



THE LOWER BASIN ALTERNATIVE

MARCH 2024

Colorado River Operations

The existing rules that govern the Colorado River are set to expire in 2026.

- 2007 Interim Guidelines
- 2019 Drought Contingency Plan
- Minute 323 (U.S. / Mexico)

States have been negotiating and developing a framework for operations post-2026.



2007 Interim Guidelines and DCP

Shortage Reductions and Water Savings Contributions
Under the 2007 Interim Guidelines, Minute 323, Lower Basin Drought Contingency Plan (DCP)*,
and Binational Water Scarcity Contingency Plan
(Volumes in thousand acre-feet)

Lake Mead Elevations (in feet)	2007 Interim Guidelines Shortage Reductions (U.S.)		Minute 323 Delivery Reductions (Mexico)	Total Combined Shortage Reductions (U.S. and Mexico)	DCP Water Savings Contributions (U.S.)			Binational Water Scarcity Contingency Plan Water Savings (Mexico)	Combined Volumes of Shortage Reductions and Water Savings Contributions by Lower Basin State and by Country (U.S. and Mexico)					Total Combined Volumes (U.S. and Mexico)
	AZ	NV	Mexico	Lower Basin States + Mexico	AZ	NV	CA	Mexico	AZ Total	NV Total	CA Total	Lower Basin States Total	Mexico Total	Lower Basin States + Mexico
	0	0	0	0	192	8	0	41	192	8	0	200	41	241
Tier 1 → 1,090 - >1,075	320	13	50	383	192	8	0	30	512	21	0	533	80	613
Tier 2a → 1,075 - >1,050	400	17	70	487	192	8	0	34	592	25	0	617	104	721
Tier 2b { 1,050 - >1,045	400	17	70	487	240	10	200	76	640	27	200	867	146	1,013
	400	17	70	487	240	10	250	84	640	27	250	917	154	1,071
	400	17	70	487	240	10	300	92	640	27	300	967	162	1,129
	400	17	70	487	240	10	350	101	640	27	350	1,017	171	1,188
Tier 3 → 1,030 - 1,025	480	20	125	625	240	10	350	150	720	30	350	1,100	275	1,375
<1,025														

*Under the Lower Basin DCP, the United States will take affirmative actions to create or conserve 100,000 acre-feet or more of Colorado River system water on an annual basis to contribute to conservation of water supplies in Lake Mead and other Colorado River reservoirs in the Lower Basin. All actions taken by the United States shall be subject to applicable federal law, including availability of appropriations.



2007 Interim Guidelines

- Water year release determination
- Coordinated Operations:
 - Based on Lake Powell and Lake Mead Elevations
 - Balancing under many tiers has created conflicts between the two basins

Lake Powell Operational Tiers (subject to April adjustments or mid-year review modifications)		
Lake Powell Elevation (feet)	Lake Powell Operational Tier	Lake Powell Active Storage (maf)
3,700	Equalization Tier equalize, avoid spills or release 8.23 maf	24.32
3,636 – 3,666 (see table below)	----- Upper Elevation Balancing Tier release 8.23 maf; if Lake Mead < 1,075 feet, balance contents with a min/max release of 7.0 and 9.0 maf	15.54 – 19.29 (2008 – 2026)
3,575	----- Mid-Elevation Release Tier release 7.48 maf; if Lake Mead < 1,025 feet, release 8.23 maf	9.52
3,525	----- Lower Elevation Balancing Tier balance contents with a min/max release of 7.0 and 9.5 maf	5.93
3,370		0

Post-2026 Colorado River Operations

- BOR initiated the NEPA process in June 2023
- The Lower Basin states have developed a draft alternative for consideration in the EIS
- Additional work with stakeholders, water users, Mexico, and the Upper Basin is needed to reach consensus



— BUREAU OF —
RECLAMATION

Scoping Report for Post-2026 Colorado River Reservoir Operations

Upper and Lower Colorado Basin Regions



Lower Basin Alternative

GOAL:

Address impacts of drought and climate change through a holistic and sustainable approach to the coordinated operations of Lake Powell and Lake Mead that improves predictability for water users



Lower Basin Alternative

In order to achieve the goal, the alternative:

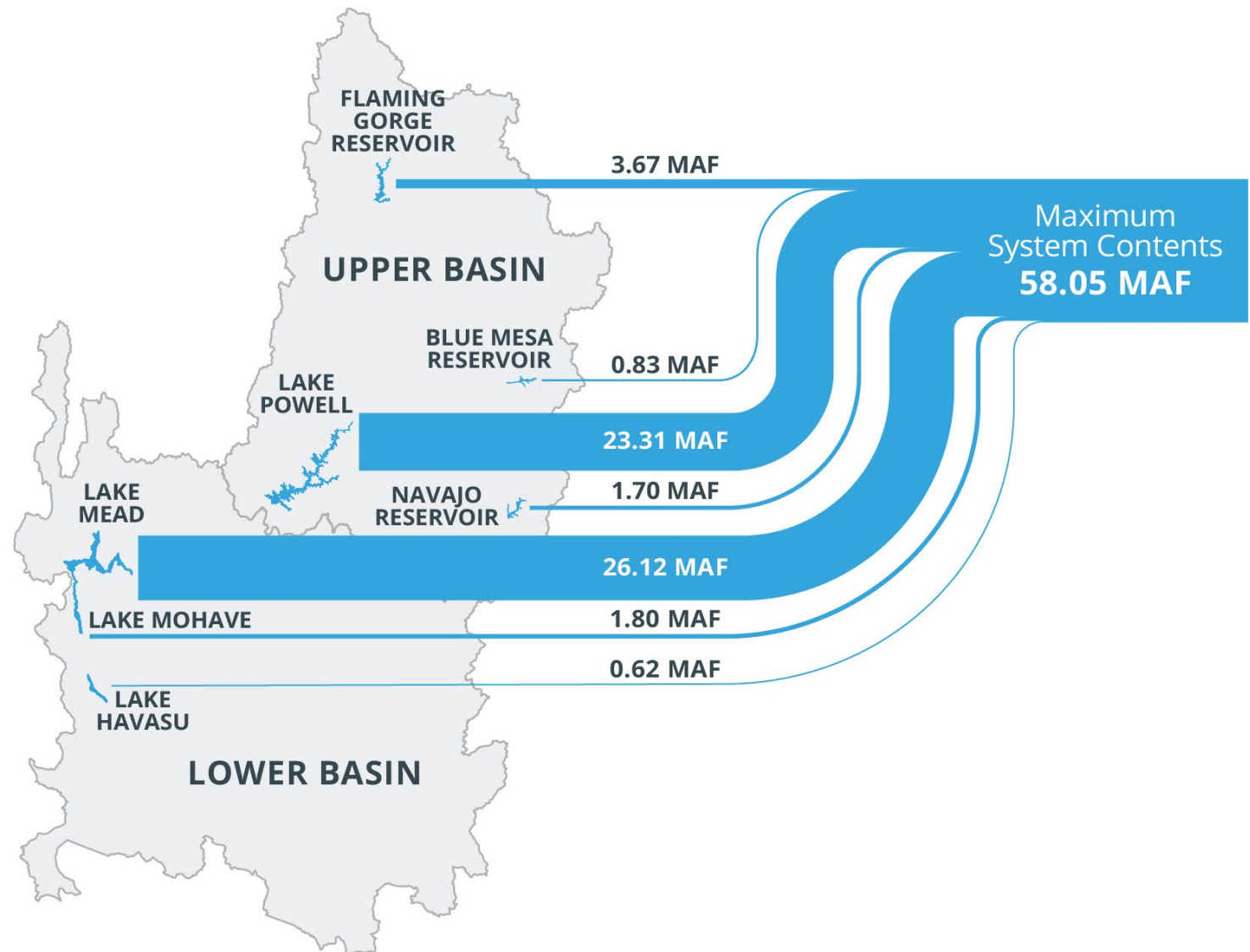
- Addresses the structural deficit in the Lower Basin
- Operates the reservoirs based on system contents rather than elevations at Lake Powell and Lake Mead
- Shares water use reductions broadly
- Creates provisions for the storage and delivery of stored water
- Releases from Lake Powell that are adaptable to a broad range of hydrologies and respond to “hydrologic shortages”



Water Use

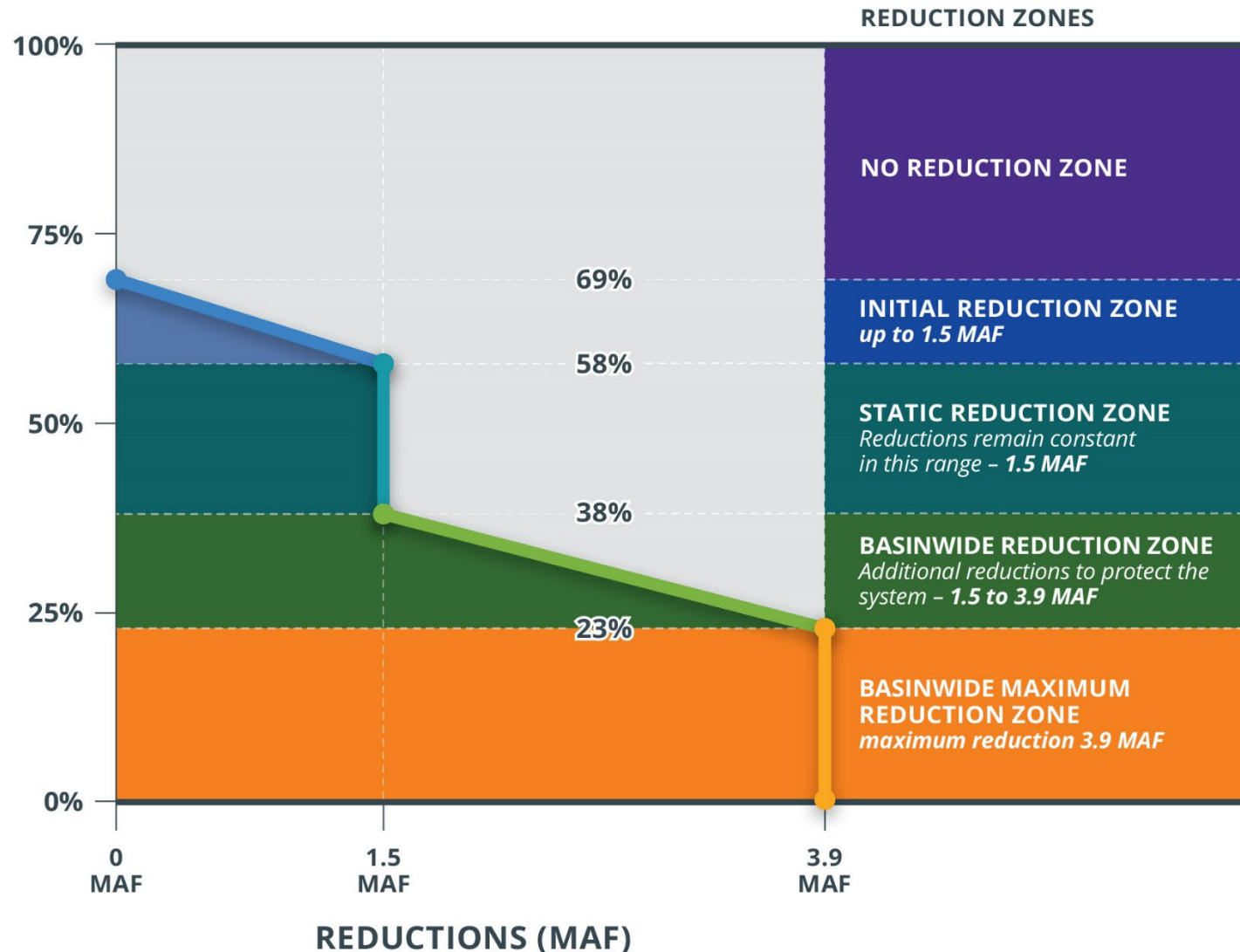
- Approach uses total system contents
 - CRSP Initial Units, Lake Powell, Lake Mead, Lake Mojave, and Lake Havasu
- Benefits of total system contents
 - More holistic view of system storage
 - Actions of one basin cannot be used to “game” the other basin
 - Whether the water is in Powell or Mead it produces the same reductions
 - Maximum reductions kick in with storage still remaining

Total System Contents



Lower Basin Alternative: Reduction Determination

Reductions are based on available system contents



Lower Basin Alternative: Reductions by State

First, the volume of the reduction must be calculated

- 69% - 58%: Cuts to Lower Basin water uses increasing from 0 to 1.5 maf
- 58% - 38%: Static cut to Lower Basin water uses of 1.5 maf
- 38% - 23%: Static cut to Lower Basin water uses of 1.5 maf plus additional, at least half of the cuts to Upper Basin as total system reductions increase from 1.5 maf to 3.9 maf

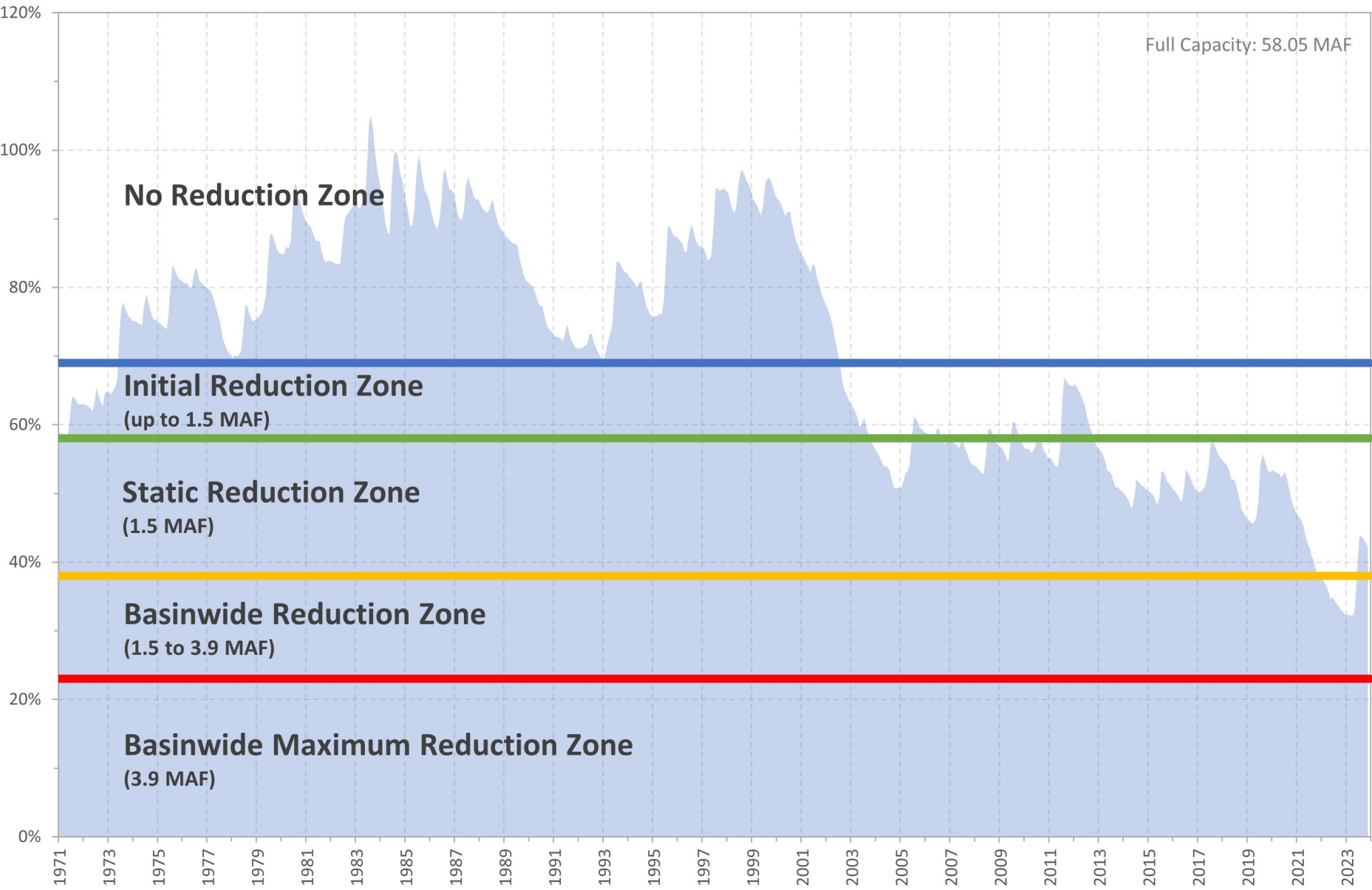
Lower Basin Alternative: Reductions by State

Second, the reduction volume is divided amongst the Lower Basin States

	Total Reduction Volumes	Upper Basin	Arizona	California	Nevada	Mexico
Initial Reduction Zone	Up to 300 KAF	0	80%	0	3.33%	16.67%
	300 KAF-1.5 MAF		43.33%	36.67%	3.33%	16.67%
Static Reduction Zone	1.5 MAF	0	760,000	440,000	50,000	250,000
Basin-wide Reduction Zone	1.5 – 3.9 MAF	Shared among Upper Division states, Lower Division States and Mexico				
Maximum Reduction Zone	3.9 MAF					

*Mexico reductions are assumed to appropriately model cumulative effects but will be determined through separate negotiations

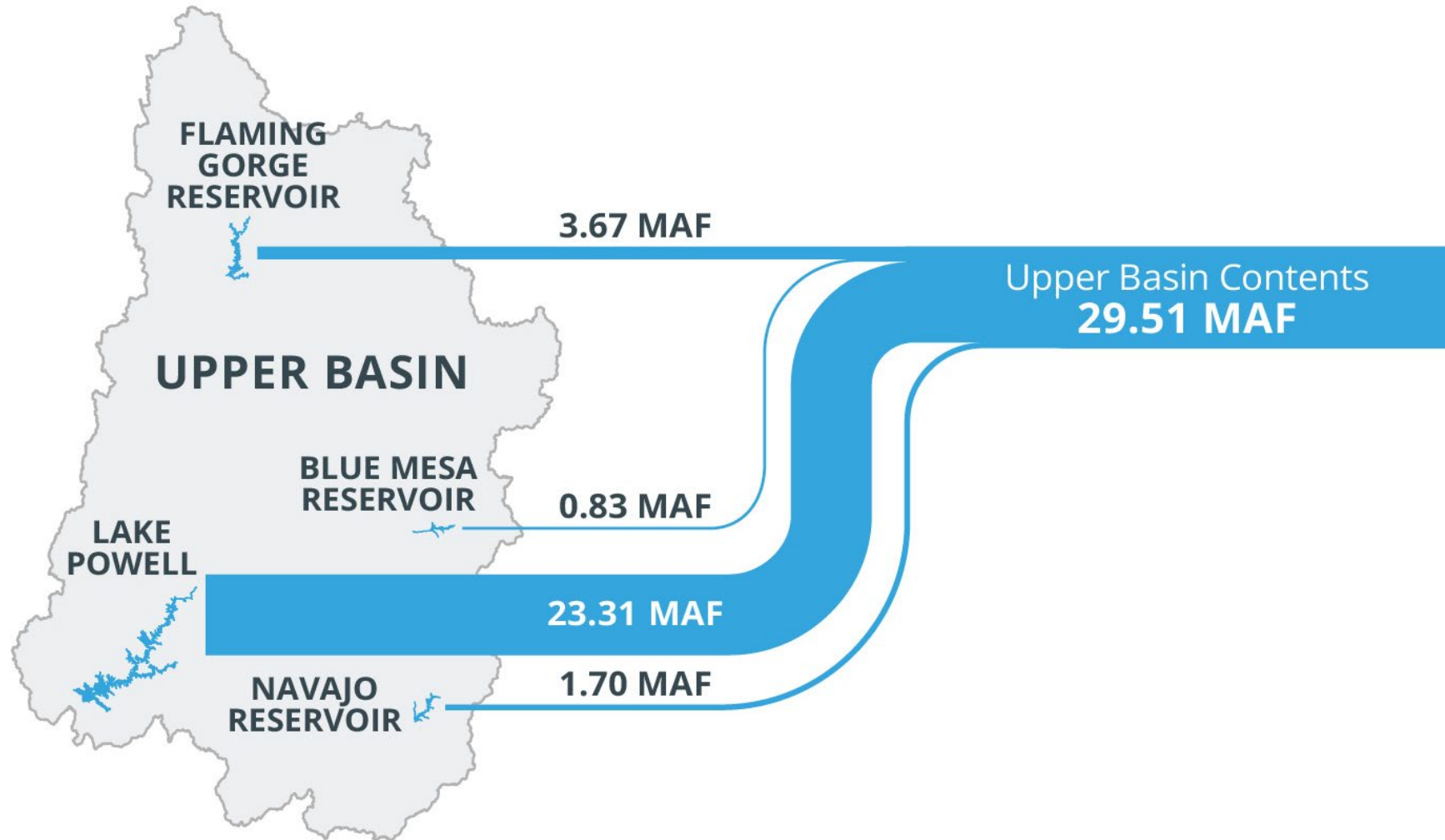
Historical Total System Contents



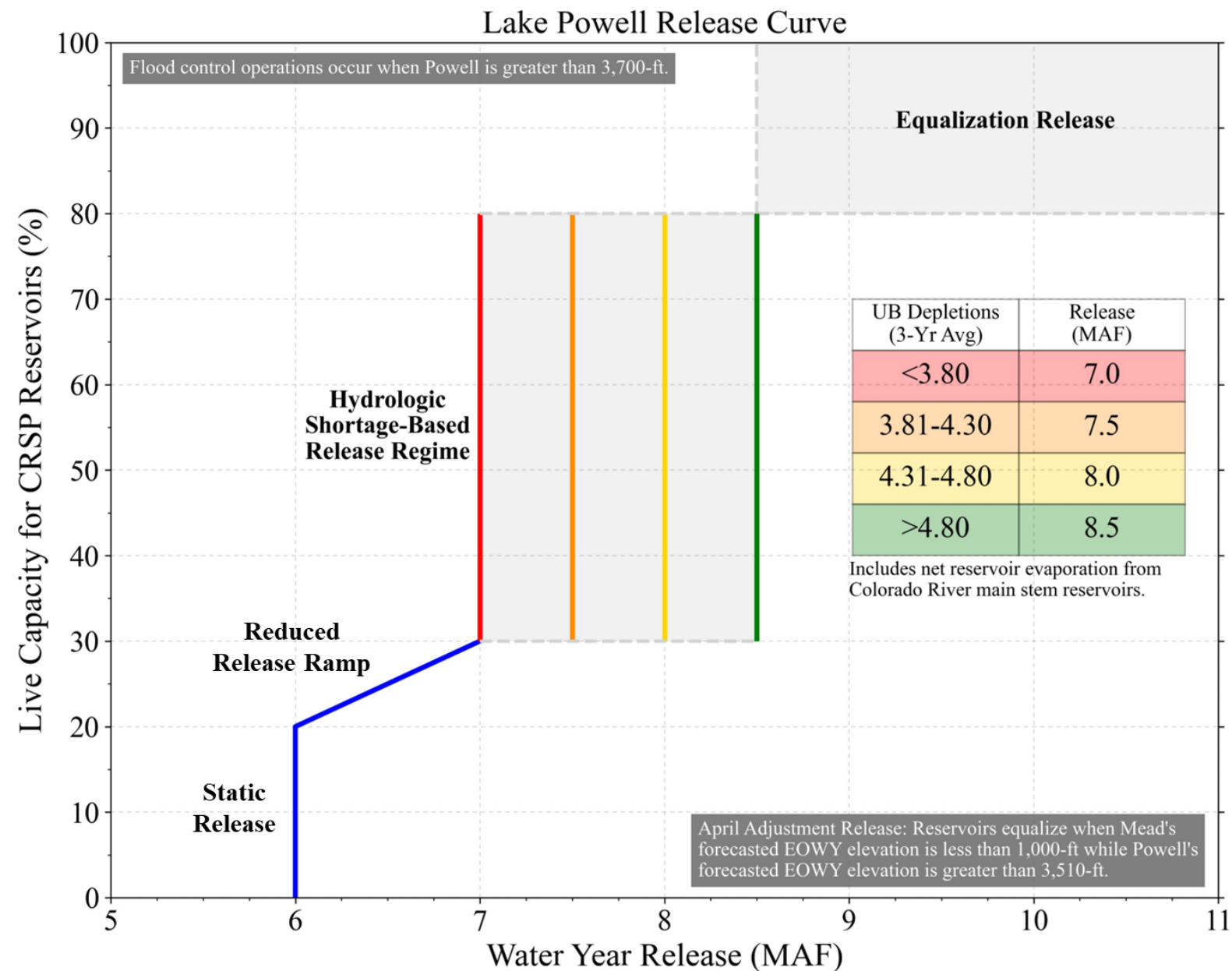
Coordinated Operations

- Considerate of compact requirements
- Acknowledges and adjusts for hydrologic shortages
- Creates framework where ANY Upper Basin activity does not influence the release because the release remains the same regardless of what reservoir the water sits in

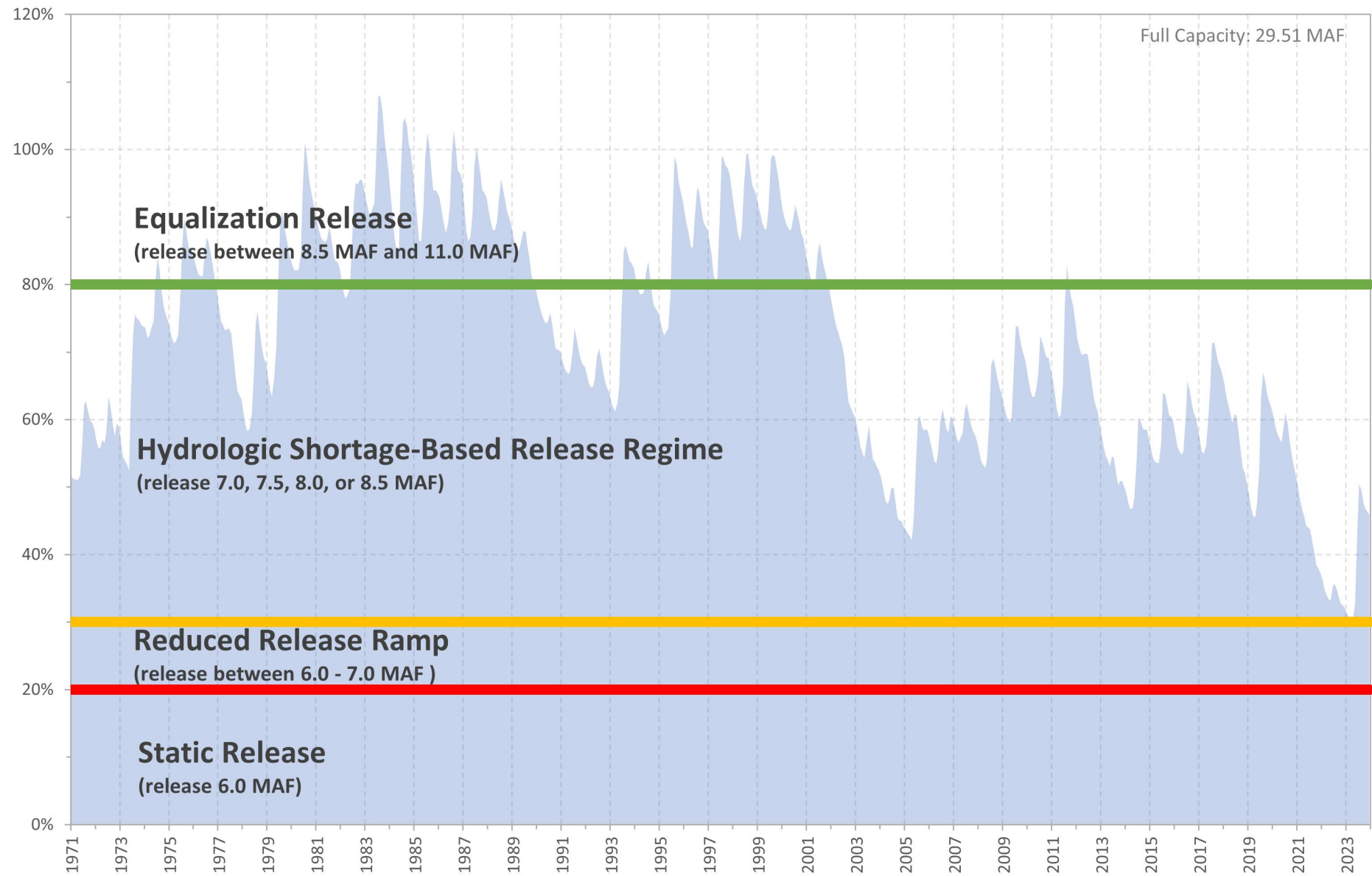
Colorado River Storage Project Reservoirs



Coordinated Operations



CRSP Contents



Storage

While there is more work to be done with stakeholders, the following storage mechanisms are included in the alternative:

- Entitlement holders meeting certain criteria would be allowed to develop storage accounts similar to ICS. This water can be used to help offset reductions
- Entitlement holders would maintain access to existing water stored under the 2007 Interim Guidelines, while creating a new storage mechanism to encourage conservation and augmentation
- Details still need to be negotiated and modeled to understand impacts, benefits, and tradeoffs

NEPA Next Steps

- Proposed alternatives will be reviewed by Reclamation
- Lower Basin will work with its water users, tribes, NGOs, stakeholders, and Reclamation to further refine the alternative and associated programs and rules
- Basin States will continue to negotiate toward a consensus-based alternative

Post-2026 Milestone Schedule



Process

Next Steps



