



2007 Colorado River Interim Guidelines for Lower Basin Shortages & Coordinated Ops for Lake Powell & Lake Mead

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Interim Guidelines 101

- NEPA ROD signed in 2007 for ops beginning in 2008
- In effect for ops through 2026
- Previously, Powell & Mead operated to avoid flood control spills
- Changing the operating criteria reduces the probability & severity of shortages

Guidelines, con't.

- Modified pre-existing Interim Surplus Guidelines
- Established trigger elevations in Mead for reducing Lower Basin deliveries (shortage condition)
- Provided methodology for storing credit water (Intentionally Created Surplus) in Mead

Implementing the Guidelines

- Forbearance agreements, delivery agreements
- Mexico & Minute 319
- Special consultation provision -- if Mead elevation below elevation 1,025 & forecasted to drop below 1000
- Formal review of guidelines' effectiveness required in 2020

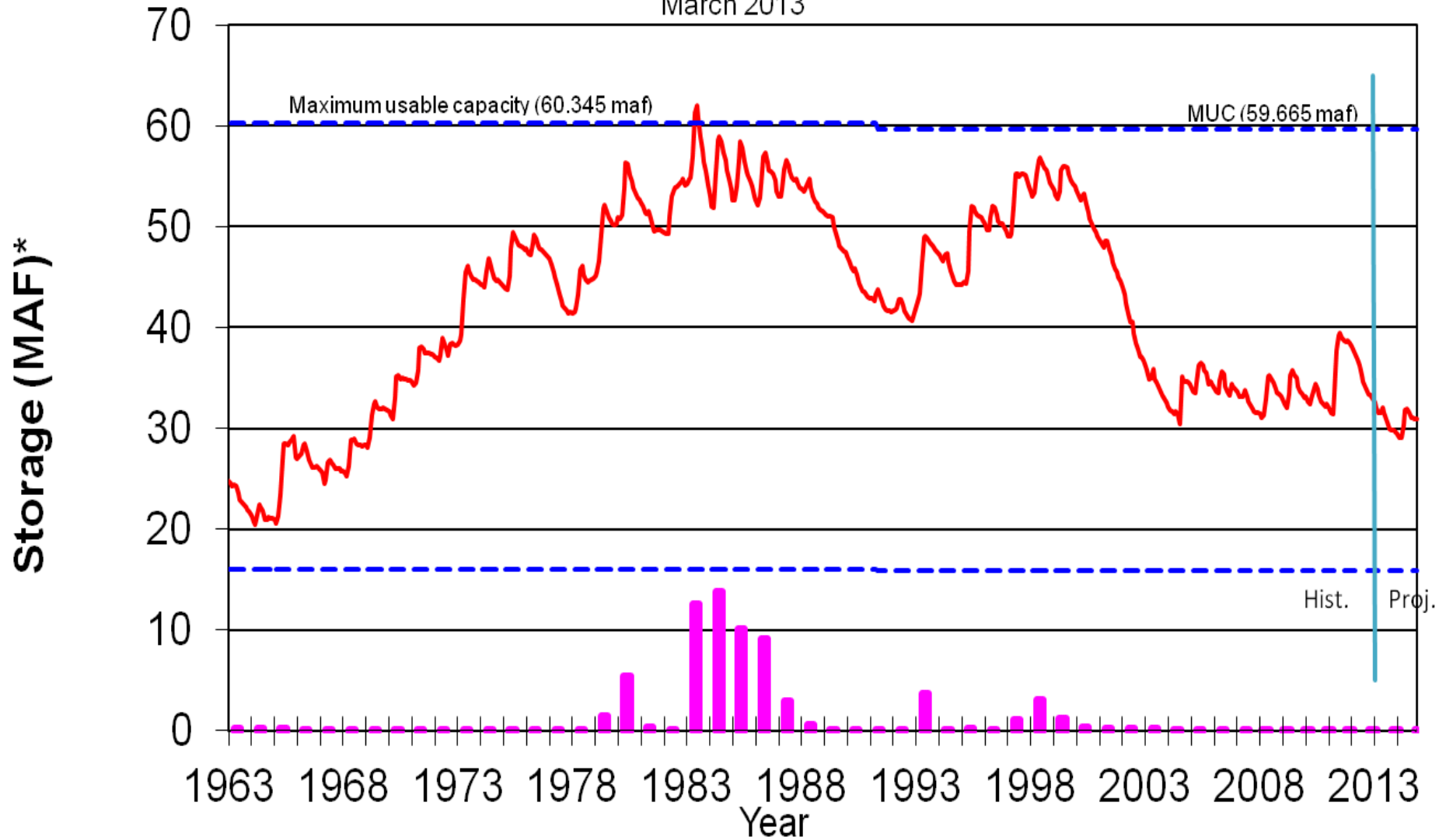
And Why Is This Important?

- Below normal inflow to Powell in 11 of last 14 years – longest dry period in historical record
- Mead presently at elev. 1107; elev. 1050 is limiting factor for SNWA's 1st intake
- Entering new territory relative to risk of Lower Basin shortages



Monthly Total Colorado River Basin Storage

March 2013



* A resurvey of Lake Powell changed the MUC and MOL in June 1991

Lakes Powell & Mead Operations

(USBR)

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 Tier² 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
3,575	Mid-Elevation Release Tier Release 7.48 maf; if Lake Mead < 1,025 feet, release 8.23 maf	9.5	1,145	Normal or ICS Surplus Condition Deliver ≥ 7.5 maf	15.9
3,525	Lower Elevation Balancing Tier Balance contents with a min/max release of 7.0 and 9.5 maf	5.9	1,105	Shortage Condition Deliver 7.167 ⁴ maf	11.9
3,490		4.0	1,075	Shortage Condition Deliver 7.083 ⁵ maf	9.4
3,370		0	1,050	Shortage Condition Deliver 7.0 ⁶ maf Further measures may be undertaken ⁷	7.5
			1,025		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

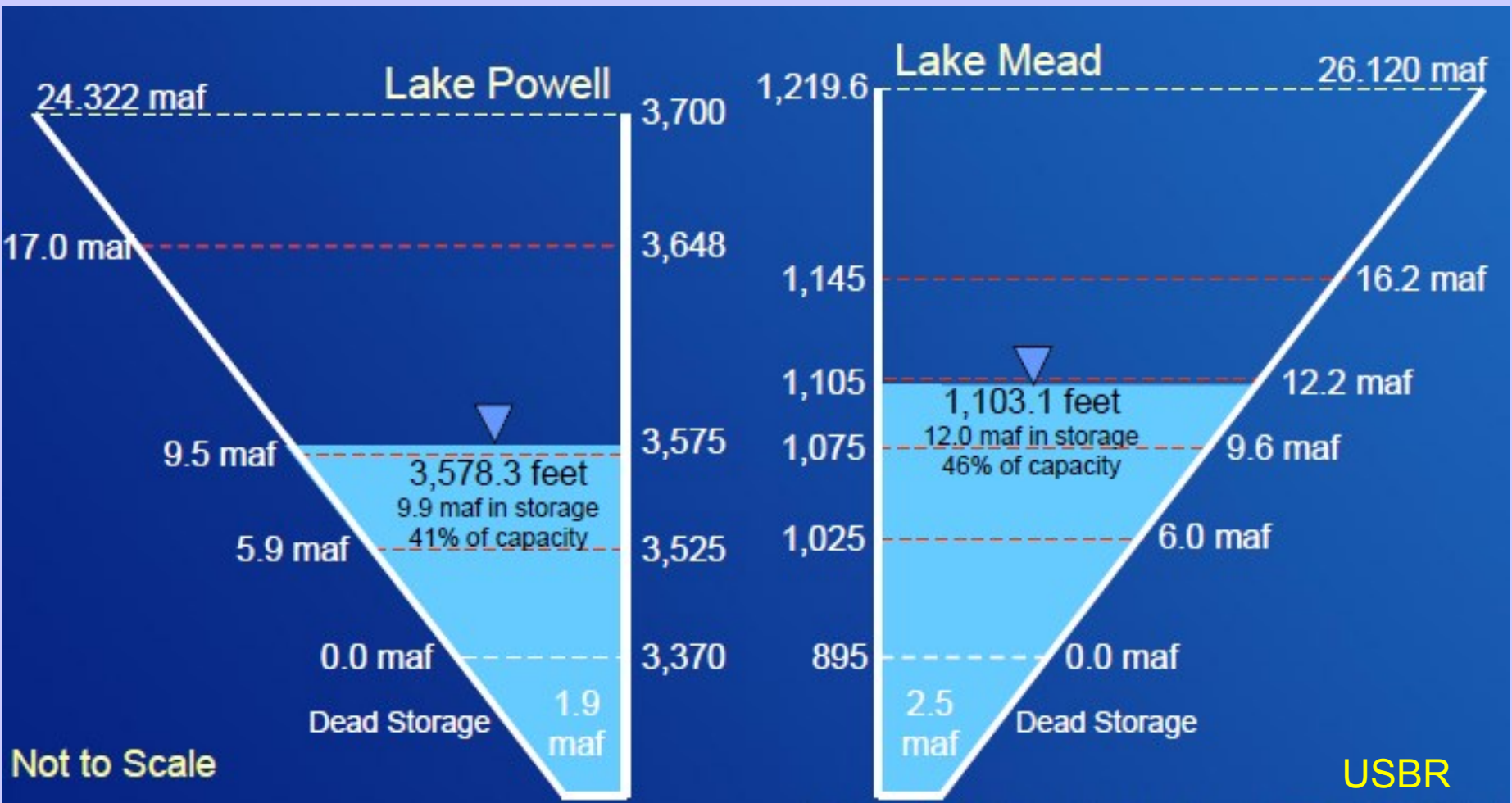
⁵ Of which 2.40 maf is apportioned to Arizona, 4.4 maf to California, and 0.283 maf to Nevada

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

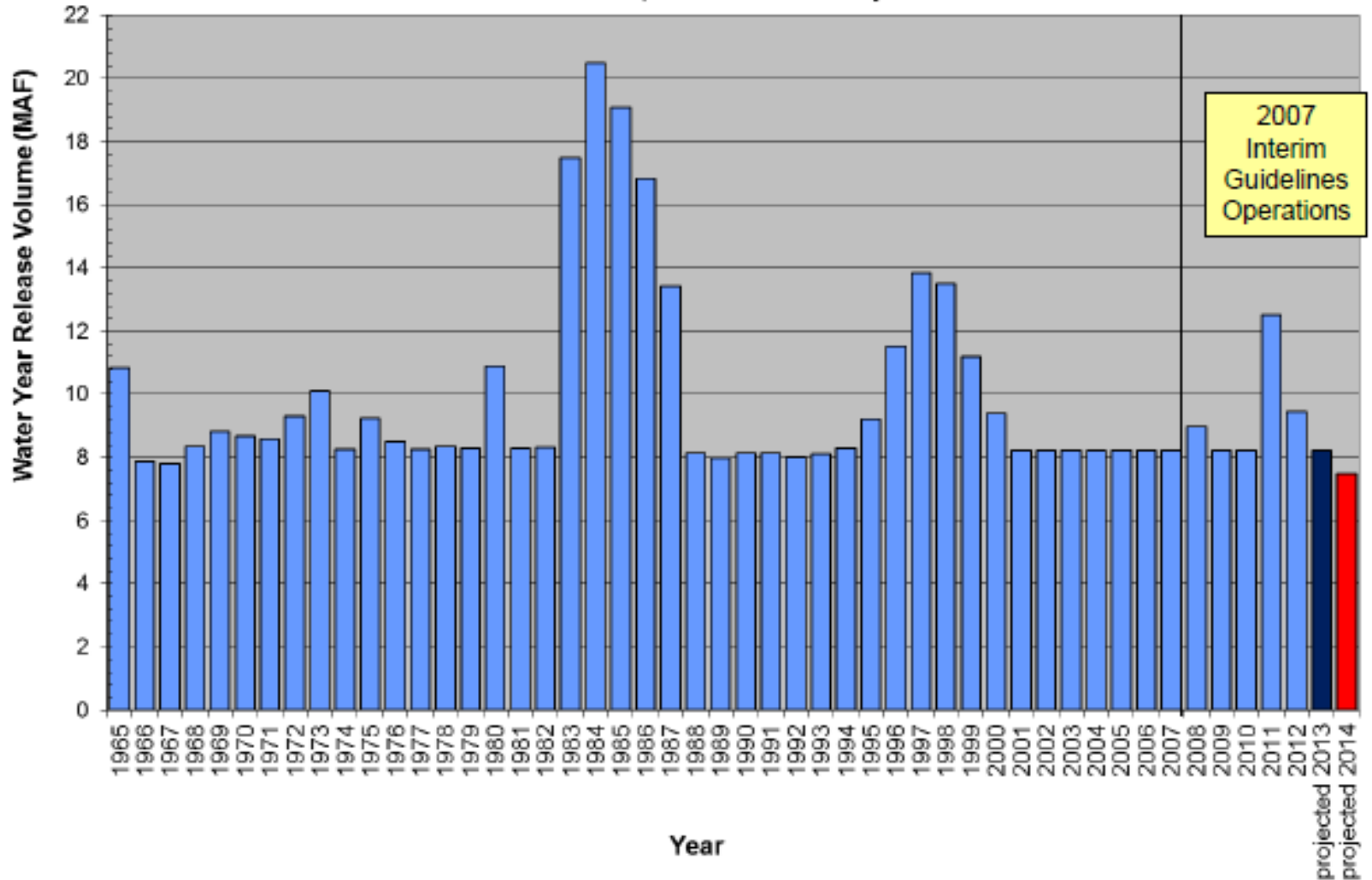
⁷ Whenever Lake Mead is below elevation 1,025 feet, the Secretary shall consider whether hydrologic conditions together with anticipated deliveries to the Lower Division States and Mexico is likely to cause the elevation at Lake Mead to fall below 1,000 feet. Such consideration, in consultation with the Basin States, may result in the undertaking of further measures, consistent with applicable Federal law.

End of Calendar Year 2013 Projections

August 2013 24-Month Study Most Probable Inflow



Lake Powell Release Water Year 2013 and 2014 Projected Comparison with History



End of Water Year 2014 Projections

August 2013 24-Month Study Most Probable Inflow Scenario¹

Based on a 7.48 maf release pattern from Lake Powell in Water Year 2014

