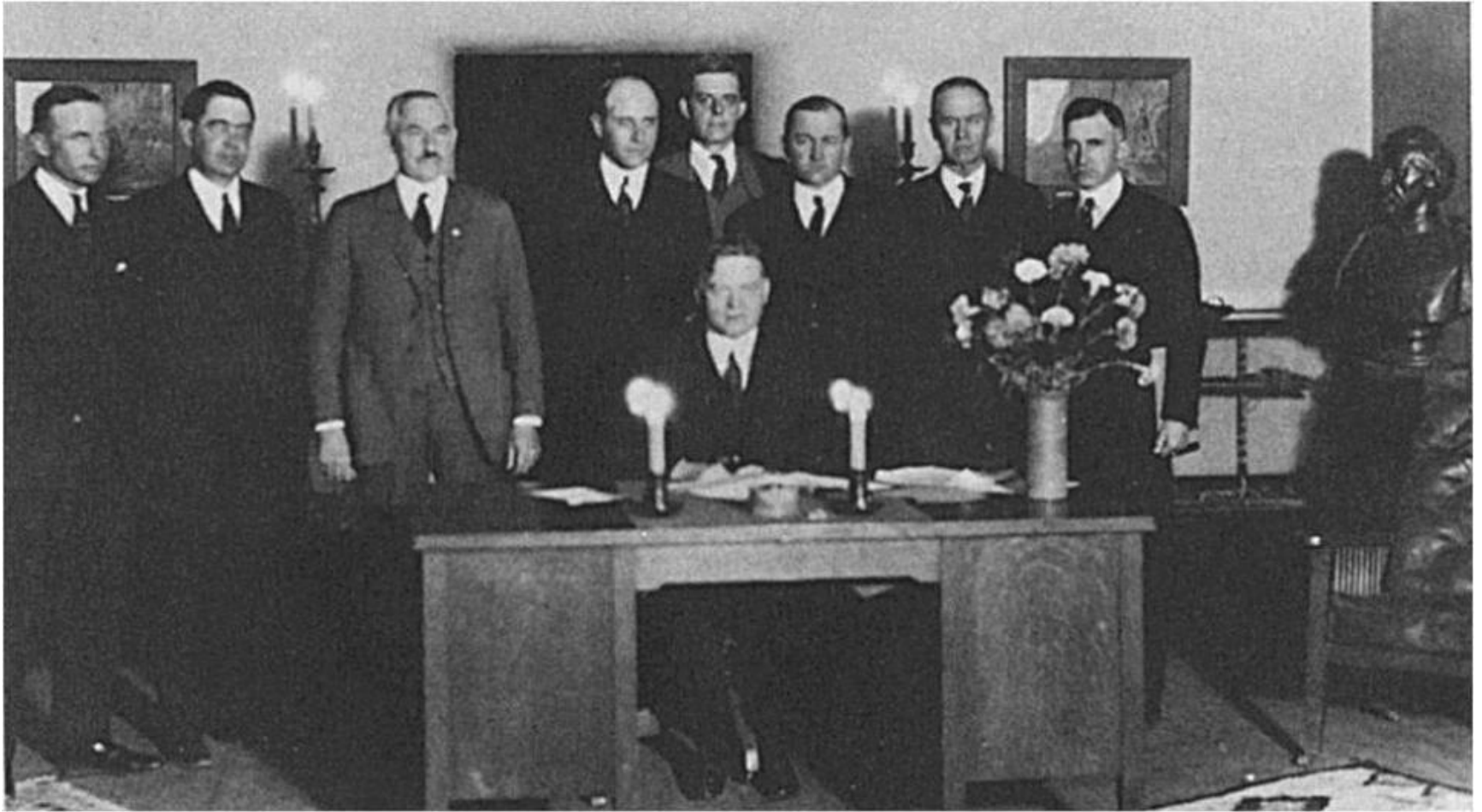


The Law of the River



COLLEGE OF AGRICULTURE
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COOPERATIVE EXTENSION

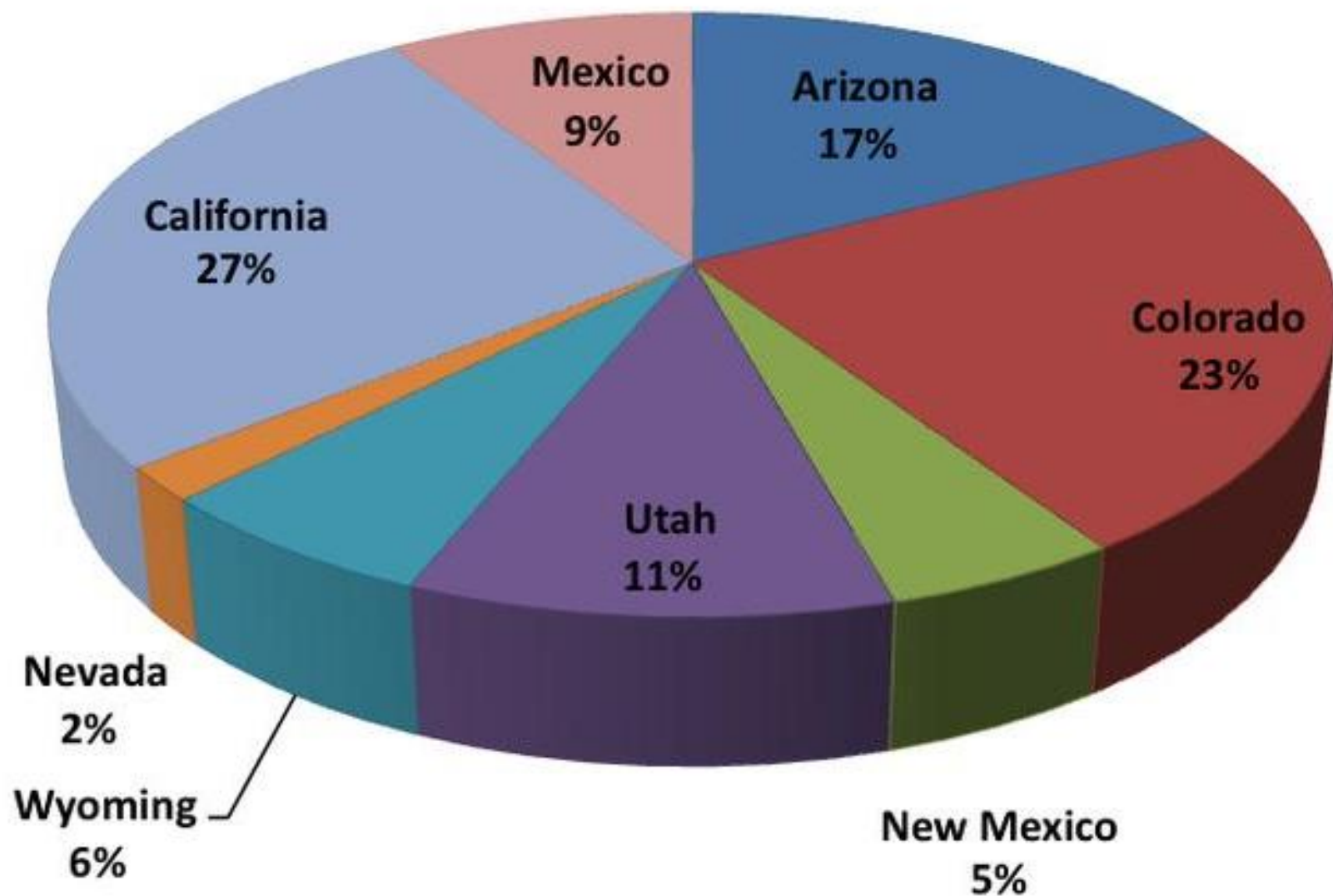
Colorado River Compact Signed 24 November 1922



Colorado River Compact

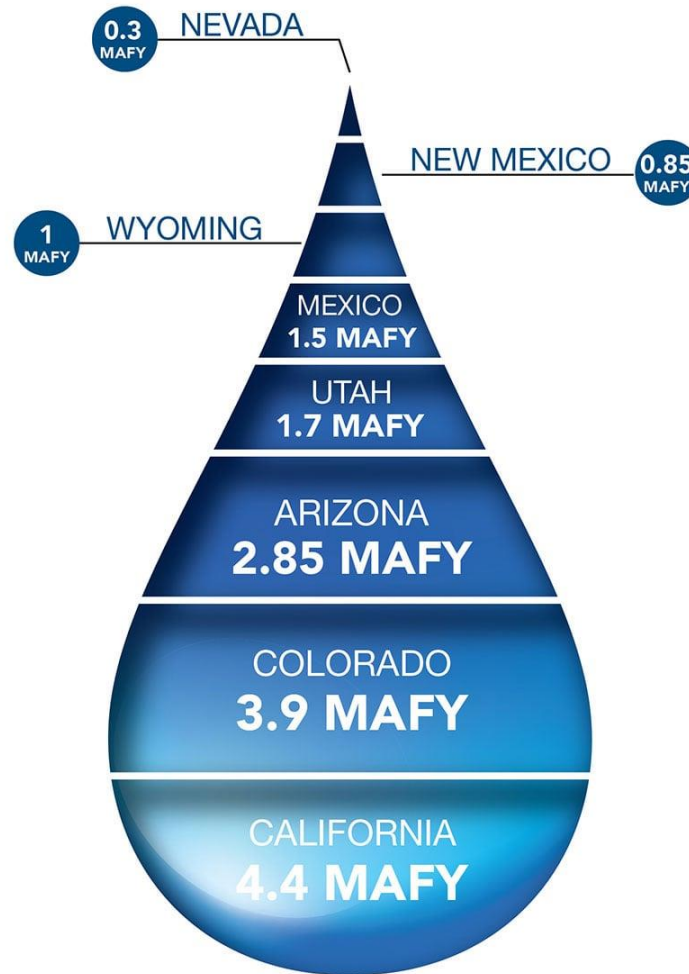
- **Created in 1922 to Divide the Water of the Colorado River**
 - At The Bishop's Lodge in Santa Fe, N.M.
 - Secretary Herbert Hoover presiding
 - Signed 24 November 1922
 - **Ratified by Arizona on 3 February 1944**

Colorado River Apportionment



WHERE THE WATER GOES:

Who Shares the Colorado River?



MAFY = million acre-feet per year

Mexican Water Treaty of 1944

Minute 319

- Mexican Water Treaty of 1944 committed the U.S. to deliver 1.5 MAF of water to Mexico on an annual basis,
- + an additional 200 KAF under surplus conditions.
- Total Colorado River allocations: 16.5 MAF

Presa Morelos



Present Perfected Rights, PPRs

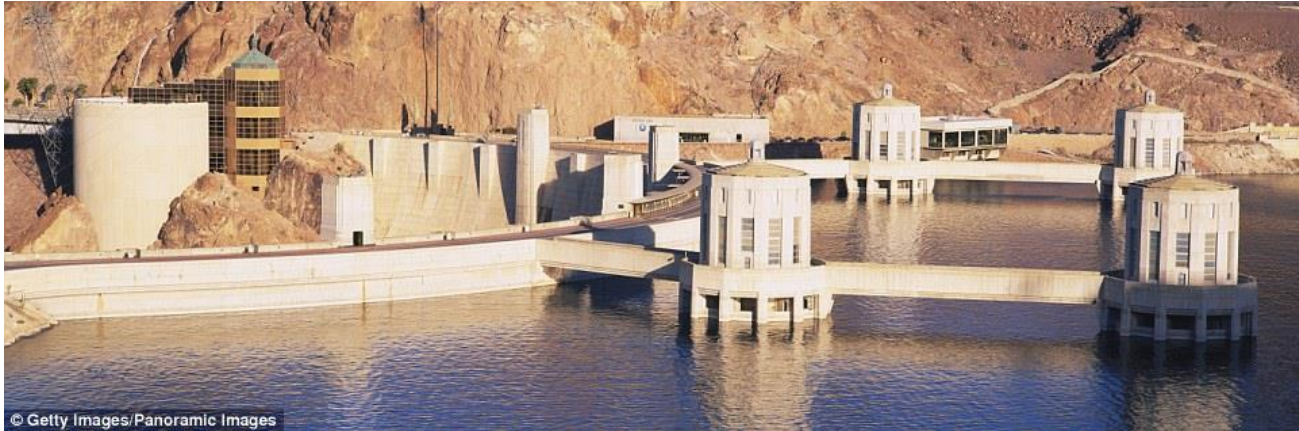
The “present perfected rights PPRs” is an important aspect of the Law of the River.

The PPRs are those rights to use Colorado River water that were acquired or “perfected” by prior appropriation under state law before the Boulder Canyon Project Act of 1928 was passed.

BoR has established a priority ranking of water rights to administer diversions from the river on a “first-in-time-first-in-right” basis.

Colorado River in the 21st Century

Lake Mead



2000 - Full

Colorado River – 21st Century

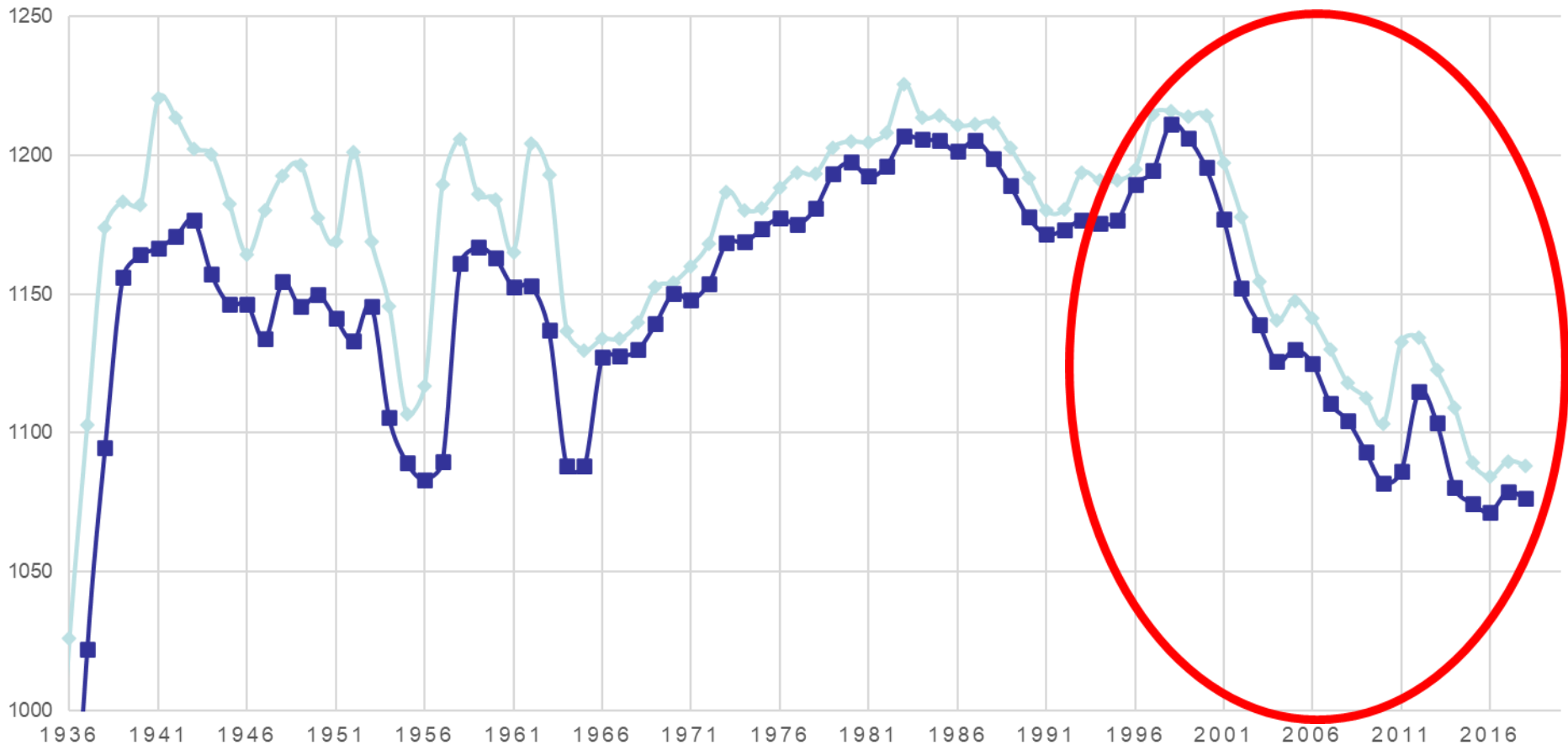
Average flow ~ **12.3 MAF**

16 % lower than the 20th Century
average of **14.8 MAF/year**

8.5 MAF in water year 2024-2025

HISTORY OF LAKE MEAD ELEVATIONS

— MAX ELEVATION — MIN ELEVATION

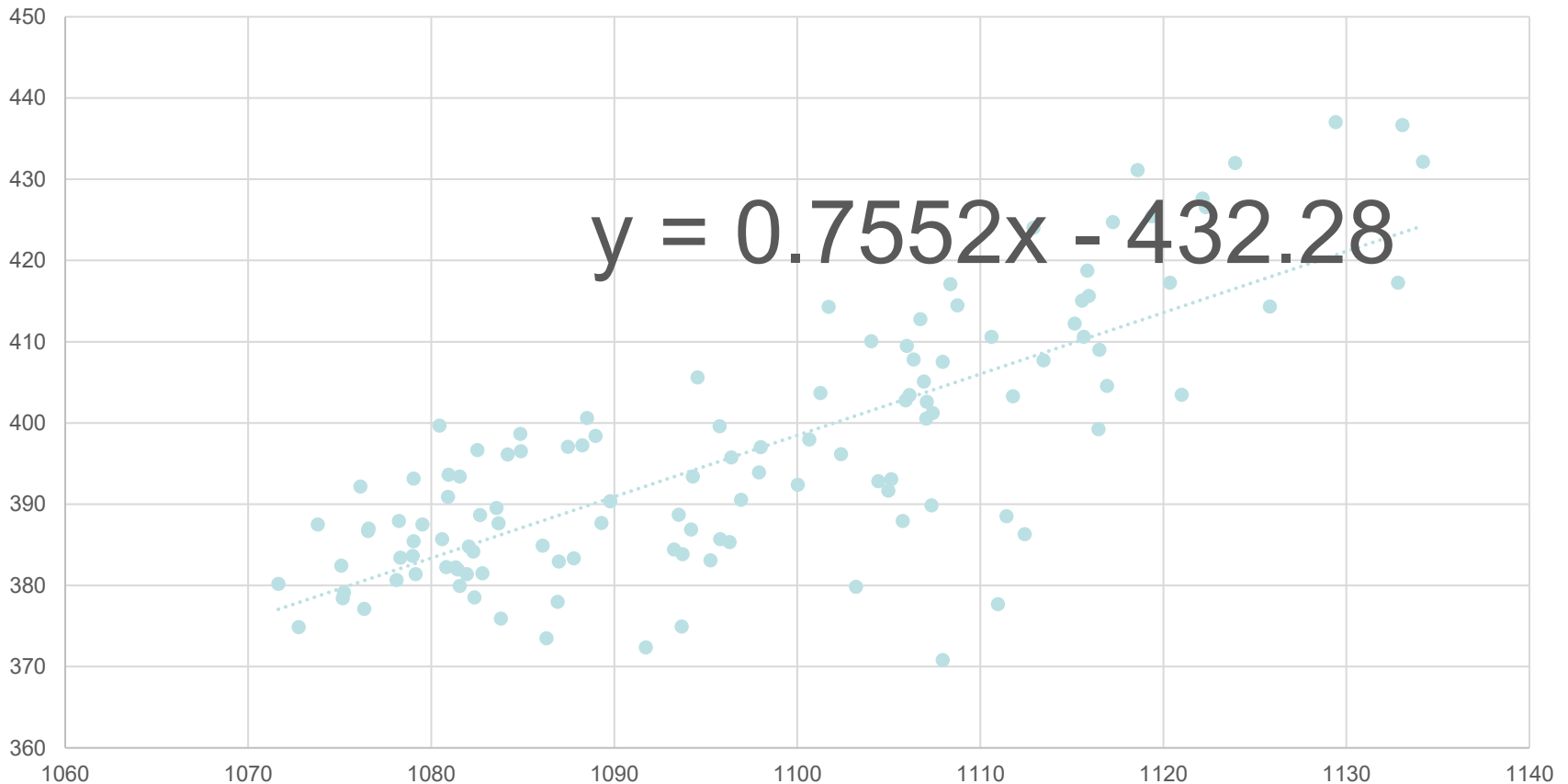


Lake Mead



Average Energy Production Based on Elevation at Hoover Dam

Energy/AF - Elevation



20 Years of Shortage Preparation

Lake Mead Elevation

2000 to 2023 (Observed & Projected)



DCP Tier Reductions - 2025

Lake Level (fas)	Tier Level	Reduction (KAF)	Total Reduction	Total % Reduction
1,075	1	512	512 K AF	18
1,050	2a	80	592 K AF	21
1,045	2b	48	640 K AF	23
1,025	3	480	1.2 M AF	43

DCP = Drought Contingency Plan

fas = feet above sea level on Lake Mead

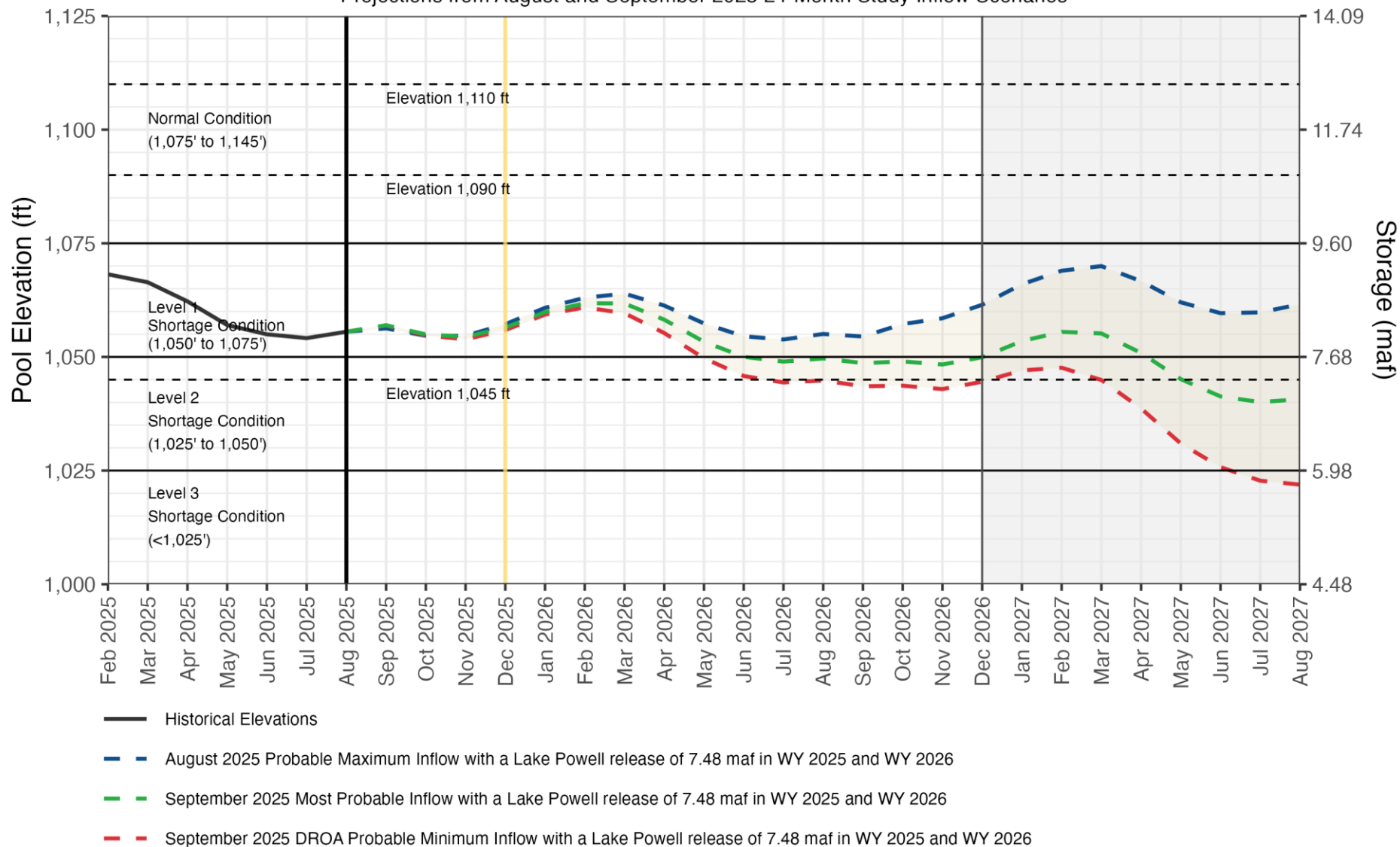
KAF = thousand acre-feet

MAF = million acre-feet



Lake Mead End-of-Month Elevations¹

Projections from August and September 2025 24-Month Study Inflow Scenarios



The Drought Response Operations Agreement (DROA) is available online at <https://www.usbr.gov/dcp/finaldocs.html>.

¹For modeling purposes, simulated years beyond 2026 assume a continuation of the 2007 Interim Guidelines including the 2024 Supplement to the 2007 Interim Guidelines (no additional SEIS conservation is assumed to occur after 2026), the 2019 Colorado River Basin Drought Contingency Plans, and Minute 323 including the Binational Water Scarcity Contingency Plan. With the exception of certain provisions related to ICS recovery and Upper Basin Demand management, operations under these agreements are in effect through 2026.



BUREAU OF
RECLAMATION

2026 Projections (T2)

State	Reduction Acre-Feet	% Reduction of Allocation
Arizona	592,000	21
Nevada	25,000	8
Mexico	104,000	7



Photo credit: Brian van der Brug / LA Times

Colorado River Water Budget

- **16.5 MAF** Currently budgeted total
($7.5 + 7.5 \text{ MAF} = 15 \text{ MAF} + 1.5 \text{ MAF Mexico}$)
- Average annual flow 2000 - 2018
~ **12.4MAF**
 - 16 % lower than the 1906-2017 average of 14.8MAF/year
- ~ **4 MAF differential**

2026 – Expiration

All interstate and international shortage agreements will expire in 2026.

Renegotiations are underway.

1. Follow the “Law of the River” and the high-priority senior water rights with an emphasis on “**present perfected rights, PPRs**”
2. Develop an entirely new approach to Colorado River management.

Dept. of Interior Cameron - June 2025

- Colorado River Basin states to submit details of a **preliminary operations agreement**
 - by mid-November 2025
- Final seven-state proposal by mid-February 2026.
- Final decision in the summer of 2026
 - implementation beginning in October 2026.



