

Governor's Drought Interagency Coordinating Committee

**Thomas Buschatzke, Assistant Director,
Water Planning Division**

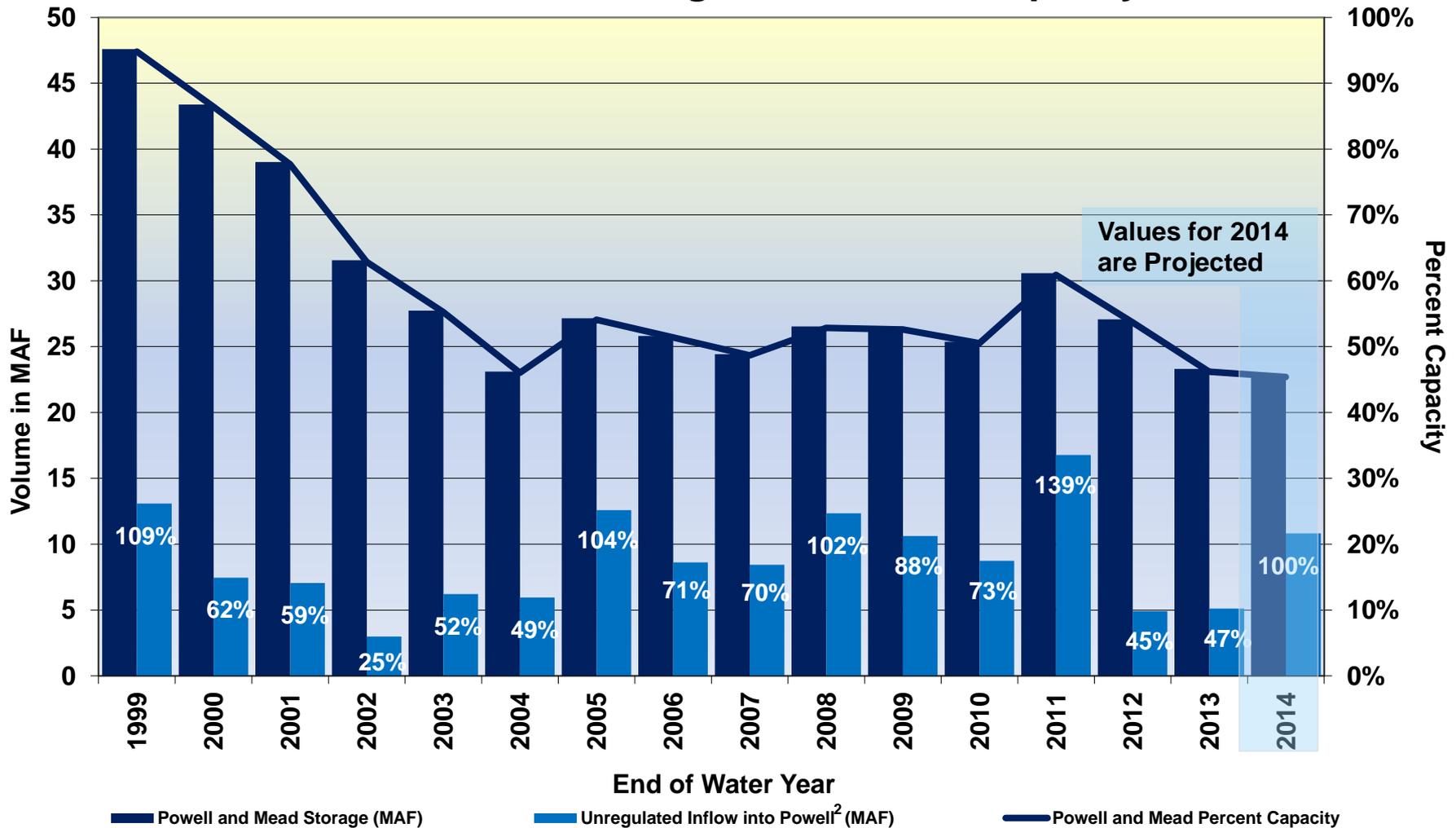
Arizona Department Of Water Resources

May 13, 2014



**PROTECTING
ARIZONA'S WATER SUPPLIES
for ITS NEXT CENTURY**

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



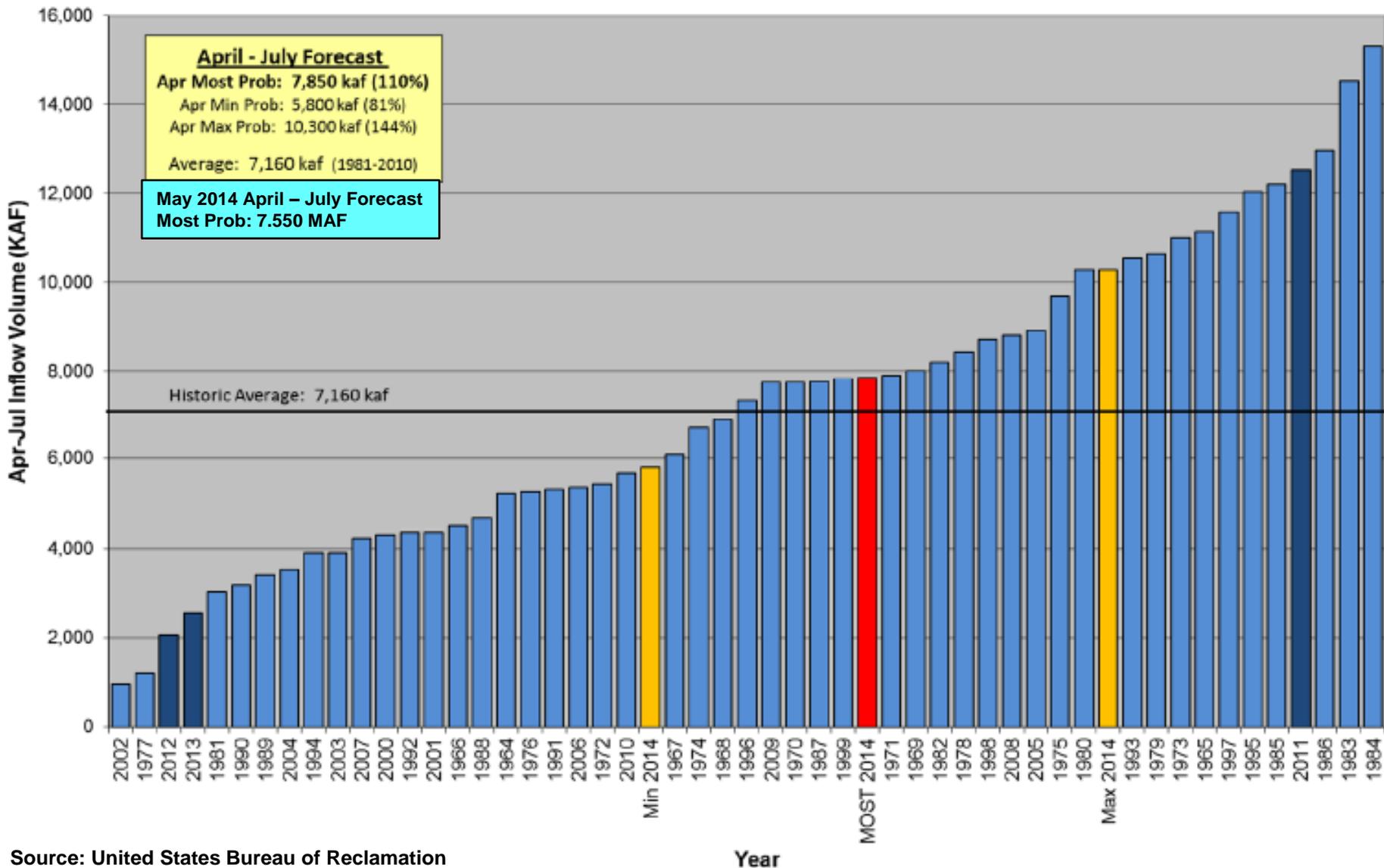
¹ Values for Water Year 2014 are projected. Unregulated inflow is based on the latest CBRFC forecast. Storage and percent capacity are based on the April 2014 24-Month Study.

² Percentages at the top of the light blue bars represent percent of average unregulated inflow into Lake Powell for a given water year. Water years 1999-2011 are based on the 30-year average from 1971 to 2000. Water years 2012-2014 are based on the 30-year average from 1981-2010.

Powell Unregulated Inflow

Apr-Jul 2014 Forecast (*Issued Apr 2*)

Comparison with History



Source: United States Bureau of Reclamation

Year

Lake Powell & Lake Mead Operational Table

Operational Tier Determinations for Water Year/Calendar Year 2014

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	15.6 - 19.3 (2008-2026)	1,200 (approx.) ²	Domestic Surplus or ICS Surplus Condition Deliver > 7.5 maf	22.9 (approx.) ²
3,575	3,573.69	9.5	1,145	1,107.39 Normal or	15.9
	1/1/14 Projection		1,105	1/1/14 Projection ICS Surplus Condition Deliver ≥ 7.5 maf	11.9
	Mid-Elevation Release Tier Release 7.48 maf; if Lake Mead < 1,025 feet, release 8.23 maf		1,075	Shortage Condition Deliver 7.167 ³ maf	9.4
3,525		5.9	1,050	Shortage Condition Deliver 7.083 ³ maf	7.5
3,490	Lower Elevation Balancing Tier Balance contents with a min/max release of 7.0 and 9.5 maf	4.0	1,025	Shortage Condition Deliver 7.0 ³ maf	5.8
3,370		0	1,000	Shortage Condition Deliver 7.0 ³ maf Further measures may be undertaken ⁷	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.

Source: United States Bureau of Reclamation

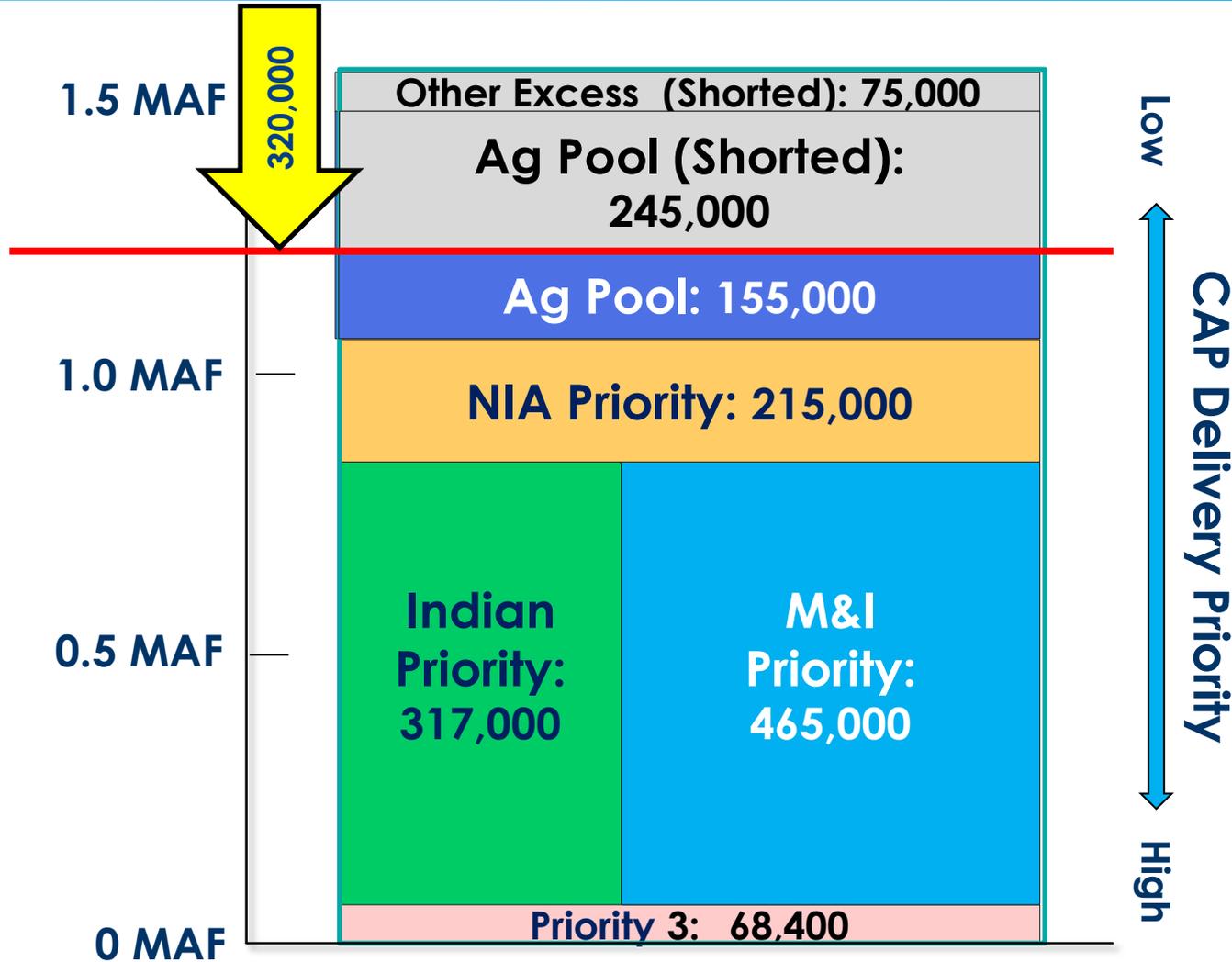
Potential For Shortages

- **15% probability of 7.48 MAF release from Lake Powell in 2016**
- **23% probability of Tier 1 shortage in the Lower Basin in 2016 (with a 9.00 MAF release in water year 2015)**
- **51% probability of Tier 1 shortage in the Lower Basin in 2017 (with 7.48 MAF release in water year 2014 and a 9.00 MAF release in water year 2015)**



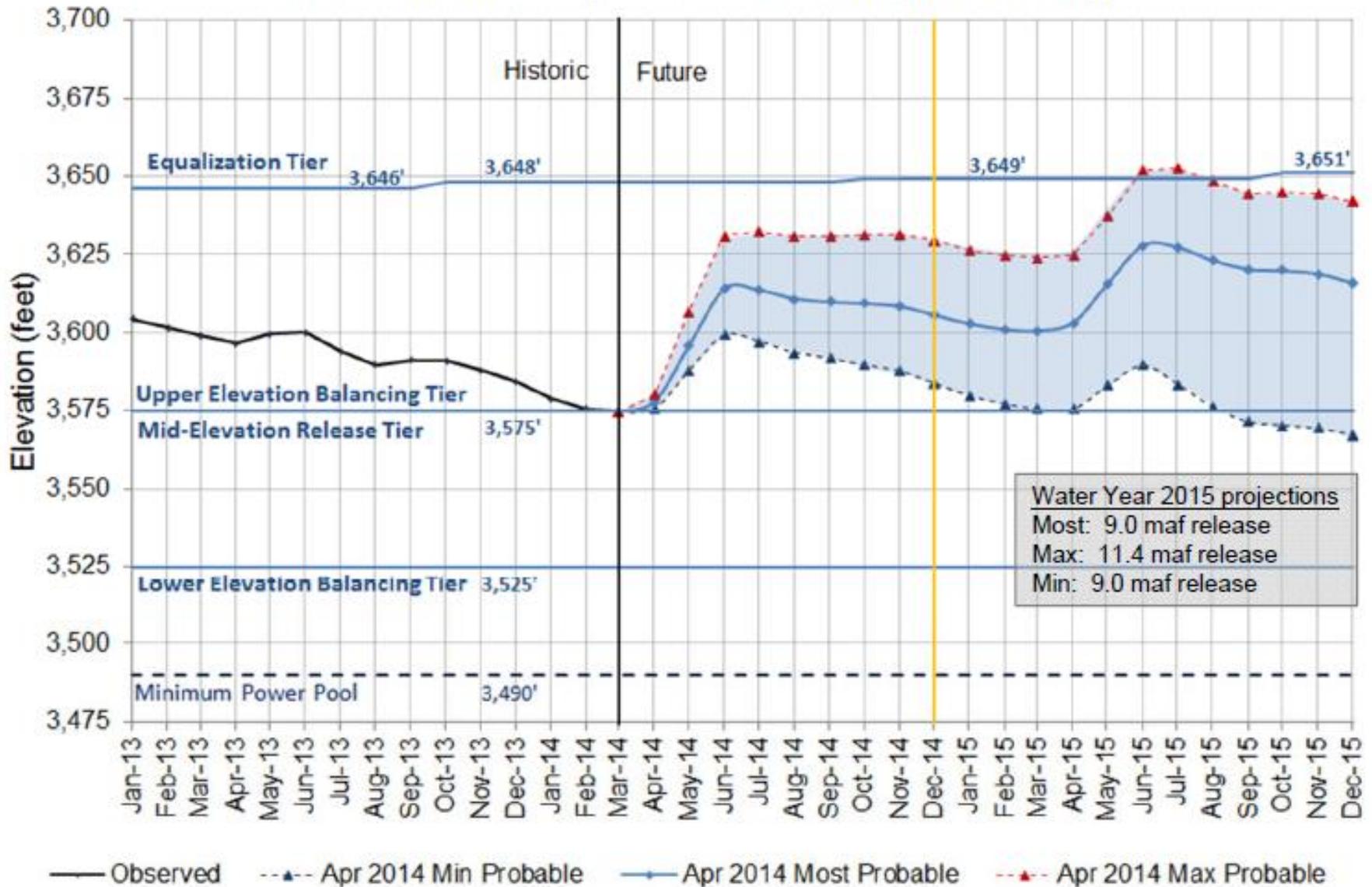
Based on Reclamation's April 2014 CRSS Model Run

2016 Level 1 Shortage



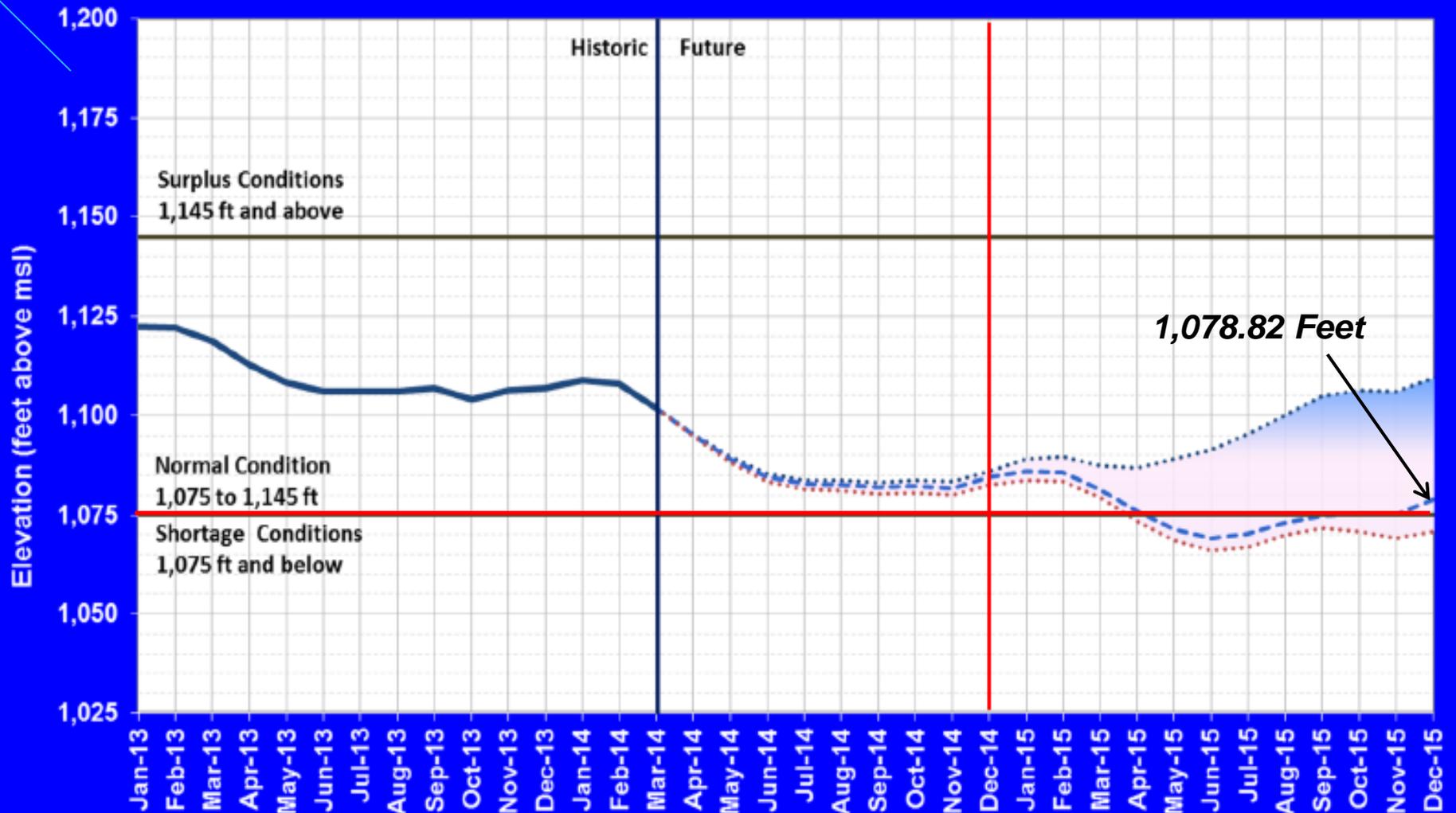
Lake Powell End of Month Elevations

Historic and Projected based on April modeling



Lake Mead End of Month Elevations

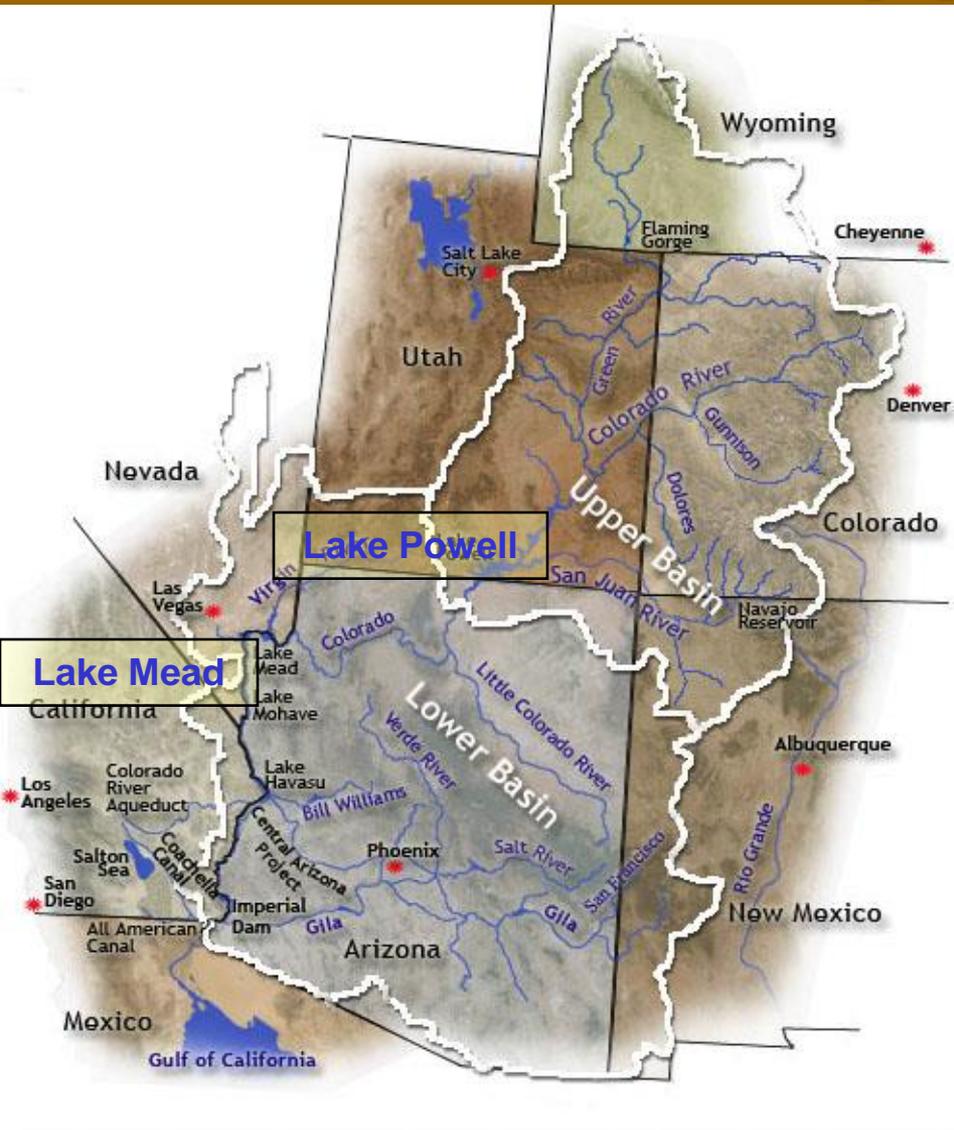
Projections from April 2014 24-Month Study Inflow Scenarios



- April 2014 Probable Maximum Inflow with Lake Powell Release of 7.48 maf Water Year 2014 and 11.44 maf in Water Year 2015
- - - April 2014 Most Probable Inflow with Lake Powell Release of 7.48 maf in Water Year 2014 and 9.00 maf in Water Year 2015
- April 2014 Probable Minimum Inflow with Lake Powell Release of 7.48 maf in Water Year 2014 and 9.00 maf in Water Year 2015
- Historical Elevations

Source: United States Bureau of Reclamation

Colorado River Basin Water Supply Outlook



Total Reservoir System Contents:
28.1 MAF or 47%

(As of May 5, 2014)

**Total Reservoir System Contents
Last Year:**

31.1 MAF or 52%

This is a change of -3.0 MAF

Colorado River Basin Water Supply Outlook

LAKE POWELL
Capacity – 24.5 MAF
05/05/2014 - 40% full
Contents 9.92 MAF
Elevation – 3,579'

Source: United States Bureau of Reclamation

Glen Canyon
Dam

Page

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Image USDA Farm Service Agency

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Colorado River Basin Water Supply Outlook

LAKE MEAD
Capacity - 26 MAF
05/05/2014 - 43% full
Contents - 11.19 MAF
Elevation - 1,094'

Source: United States Bureau of Reclamation

Las Vegas

Hoover Dam

Image U.S. Geological Survey
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Imagery Date: Jun 8, 2007

36°07'44.40" N 114°31'18.60" W elev 1309 ft

Eye alt 46.71 mi

Questions?

