



Metropolitan Water District of Southern California
Board of Directors

Colorado River Workshop

Items 5 A - C
January 17, 2023

The Colorado River Basin



Metropolitan is the Junior Priority User in California

California Priority System (1931)

1. Palo Verde Irrigation District
 2. Yuma Project
 3. (a) Imperial Irrigation District
Coachella Valley Water District
(b) Palo Verde Irrigation District
 4. Metropolitan Water District
- 3.85 MAF
- 0.55 MAF

Total CA Basic Apportionment 4.4 MAF





Overview of Metropolitan's Colorado River Supply Programs and Select Agreements

1988 IID- MWD Conservation Program

- Duration: 2047, extension to 2077



105,000 AF/year
made available to Metropolitan

~\$120/AF
Marginal Cost to Metropolitan

● Program

- IID implements system conservation activities.
 - Reservoirs
 - Canal lining and lateral interceptors
 - Irrigation management and 12-Hour Deliveries
 - System Automation
- Conserved water made available to Metropolitan.
- Metropolitan pays for actual construction, operations, maintenance, repair, and rehabilitation costs

2003 SDCWA Exchange

Duration:

- Exchange of IID water – 2047
- Exchange of canal lining water (approx. 77,000 AF) – 2112

277,700 AF/year
made available to Metropolitan

N/A
Cost to Metropolitan

● Agreement

- SDCWA pays IID farmers to conserve water
- Metropolitan assigned to SDCWA conserved water from lining the All-American Canal and the Coachella Canal
- SDCWA makes IID and canal lining water available to Metropolitan at Lake Havasu, and in exchange Metropolitan delivers water from any source(s) to SDCWA at its service area connections
- After significant ramp up period, volume is fixed
- SDCWA pays Metropolitan a per-acre-foot price for delivered exchange water

2005 PVID Fallowing

- 35-year Program
- (2005-2040)



25,000 - 125,000 AF/year
made available to Metropolitan

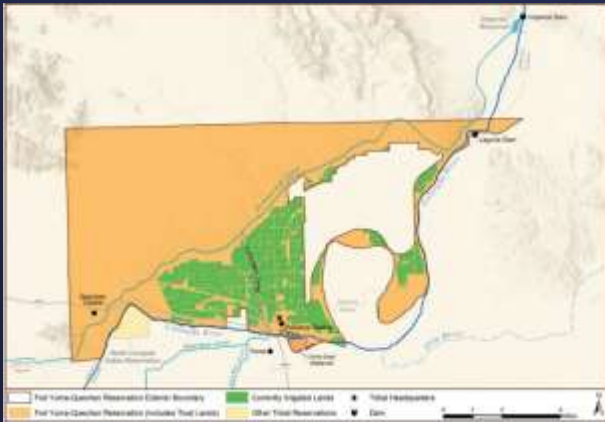
~\$215/AF
Marginal Cost to
Metropolitan

● Program

- Metropolitan pays PVID farmers to fallow land
- Variable Fallowing Call
 - Between 25% and 90% of program lands
 - Two-year call with one year advance notice
 - Program year is August 1 – July 31
- Two Cost components
 - Up-Front payment tied to maximum acres enrolled (\$74M)
 - Annual payments tied to acres fallowed
- Additional \$6M to a Community Improvement Fund

Quechan Forbearance Agreement

- Duration: Renew or opt-out in 2035



~6,500 AF/year
made available to Metropolitan

\$181/AF Diversion
Cost to Metropolitan

• Program

- Based on 2005 Settlement Agreement related to Arizona v. California
- Quechan Tribe Forbears diversion of up to 13,000 AF/year
 - This is what Metropolitan makes payments on
- The portion of water the Tribe would have used on a consumptive use basis is ~50% of diversions.
 - This water comes to Metropolitan.

2007 Lower Colorado Water Supply Project

- Duration: 50 years + 50-year option

~9,000 AF/year
made available to Metropolitan

\$258/AF
Cost to Metropolitan

• Program

- Groundwater pumped into the AAC and IID Forbears an equivalent amount on the Colorado River
- Water made available to persons or non-Federal governmental agencies whose lands are adjacent to the CR but do not hold rights to Colorado River Water
 - e.g. City of Needles, individual families
- Metropolitan pays for unused capacity in the Lower Colorado Water Supply Project

San Luis Rey Exchange

- Agreement executed in 2003
- Delivery of exchange water began in 2017
- Duration: Lifespan of the All-American Canal and Coachella Canal

16,000 AF/year
made available to Metropolitan

N/A
Cost to Metropolitan

● Agreement

- All American Canal and Coachella Canal Lining Project water made available to the San Luis Rey Settlement Parties.
- The water is exchanged with US and then provided to SDCWA for deliver to the Settlement Parties.
- USBR pays Metropolitan a per-acre-foot price for delivered exchange water

2020 Bard Seasonal Fallowing Program

- Duration: 2020-2026



Up to 6,000 AF/year
made available to Metropolitan

\$240/AF
Cost to Metropolitan

- **Program**

- Seasonal Fallowing from April 1st – July 31st
- Maximum enrollment is 3,000 acres
- Fallowing call made by Oct 1 the previous year
- Voluntary enrollment leads to variable volume
- Requirements
 - At least 10 contiguous irrigable acres
 - Have been farmed for at least three of the last five years / previously fallowed

2022 Quechan Seasonal Fallowing Program Pilot Program

- Duration: 2022 - 2023



Up to 3,500 AF/year
made available to Metropolitan

\$240/AF
Cost to Metropolitan

• Program

- Seasonal Fallowing from April 1st – July 31st
- Maximum enrollment is 1,600 acres
- Fallowing call made by Oct 1 the previous year
- Voluntary enrollment leads to variable volume
- Requirements
 - Have been farmed for at least three of the last five years / previously fallowed
 - Must be Quechan tribal land



Managing Colorado River Supplies

Intentionally Created Surplus (ICS)

Storage Program
Duration: 2006 - 2026



Up to 400,000 AF

Annual Put Capacity*

Annual Take Capacity**

*less creation by IID which is capped at 25,000 AF

**less take by IID which is capped at 50,000 AF

~1,084,000 AF

Stored Volume

Estimated end of 2022 Balance

- Ability to store water in Lake Mead. ICS may be created using a variety of approved measures within the four established ICS categories:
 - 1) Extraordinary Conservation ICS,
 - 2) Tributary Conservation ICS,
 - 3) System Efficiency ICS,
 - 4) Imported ICS
- Benefits:
 - DCP contributions in lieu of reduced deliveries
 - Augmenting CRA supplies
- Limitations on delivery start at elevation 1,045'

Partnerships with States and Mexico

- Investments to create additional ICS
- Partnering agencies include SNWA, CAWCD, and Mexico

Brock Reservoir

100,000 AF ICS for
Metropolitan

Yuma Desalter

24,397 AF ICS for
Metropolitan

122,000 AF Currently Available
(subset of total ICS)

Minute 319

23,750 AF ICS for
Metropolitan

Minute 323

9,092 AF ICS for
Metropolitan to date
(27,275 AF over the
Minute)

Storing Water for IID

Up to 25,000 AF
Made available to MWD in 2022

N/A
Cost to Metropolitan

- Metropolitan provides for storing excess conservation for IID
 - California ICS Agreement
 - Amendment #1 to the California ICS Agreement
 - 2021 Settlement Agreement
- Current return amount: ~276,000 AF.

Managing Colorado River Supplies Through Reclamation



Prior
Year

July 1:
Submit ICS Plan
of Creation

Sep 15:
Submit Water
Order

By Dec 31:
USBR Approves ICS
Plans and Water Orders
for future year

Current
Year

Anytime:
Submit Revised Water Order to Take Delivery of ICS

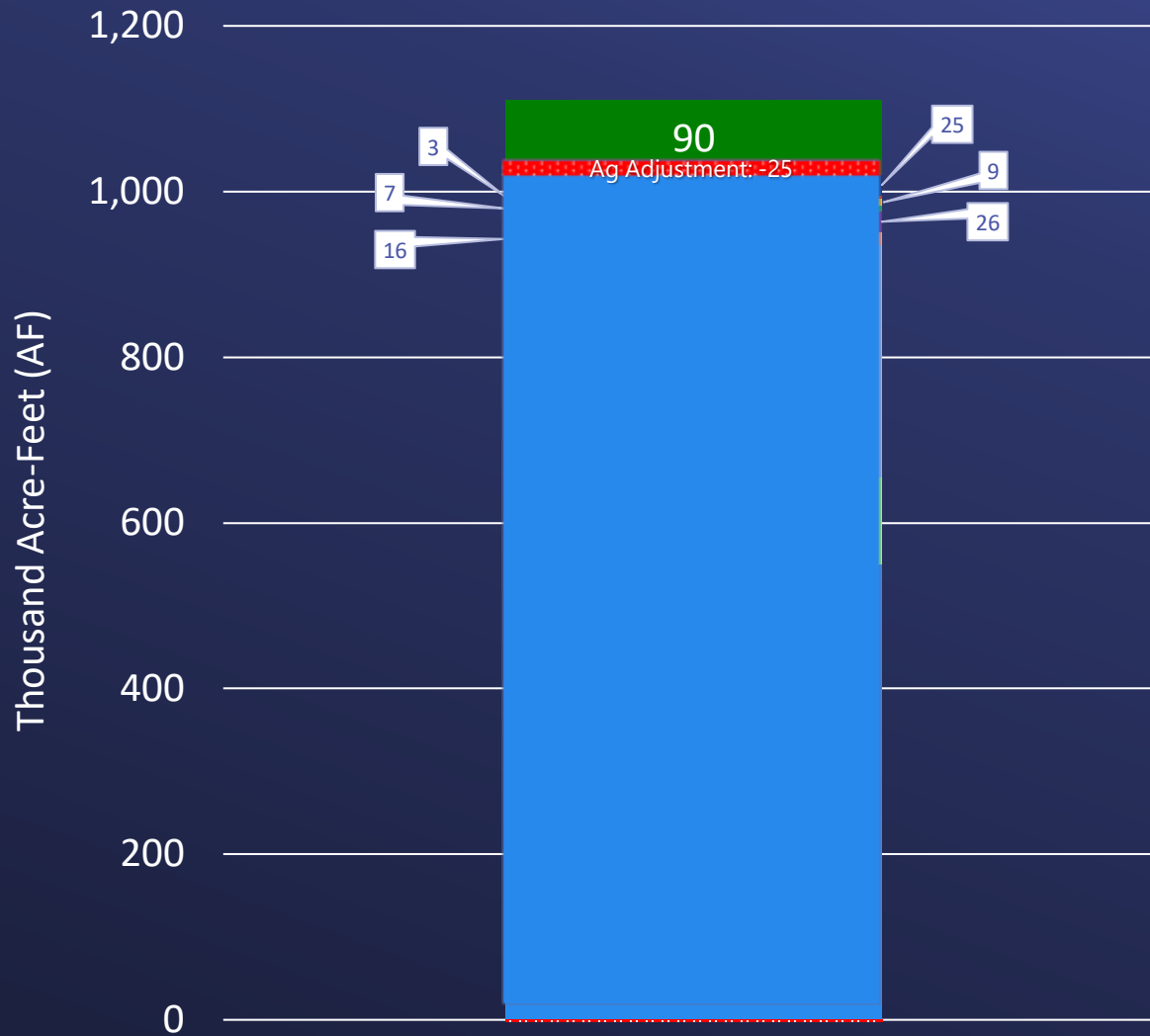
Following
Year

May 15:
Water Accounting
Report

Upon data availability:
ICS Certification Reports

2022 CRA Delivery (Estimated)

Total Deliveries: 1.129 MAF



- Intentionally Created Surplus
- Agricultural Adjustment (est.) (~ -25,000)
- IID ICS Sub-Account
- Quechan Seasonal Fallowing Program (Too Small to see)
- Bard Fallowing Program
- Lower Colorado Water Supply Project
- Quechan Forberance
- PVID Fallowing Program
- Canal Lining to San Luis Rey
- SDCWA Exchange (IID Transfer and Canal Lining)
- IID-MWD Conservation
- Basic Apportionment



Overview of the Supplemental Environmental Impact Statement Process

2007 Interim Guidelines SEIS

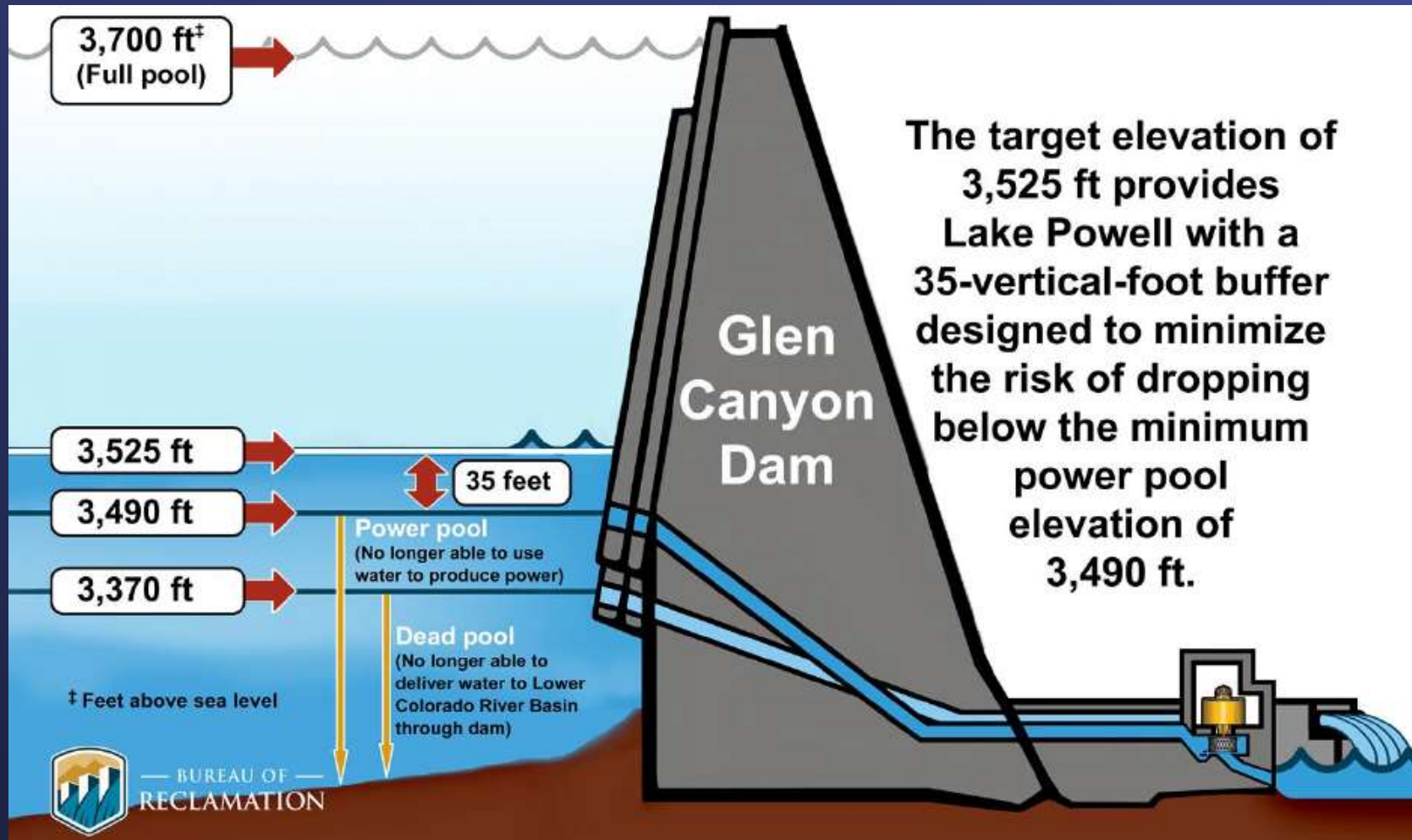
Rules for Operation of Lake Powell & Lake Mead

Under the Boulder Canyon
Project Act, the Secretary of
the Interior is the River
Master in the Lower Basin

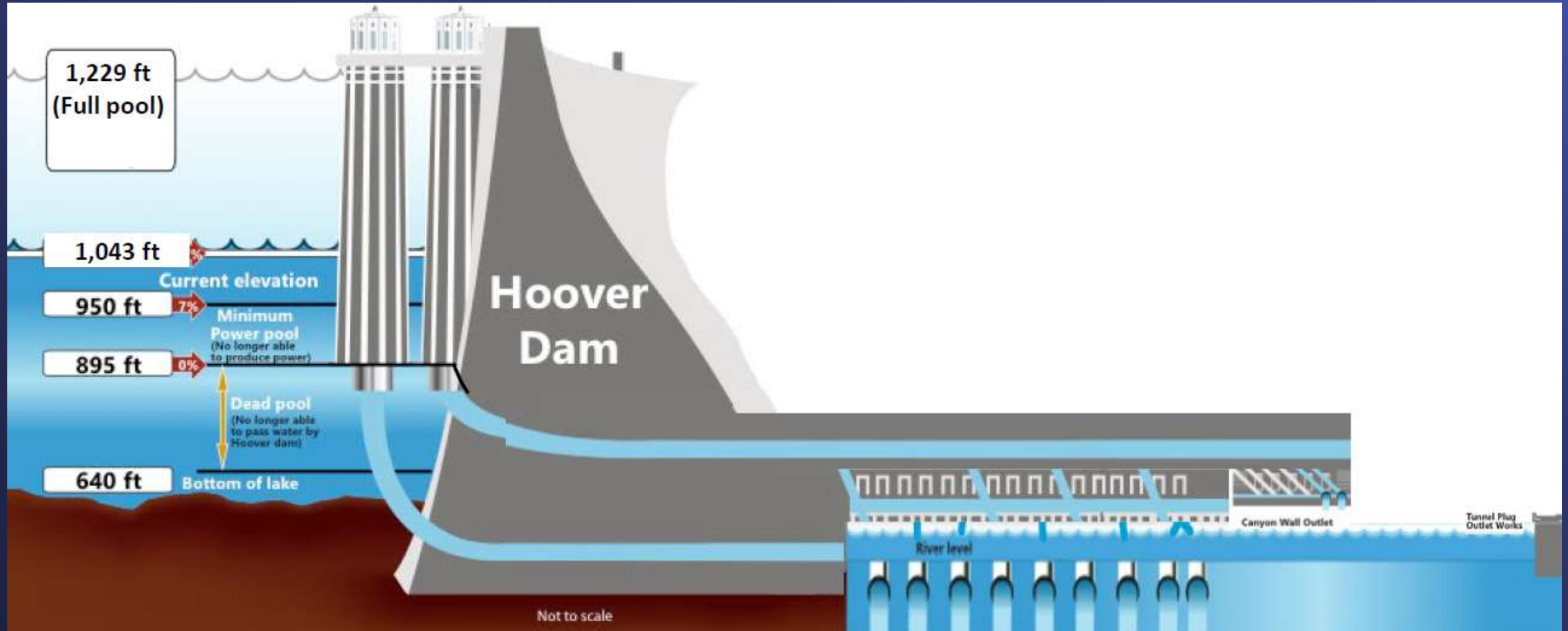
2007 Interim Guidelines

- Defined coordinated operation of Lake Powell and Lake Mead;
- Determined when Shortages would be taken in the Lower Division States (Arizona, California and Nevada);
- Established Intentionally Created Surplus storage in Lake Mead
- Effective 2007-2025

Lake Powell Key Elevations



Lake Mead Key Elevations



2007 Interim Guidelines SEIS

U.S. Bureau of Reclamation Announcement

Notice of Intent to prepare a
Supplemental Environmental
Impact Statement (SEIS)

2007 Interim Guidelines Revisions

Possible changes to operations of Glen Canyon and Hoover Dams in 2023-24 to address impacts of low runoff conditions that pose unacceptable risks to operations of dams.

Revisions may include:

- Reduced annual releases from Glen Canyon Dam;
- Changes to shortages and decrease in quantity of water for Arizona, Nevada and California.

2007 Interim Guidelines SEIS

Anticipated Alternatives

Public comments on scoping
were due December 20, 2022

Three Primary Alternatives

- **Framework Agreement** – consensus-based actions that build on States, Tribes and NGO's commitments in 2019 Drought Contingency Plan
- **Reservoir Operations** – Reclamation alternative to mitigate risks to Colorado River System reservoirs if consensus alternative isn't reached or is insufficient
- **No Action Alternative**

2007 Interim Guidelines SEIS

Metropolitan's Scoping Comments

Metropolitan submitted a scoping comment letter and joined a 3-agency letter with the Southern Nevada Water Authority and Central Arizona Project

Strategic Priorities for SEIS Process

- Protect stored Intentionally Created Surplus
- Provide for public health, safety and welfare (HHS) storage and deliveries
- Reduce water deliveries to protect infrastructure
- Modifications to operations of Lake Powell and improvements to Glen Canyon Dam

Colorado River Unmet Human Health & Safety Needs

HH&S Need for 12.3 Million Population	760,000 acre-feet	Assuming 55 gallons per person per day (gpcd)
+ Estimated Critical Needs CII Use	234,000 acre-feet	
- Estimated Local Supply Meeting HHS Need ^{1, 2, 3}	813,000 – 825,000 acre-feet	Range of low to high local supply production
<hr/>		
Total <u>Unmet</u> HH&S Need⁴ (including estimated critical needs CII use)	169,000 – 181,000 acre-feet	

¹. In this calculation, each agency's local supply was capped at their agency level HHS need because excess local supply from one agency cannot be used to meet unmet HHS demands of another agency

². Does not include SWP supplies that could be available for blending

³. Includes the SDCWA exchange supply

⁴. Does not include using SWP water to meet CR unmet HH&S need



Status of Current Discussions

Colorado River

Basin State Principals

Each of the seven signatory
state's Governors appoints a
representative pursuant to
Art. V Colorado River
Compact

Governor's Representatives

- Arizona Tom Buschatzke
- Nevada John Entsminger
- California JB Hamby
- Wyoming Brandon Gebhart
- Colorado Rebecca Mitchell
- New Mexico Estevan Lopez
- Utah Gene Shawcroft

Colorado River Board of California



Mission

To represent California in discussions among the federal government, Colorado River Basin States, Mexico, Tribes, and other in development, implementation, and management of programs to protect California's use of, and rights to, Colorado River water and hydropower resources.

Board Members

- Coachella Valley Water District
- Imperial Irrigation District
- Los Angeles Department of Water and Power
- The Metropolitan Water District of Southern California
- Palo Verde Irrigation District
- San Diego County Water Authority
- DWR & DFW representatives
- Two At-Large public members

2007 Interim Guidelines SEIS

Consensus Framework Agreement Alternative Development

Work on a Consensus
Framework Agreement
Alternative will continue
through January

Example of Options Being Evaluated

Southern Nevada Water Authority (SNWA) alternative:

- Protect stored ICS
- Provide for storage and delivery of HHS water
- Assess system and evaporative losses
- Increase Shortage volumes
- Trigger DCP Contributions at higher lake elevations
- Reduce Lake Powell releases at most elevations

Next Steps

SEIS and Post-2026 Operations

The SEIS and development of the next set of operational guidelines are separate processes

● SEIS

- January: Develop SEIS alternatives
- Spring: Draft SEIS for public comment
- Summer:
 - Final SEIS and Record of Decision (ROD)
 - Board authorizations
- CY 2024: Implement new ROD, as needed

● Post-2026 Operations

- September 2022: Pre-scoping comments
- Early 2023: Notice of Intent to prepare environmental impact statement

2022 Inflation Reduction Act

\$4 Billion for Drought Relief in the West

- Majority for the Colorado River Basin
- First round of proposals were due December 20th, 2022
- MWD submitted two joint proposals
 - PVID
 - Bard
- USBR is currently evaluating the 32 proposals that were received.
 - Volumes unknown

Upcoming Board Information /Action



Jan - Mar

- Update on Colorado River Activities
- Amend PVID Agreement to include additional fallowing funded by Reclamation

Apr - Jun

- Update on Colorado River Activities
- Provide Committee updates on the SEIS Alternatives and impacts to MWD

Jul - Sep

- Update on Colorado River Activities
- Authorize Implementing Agreements for Reclamation SEIS Record of Decision

Oct - Nov

- Update on Colorado River Activities
- TBD; by late this year Basin could be cooperating or in litigation



Board Discussion

