

Governor's Drought Interagency Coordinating Committee

Thomas Buschatzke
Director

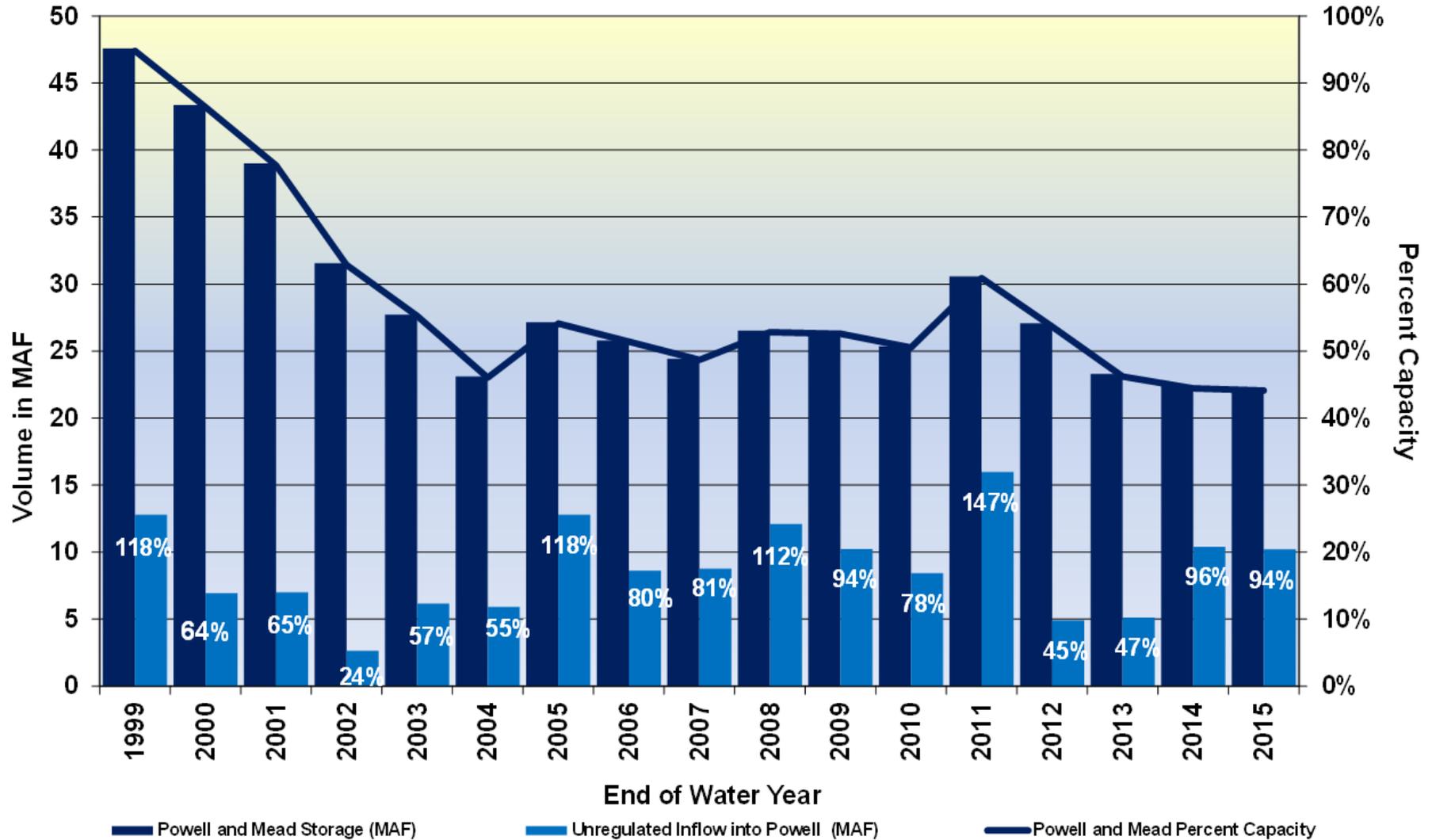
Arizona Department Of Water Resources

November 10, 2015



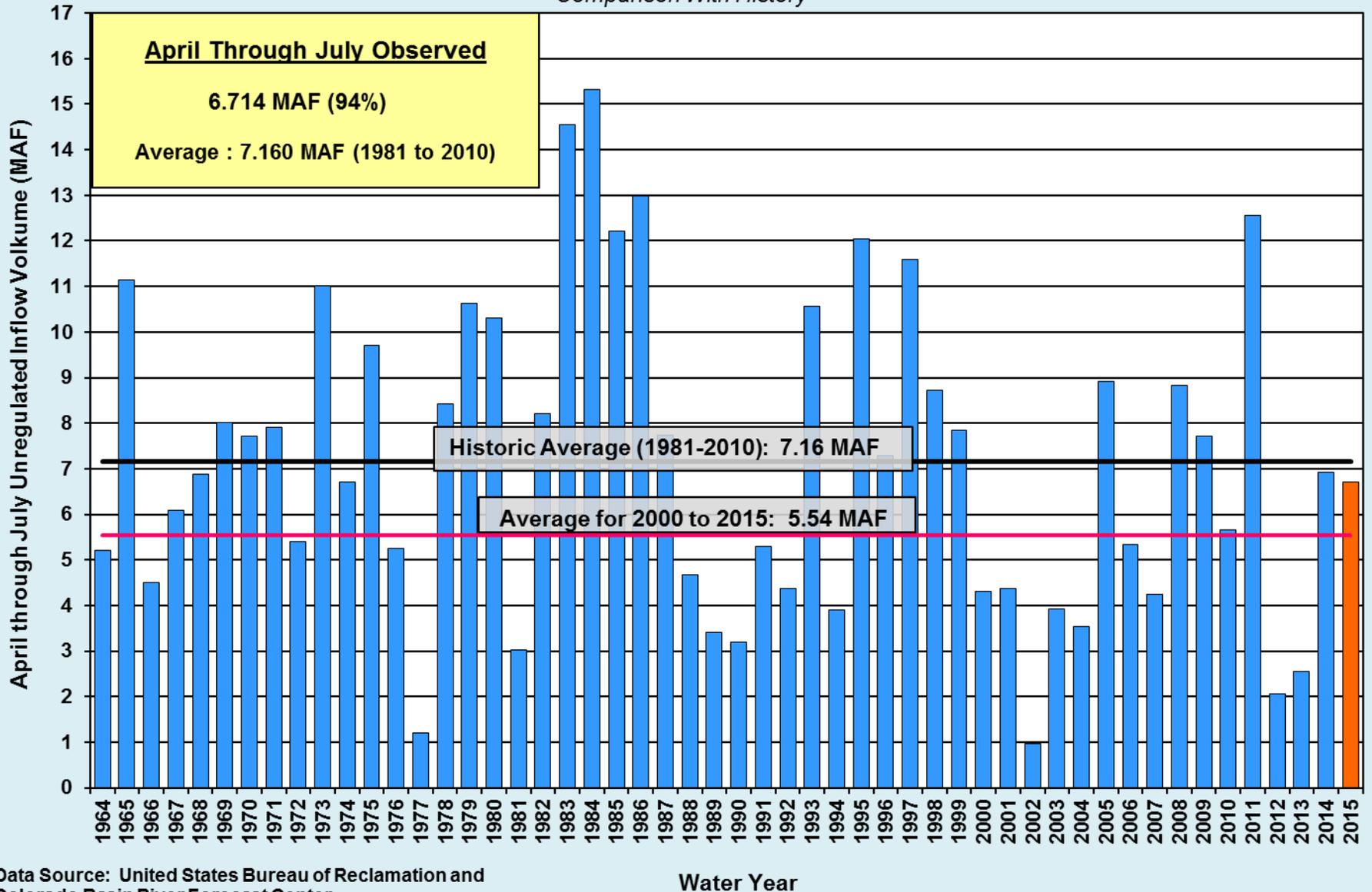
PROTECTING
ARIZONA'S WATER SUPPLIES
for ITS NEXT CENTURY

Unregulated Inflow into Lake Powell Powell-Mead Storage and Percent Capacity



¹ Percentages at the top of the light blue bars represent percent of average unregulated inflow into Lake Powell for a given water year. The percent of average is based on the period of record from 1981-2010.

Lake Powell Unregulated Inflow April through July (Final) *Comparison With History*



Data Source: United States Bureau of Reclamation and Colorado Basin River Forecast Center

Water Year

Lake Powell and Lake Mead Operational Table

Operational Tiers for Water/Calendar Year 2016 Determined from Reclamation's *August 2015 24-Month Study*

Lake Powell			Lake Mead		
Elevation (feet)	Operation According to the Interim Guidelines	Live Storage (maf) ¹	Elevation (feet)	Operation According to the Interim Guidelines	Live Storage (maf) ¹
3,700	Equalization Tier Equalize, avoid spills or release 8.23 maf	24.3	1,220	Flood Control Surplus or Quantified Surplus Condition Deliver > 7.5 maf	25.9
3,636 - 3,666 (2008-2026)	Upper Elevation Balancing Tier ² Release 8.23 maf; if Lake Mead < 1,075 feet, balance contents with a min/max release of 7.0 and 9.0 maf	15.5 - 19.3 (2008-2026)	1,200 (approx.) ²	Domestic Surplus or ICS Surplus Condition Deliver > 7.5 maf	22.9 (approx.) ²
	3,602.46 ft <i>Jan 1, 2016 projection</i>		1,145	Normal or ICS Surplus Condition Deliver ≥ 7.5 maf	15.9
3,575	Mid-Elevation Release Tier Release 7.48 maf; if Lake Mead < 1,025 feet, release 8.23 maf	9.5	1,105	1,082.33 ft <i>Jan 1, 2016 projection</i>	11.9
3,525	Lower Elevation Balancing Tier Balance contents with a min/max release of 7.0 and 9.5 maf	5.9	1,075	Shortage Condition Deliver 7.167 ⁴ maf	9.4
3,490			1,050	Shortage Condition Deliver 7.083 ⁵ maf	7.5
3,370		0	1,025	Shortage Condition Deliver 7.0 ⁶ maf Further measures may be undertaken ⁷	5.8
			1,000		4.3
			895		0

Diagram not to scale

¹ Acronym for million acre-feet

² 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.

³ Subject to April adjustments which may result in a release according to the Equalization Tier

⁴ Of which 2.48 maf is apportioned to Arizona, 4.4 maf to California, and 0.287 maf to Nevada

⁵ Of which 2.40 maf is apportioned to Arizona, 4.4 maf to California, and 0.283 maf to Nevada

⁶ Of which 2.32 maf is apportioned to Arizona, 4.4 maf to California, and 0.280 maf to Nevada

⁷ 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.

Potential For Shortages

- The 2015 water year release was 9.0 MAF from Lake Powell
- Water Year 2016 release from Lake Powell will be 8.23 MAF with an anticipated adjustment in April to 9.0 MAF
- 0% probability of Tier 1 shortage in the Lower Basin in 2016 (based the 9.0 MAF release in water year 2015)
- 18% probability of Tier 1 shortage in the Lower Basin in 2017 (with 9.0 MAF release in water year 2016)

Based on Reclamation's August 2015 Colorado River modeling.



PROBABILITIES OF LOWER BASIN SHORTAGE

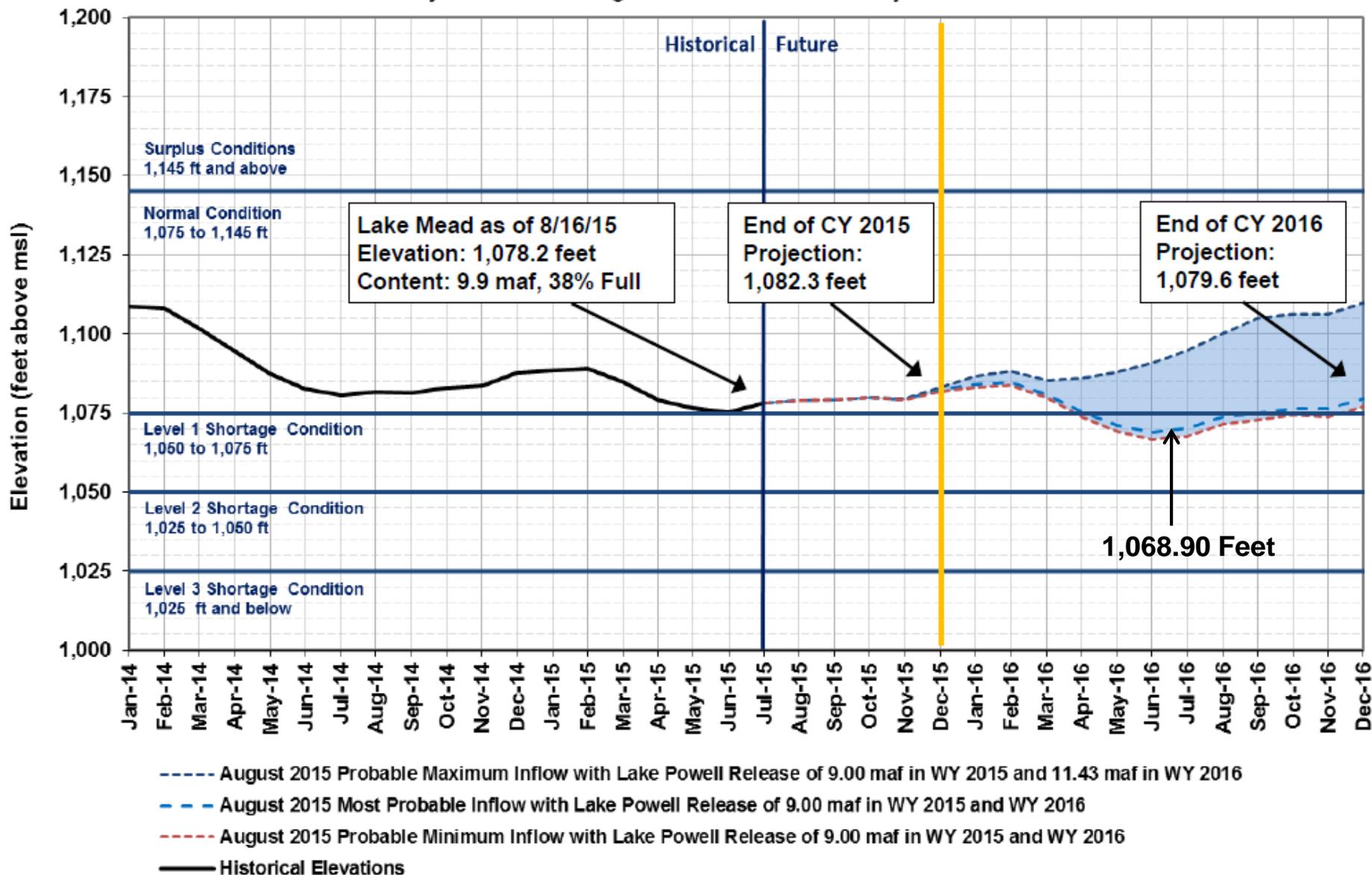
	2016	2017	2018	2019	2020
Probability of any level of shortage (Mead \leq 1,075 ft.)	0	18	52	65	59
1 st level shortage (Mead \leq 1,075 and \geq 1,050 ft)	0	18	42	47	35
2 nd level shortage (Mead $<$ 1,050 and \geq 1,025 ft)	0	0	10	14	18
3 rd level shortage (Mead $<$ 1,025)	0	0	0	4	7

From Bureau of Reclamation August 2015 Colorado River modeling projections for 2016 through 2020.

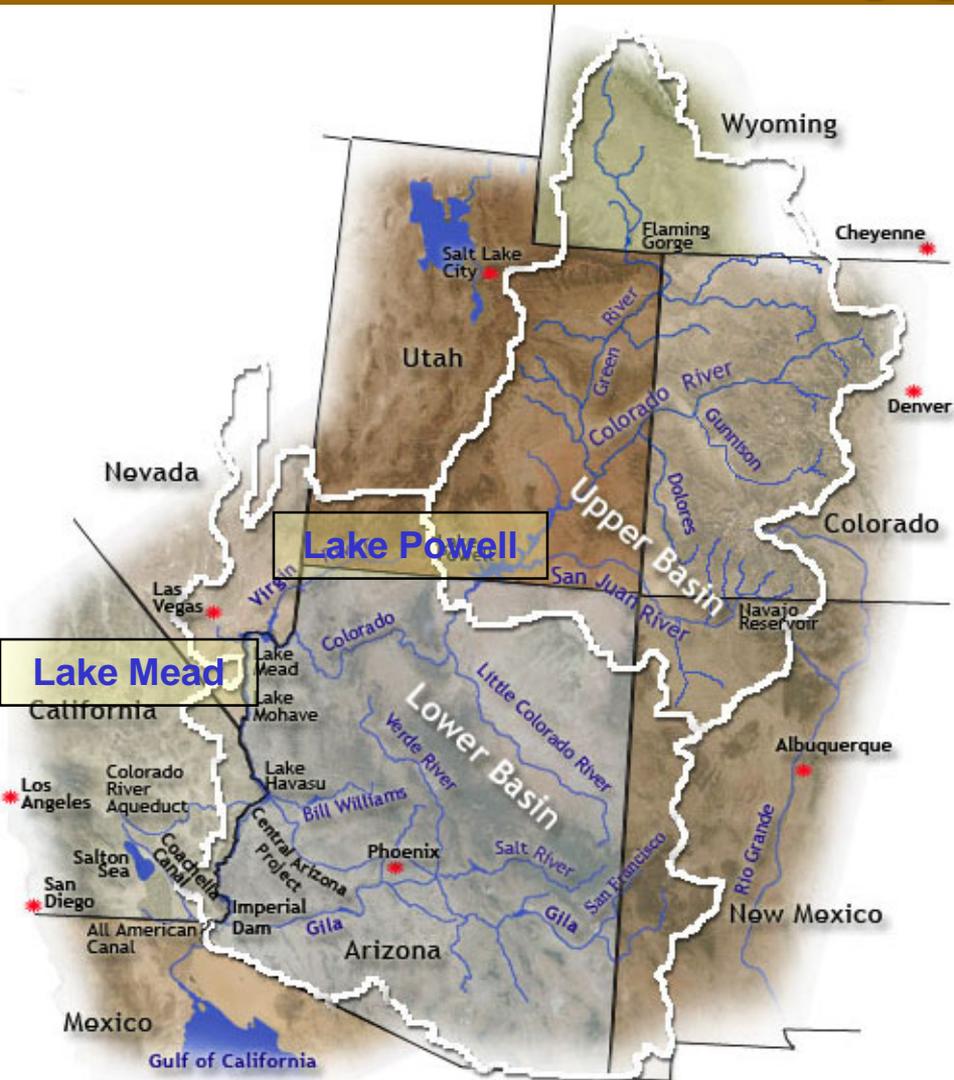


Lake Mead End of Month Elevations

Projections from August 2015 24-Month Study Inflow Scenarios



Colorado River Basin Water Supply Outlook



Total Reservoir System Contents:
30.12 MAF or 51%

(As of November 8, 2015)

**Total Reservoir System Contents
Last Year:**

29.90 MAF or 50%

This is a change of + 0.22 MAF

Colorado River Basin Water Supply Outlook

LAKE POWELL
Capacity – 24.5 MAF
11/08/2015 – 51% full
Contents 12.37 MAF
Elevation – 3,606.35

Source: United States Bureau of Reclamation

Glen Canyon
Dam

Page

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Imagery Dates: Jun 8, 2007 - Jun 23, 2009

37°01'38.17" N 111°22'56.22" W elev 3887 ft

Eye alt 37.88 mi

Colorado River Basin Water Supply Outlook

LAKE MEAD
Capacity - 26 MAF
11/08/2015 - 38% full
Contents – 9.94 MAF
Elevation – 1,079.14'

Source: United States Bureau of Reclamation

Las Vegas

Hoover Dam

Image U.S. Geological Survey
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Questions?

