



Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead

Virtual Public Scoping Meetings – July 17, 18, and 24, 2023

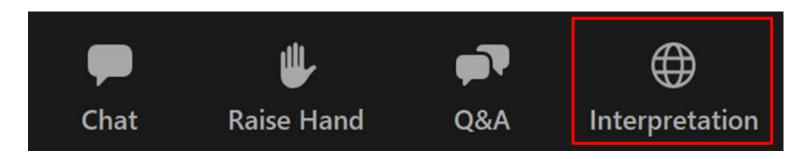
The meeting will begin at 1:00 p.m., MDT

La interpretación en vivo será disponible en español. Live interpretation will be available in Spanish.

Dial In: (720) 928-9299 or (602) 753-0140; Webinar ID: 918 5524 0606

For technical support, please contact Jessica Sams: jessica.sams@swca.com

La interpretación en vivo está disponible en español



Live language interpretation is available in Spanish

Public Scoping Meeting Agenda

- Introductory Remarks and Welcome
- Presentation
- Public Comment
- Closing Remarks



Zoom Orientation



Webinar is being recorded



Microphones are muted



Chat feature is turned off



Submit comments using Q&A during the Public Comment Period





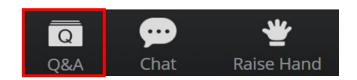




Questions about the Presentation?

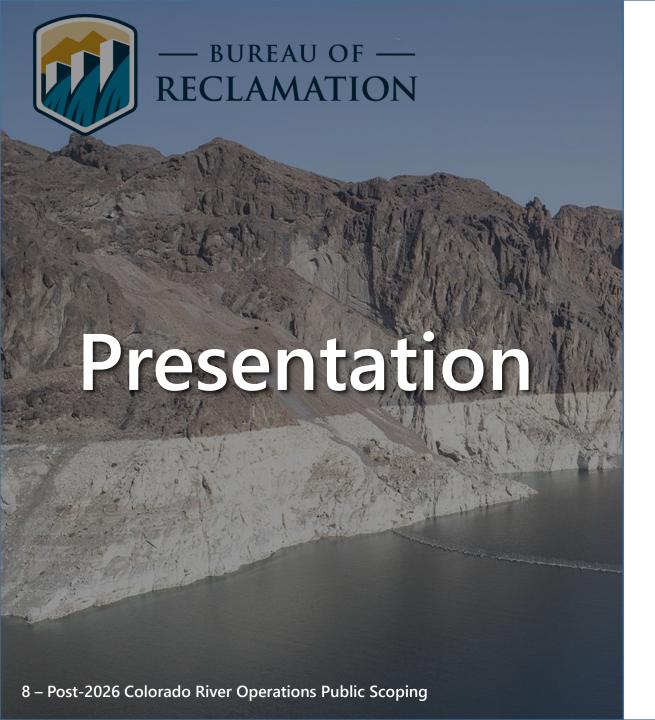
How to submit a question

- Click the Q&A button
- A box will pop up
- Type your question
- Click send
- Responses to questions will appear in the Q&A box



Questions are not part of the project record



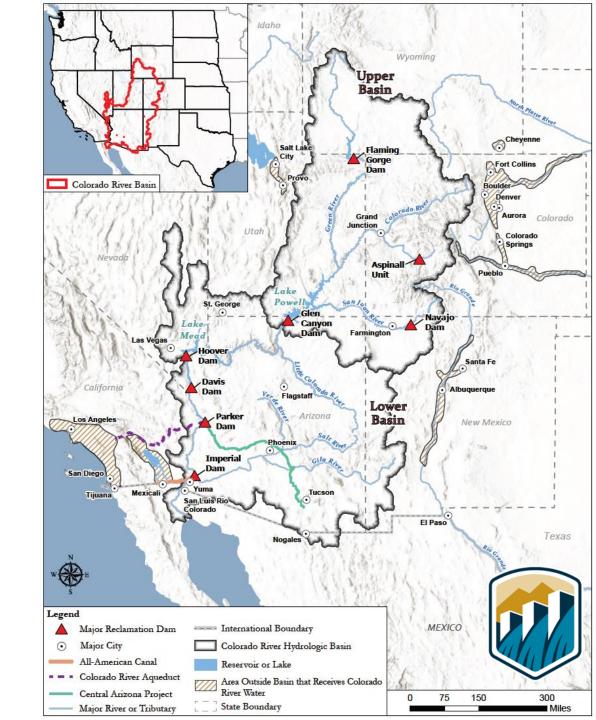


OVERVIEW

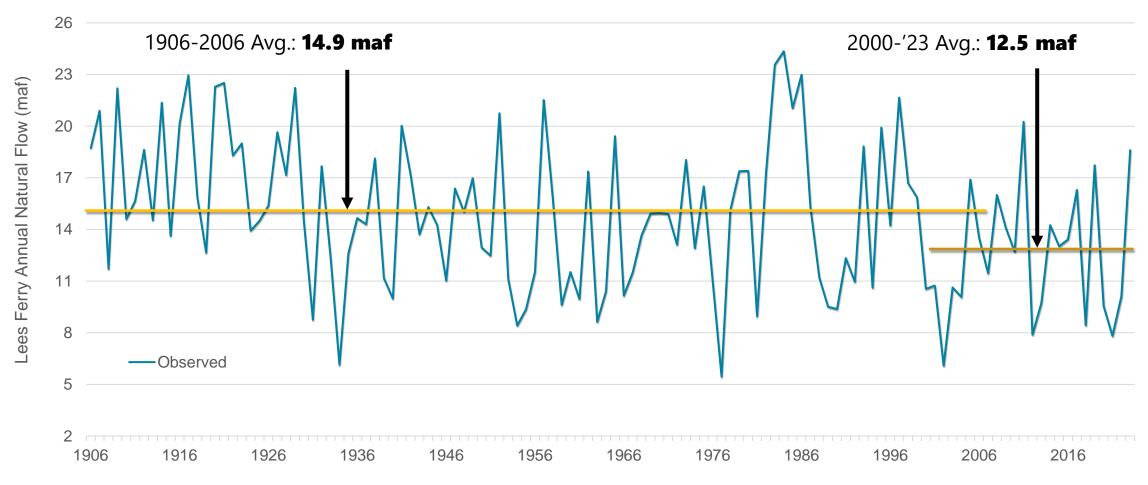
- Background, Need, Setting
- Key Operational Agreements
- Process

Operational Setting

- Colorado River system provides water for 7 States, 30 Basin Tribes, and Mexico
- Dams and reservoirs on the river can store nearly 4 years' water supply and generate 4,200 megawatts of hydropower
- Two largest reservoirs in the system have the capacity to store 60 million acre-feet of water
 - Lake Powell formed by Glen Canyon Dam
 - Lake Mead formed by Hoover Dam
- Several operating agreements that govern the operation of Lake Powell and Lake Mead expire at the end of 2026



Hydrologic Conditions





Hydrologic Conditions

Long-term average when the Interim Guidelines were developed in 2007

14.9_{maf}

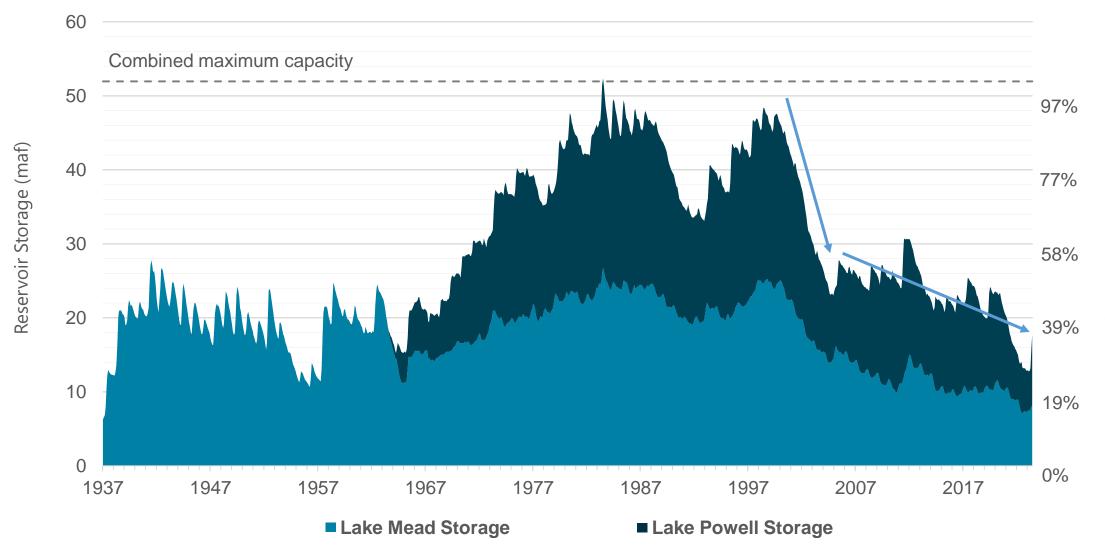
12.5 maf

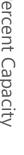
Recent approximate

20-year average – more indicative of future conditions



System Response

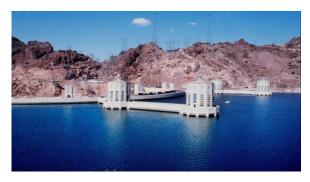






System Response

Current combined storage of **Lakes Powell and Mead** 36% Capacity

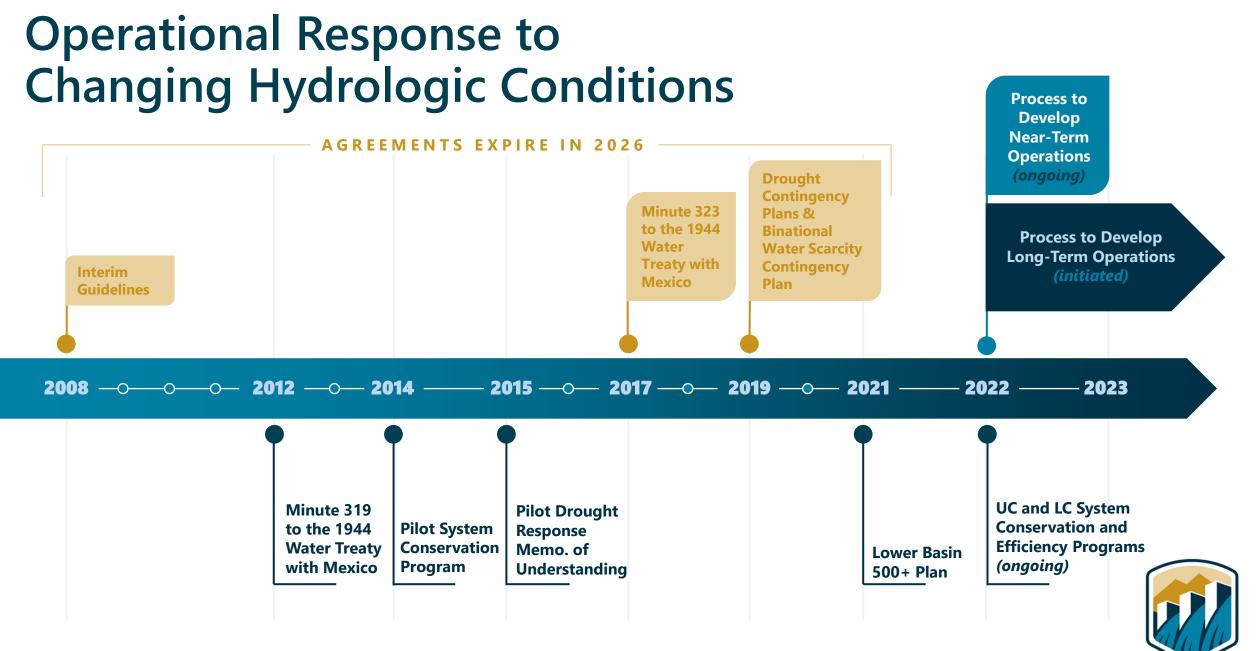


Photos: Lake Mead nears full capacity in June 1983 - Las Vegas Review-Journal



Photos: Water Levels in Lake Mead Reach Record Lows in April 2022 - The Atlantic





Long-term vs. Near-term Planning Processes

| PLANNING EFFORT | NEAR-TERM COLORADO RIVER OPERATIONS (SEIS) | LONG-TERM COLORADO RIVER OPERATIONS (POST-2026) |
|---------------------|---|---|
| RANGE OF OPERATIONS | Limited sections of the 2007 Interim Guidelines; | Revisit all sections of the 2007 Interim Guidelines and other operating agreements that expire in 2026. |
| | Develop the operational tools needed to address extreme drought and low water levels. | Public Scoping Process will help determine scope of post-2026 long-term planning process. |
| DURATION | 2024 – 2026 (3 YEARS) | 2026 AND BEYOND |

2007 Interim Guidelines

Purpose

- Improve management of the Colorado River by considering trade-offs between the frequency and magnitude of reductions of water deliveries
- Provide a greater degree of predictability with respect to the amount of annual water deliveries in future years
- Provide additional mechanisms for the storage and delivery of water supplies in Lake Mead to increase the flexibility of meeting water use needs from Lake Mead

Operational Elements

- Shortage Guidelines Prescribed volumes of Lower Basin Shortages at specific Lake Mead elevations
- Coordinated Reservoir Operations Guidelines for coordinated operations between Lake Powell and Lake Mead
- Storage and Delivery of Conserved
 Water Mechanism for storage and delivery of conserved water in Lake Mead
- **Surplus Guidelines** Guidelines to identify Surplus Conditions

Summarized from the 2007 Interim Guidelines Record of Decision

2007 Interim Guidelines - Operational Diagram

| Lake Powell | | | |
|--------------------------------|---|------------------------------------|--|
| 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 | |
| 3,636-3,666 (2008-2026) | | 15.5-19.3 (2008-2026) | |
| 3,575 | Upper Elevation Balancing Tier ³ Release 8.23 maf; if Lake Mead < 1,075 feet, balance contents with a min/max release of 7.0 and 9.0 maf Mid-Elevation Release Tier Release 7.48 maf; if Lake Mead < 1,025 feet, release 8.23 maf | 9.5 | |
| 3,525 | | 5.9 | |
| 3,490 | Lower Elevation Balancing Tier Balance contents with a min/max release of 7.0 and 9.5 maf | 4.0 | |
| 3,370 | | 0 | |

| Lake Mead | | | |
|-------------------------------------|---|------------------------------------|--|
| Elevation (feet) | Operation According to the Interim Guidelines | Live Storage (maf) ¹ | |
| 1,220 | Flood Control Surplus or Quantified Surplus Condition Deliver > 7.5 maf | 25.9 | |
| 1,200 (approx.) ² | Domestic Surplus or ICS Surplus Condition Deliver > 7.5 maf | 22.9 (approx.) ² | |
| 1,145 | | 15.9 | |
| | Normal or ICS Surplus Condition Deliver ≥ 7.5 maf | | |
| 1,075 | Shortage Condition Deliver 7.167 ⁴ maf | 9.4 | |
| 1,050 | | 7.5 | |
| | Shortage Condition Deliver 7.083 ⁵ maf | | |
| 1,025 | | 5.8 | |
| 1,000 | Shortage Condition Deliver 7.0 ⁶ 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 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 0.280 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 Divison States and Mexico are 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.



2019 Drought Contingency Plans

 Adopted in response to changing hydrologic conditions and increased risk of reaching critically low elevations at Lake Powell and Lake Mead

Key Elements:

- Requires additional water savings contributions by Lower Basin States
- Allows for additional flexibility for water storage and recovery to incentivize conservation
- Provides for Drought Response Operations and Demand Management in the Upper Basin
- Triggers Mexico's Binational Water Scarcity Contingency Plan





2020 Review of the 2007 Interim Guidelines

• Evaluated the effectiveness of the Guidelines and documented operational experience

Conclusions:

- Increasing severity of the drought necessitates additional action to reduce the risk of reaching critically low elevations in Lakes Powell and Mead
- Considerations for enhancing future effectiveness:
 - o Enhanced flexibilities and transparency for water users
 - Expanded participation in conservation and Basinwide programs
 - o Increased consideration of the linkage that occurs through coordinated reservoir operations
 - o More robust measures to protect reservoir levels



Review of the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead

Upper and Lower Colorado Basin Regions





U.S. Department of the Interior

December 2020

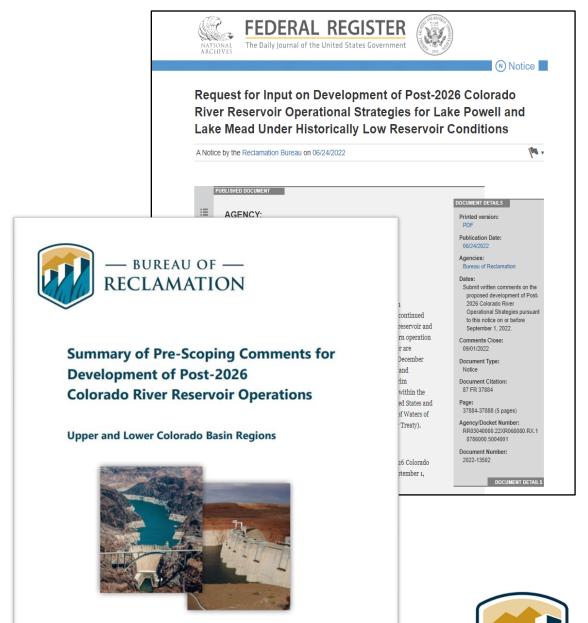


Post-2026 Colorado River Operations

- The "Post-2026 Process" is intended to develop successor domestic agreements for the long-term operations and management of the Colorado River system in 2027 and beyond
- Multi-year NEPA process to be concluded before the development of the 2027 Annual Operating Plan for Colorado River Reservoirs (anticipated to begin in mid-2026)
- Focused on domestic (U.S.) actions. Parallel process through the International Boundary and Water Commission anticipated to develop successor agreements to Minute 323 with Mexico

Post-2026 "Pre-Scoping"

- June 2022 Federal Register Notice (87 FR 37884) published to request input on the process and substantive elements for post-2026 operations
- Highlighted 3 changed circumstances in the Basin since 2007:
 - 1) Changed/changing hydrologic conditions
 - 2) Tribal engagement
 - 3) Cooperative process with Mexico
- Substantial input received from Tribes, States, water districts, NGOs, and the public
- Input summarized in Pre-Scoping Summary Report published in January 2023





Key Themes in "Pre-Scoping" Comments



Robust and Adaptive

Future operational guidelines
must support proactive
management to improve system
stability. They must be capable of
both withstanding a broad range
of future hydrologic and
operating conditions and
minimizing system vulnerability.



Holistic Approach

Future operational guidelines should focus on the long-term sustainability of both the Basin's population and natural environment, minimize system vulnerability, and increase system resiliency.



Alternative Paradigms

The current tier-based approach to coordinated operation of Lake Powell and Lake Mead is one of multiple ways that the system can be managed. Alternative paradigms should be explored.

Partner, Stakeholder, and Public Engagement

- Reclamation is working to design and implement a stakeholder engagement process that is inclusive and transparent; that encourages meaningful input from Tribes, States, partners, stakeholders, and the public.
- Working to implement this commitment through:
 - Prioritizing stakeholder technical education and technical outreach
 - Creating a common technical understanding and developing new tools for engagement
 - Prioritizing outreach, leveraging existing groups, and creating new groups with the goal of enhanced tribal engagement across the Basin

Post-2026: Proposed Schedule

Public Scoping Period – Development of EIS Operational opportunity for public to provide **Alternatives by Reclamation, Publication of Draft EIS with** input on scope of EIS and Purpose partners, and stakeholders public comment period to follow and Need for Proposed Action **DECEMBER 2024 JUNE - AUGUST 2023 FALL 2023 - SPRING 2024** 2025 - 2026 **AUGUST - SEPTEMBER 2023 SPRING - FALL 2024 JUNE 2023 Reclamation prepares Publication of Final EIS and Reclamation publishes Reclamation develops Scoping Draft EIS Record of Decision issued NOI to Prepare EIS -Summary Report with** initiates NEPA Process anticipated Purpose & Need **Begins public Scoping Period**



Key NEPA Process milestones – Opportunities for Tribal, State, Partner, Stakeholder, and Public engagement





Scoping Process

- Notice of Intent published on June 16, 2023 initiated the NEPA Scoping Process
- 60-day public scoping comment period ending August 15, 2023
- Invite all Basin partners, stakeholders, and interested members of the public to provide oral and written comments
- Scoping Report will be published after the comment period

Scoping Comments

Considerations:

- Past 15 years of operating experience
- Findings from 2020
 Review of 2007
 Interim Guidelines
- Themes in the Pre-Scoping Report
- Need for robust and adaptive operations

Seeking Feedback On:

- Operational guidelines and strategies
- Potential modifications to the purpose and elements of the 2007 Interim Guidelines
- Any other related issues that should be considered in the EIS



Informs:

- Proposed federal action
- Purpose and Need
- Scope of the analysis (e.g., affected area, geographic scope, time horizon/term)

Ways to Comment

60-day comment period closes August 15, 2023

- During public scoping meetings
- Webform via the project website: www.usbr.gov/ColoradoRiverBasin/Post2026
- Send an email: <u>crbpost2026@usbr.gov</u>
- Telephone hotline: (602) 789-3889
- By mail to:

Bureau of Reclamation Attn: Post-2026 (Mail Stop 84-55000) P.O. Box 25007 Denver, CO 80225



Need Information?

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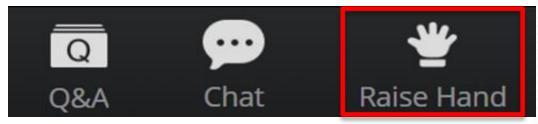
Comment Guidelines

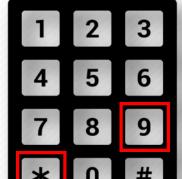
- Comments should be directed to the Bureau of Reclamation, not to other commenters.
- Comments will be limited to 3 minutes so we have time to hear from as many commenters as possible. Comments longer than 3 minutes can be submitted in writing.
- This virtual event is designed to be viewed in homes across the country in real time. Profanity is not acceptable.



To Comment

- Click the raise hand button
- Facilitator will call your name
- Click unmute to speak
- Please state and spell your name when you begin
- Please limit comments to 3 minutes. Please submit comments longer than 3 minutes in writing





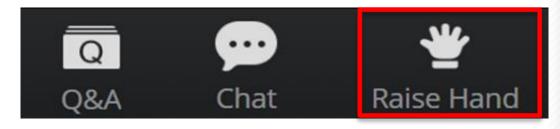
Telephone

Comment Timer



To Comment

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Telephone

Comment Timer for Comments with Interpretation





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Thank you for your participation!

We are standing by to answer any questions until the meeting ends at 2:00 p.m. MDT

Please click the Q&A button in Zoom to submit a question