

## Report

Office of the General Manager

## Colorado River Management Report

## **Summary**

This report provides a summary of activities related to management of Metropolitan's Colorado River resources for the month of January 2023.

### **Purpose**

Informational

#### **Attachments**

Attachment 1: Six State Supplemental Environmental Impact Statement Alternative Letter

Attachment 2: Colorado River Board Supplemental Environmental Impact Statement Alternative Letter

## **Detailed Report**

## 2007 Interim Guidelines Supplemental Environmental Impact Statement Update

The U.S. Bureau of Reclamation (Reclamation) published a notice of intent (NOI) to prepare a supplemental environmental impact statement (SEIS) for the 2007 Interim Guidelines for Lower Basin Shortages and Coordinated Operations of Lake Powell and Lake Mead. Part of Reclamation's SEIS process includes an evaluation of alternatives.

Over the past (**Attachment 2**) six weeks, Metropolitan, along with other Section 5 Contractors in California, and the other six Colorado River Basin States (Basin States) representatives have worked diligently to develop a Framework Agreement Alternative that would be a consensus-based set of actions that builds on the existing framework for Colorado River Operations, including commitments included in the 2019 Drought Contingency Plan. Unfortunately, the Basin States came to an impasse and six of the Basin States submitted an alternative that did not include California's set of modeling assumptions to be evaluated as a potential consensus-based set of actions consistent with the purpose and need set forth in the NOI (**Attachment 1**).

The Colorado River Board of California submitted an alternative that includes proposed actions for Reclamation to model and evaluate in the Draft SEIS, which will be issued pursuant to the National Environmental Policy Act of 1969 (NEPA) before identifying a preferred alternative (**Attachment 2**). The NOI anticipates a draft SEIS will be available for public review in Spring 2023 and the final SEIS is anticipated to be available with a Record of Decision in late Summer 2023.

#### Post-2026 Colorado River Reservoir Operations Pre-Scoping Comment Summary Report Webinar

In June 2022, Reclamation published a Federal Register Notice (87 FR 37884) (FRN) requesting input on the process and substantive elements for post-2026 operations. While not an official NEPA phase or term, "Pre-Scoping" is the term used to describe this invitation for public input prior to the initiation of the formal NEPA process. The comment period for the FRN extended for 70 days through September 1, 2022, during which Reclamation received: 56 in-depth stakeholder letters signed by 82 unique stakeholders; 141 unique comment letters from concerned citizens; and more than 1,975 submittals of the BlueRibbon Coalition "Fill Lake Powell – the Path to 3588 ft" form letters.

Date of Report: 2/14/2023

## Board Report (Colorado River Management Report)

More information about the Pre-scoping Summary Report can be found at <a href="https://www.usbr.gov/ColoradoRiverBasin/documents/Post-2026\_Pre-Scoping%20Comment%20Summary%20Final.pdf">https://www.usbr.gov/ColoradoRiverBasin/documents/Post-2026\_Pre-Scoping%20Comment%20Summary%20Final.pdf</a>

#### Colorado River Board of California elects new Chairman and Vice-Chair for Four Year Terms

On January 11, 2023, the Colorado River Board of California Board of Directors unanimously elected JB Hamby, Vice President and Division 2 Director of Imperial Irrigation District, as Chair of the Board. At the same board meeting the board members elected Jim Madaffer, of San Diego County Water Authority Board of Directors to serve as Vice-Chair. Both terms expire in 2027. Peter Nelson, of Coachella Valley Water District Board of Directors and David Pettijohn, Director of Water Resources at Los Angeles Department of Water and Power, completed their 4-year terms as past Chair and Vice-Chair of the board.

Date of Report: 2/14/2023 2

# Colorado River Basin State Representatives of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming

January 31, 2023

The Honorable Tanya Trujillo
Assistant Secretary, Water & Science
U. S. Department of the Interior
Washington, DC 20240

The Honorable Camille Calimlim Touton

Commissioner

Bureau of Reclamation Washington, DC 20240

Re: Notice of Intent to Prepare a Supplemental Environmental Impact Statement

Dear Assistant Secretary Trujillo and Commissioner Touton:

Consistent with the Department of the Interior (Interior), Bureau of Reclamation's (Reclamation) November 17, 2022, Notice of Intent To Prepare a Supplemental Environmental Impact Statement for December 2007 Record of Decision Entitled Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations For Lake Powell and Lake Mead (Notice), 87 FR 69043 (November 17, 2022), the undersigned Governors' Representatives submit this set of modeling assumptions for an alternative to be evaluated as a potential consensus-based set of actions consistent with the purpose and need set forth in the Notice (Consensus-Based Modeling Alternative or CBMA).

We ask that Reclamation model and evaluate CBMA impacts in the Draft Supplemental Environmental Impact Statement (SEIS) to be issued pursuant to the National Environmental Policy Act of 1969 (NEPA) before identifying a preferred alternative. The CBMA will promote NEPA's goal of fostering more informed decision-making. Therefore, we request that Reclamation advance the CBMA for further evaluation in the NEPA process for comparative purposes. We recognize that impediments may ultimately preclude the CBMA from being incorporated into a consensus-based set of actions to guide the operation of Glen Canyon and Hoover Dams.

Negotiations to implement actions contemplated by this CBMA, both by and between the undersigned and by and between other necessary parties, have not yet been completed, and in many cases have not yet begun. Accordingly, the States and water users expressly reserve their rights under applicable law, including, but not limited to, the Law of the River as broadly defined, and this submittal is not intended to be and shall not be construed in any way as a waiver of any such rights.

#### **EXECUTIVE SUMMARY**

The Notice anticipates that alternatives would make specific modifications to Lake Powell and Lake Mead operations governed by the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead ('07 Guidelines) to prevent Lake Powell and Lake Mead from falling to critically low elevations impacting water delivery or power production from either reservoir in 2023 and 2024. In particular, Reclamation anticipates that alternatives will propose revisions to reduce annual Lake Powell release volumes governed by Sections 6.C. (Mid-Elevation Release Tier) and

6.D. (Lower Elevation Balancing Tier) of the '07 Guidelines to protect Glen Canyon Dam to ensure the deliverability of water downstream and power production. The Notice further anticipates that alternatives would provide for increased Lower Division State (Arizona, California, and Nevada) delivery reductions when Lake Mead is below elevation 1050 ('07 Guidelines Section 2.D.1.b.) or 1025 ('07 Guidelines Section 2.D.1.c.).<sup>1</sup>

As more fully set forth below, the CBMA includes the elements anticipated by Reclamation's Notice. In addition to revising the specific '07 Guidelines provisions referenced in the Notice, the CBMA assesses 1.543 million acre-feet (maf) per year of reductions among all Lower Basin Contractors when Lake Mead is below elevation 1145 for the protection of critical infrastructure (Infrastructure Protection Volumes, hereinafter referred to as IPV). The undersigned believe implementation of the CBMA would protect Glen Canyon Dam infrastructure, water deliveries, and power production, and adequately mitigate the risk that either Lake Powell or Lake Mead reaches dead pool.

#### LAKE POWELL OPERATIONS

Reduced releases at Glen Canyon Dam would be accomplished by modeling operations under Sections 6.C. and 6.D. of the '07 Guidelines as follows:

- 1. Raise the lower elevation of the Mid-Elevation Release Tier (MERT) from elevation 3525 to elevation 3550 and fix the annual release volume in the MERT at 7.48 maf.
- 2. Raise the upper elevation of the Lower Elevation Balancing Tier (LEBT) from elevation 3525 to elevation 3550 and fix the annual release at 7.0 maf without balancing releases.
- 3. Reduce releases as necessary to protect elevation 3500.

#### **LAKE MEAD OPERATIONS**

Reduced deliveries from Lake Powell must be coupled with reduced deliveries from Lake Mead or Lake Mead's existing storage will be quickly depleted. The CBMA incorporates the following modeling adjustments to the '07 Guidelines and to elevation-dependent Drought Contingency Plan (DCP) contributions required under the Lower Basin Drought Contingency Plan Agreement Dated May 20, 2019, and the incorporated LBOps, to reduce Lake Mead outflows:

- 1. When Lake Mead is below 1145, Infrastructure Protection Volumes (IPV) consisting of evaporation and system losses in the amount of 1.543 maf are apportioned among all Contractors (as such term is defined in Section XI.F.9. of the '07 Guidelines) in accordance with the methodology outlined in Attachment 1, hereto.
- 2. Section 2.D.1.a. no changes.
- 3. Section 2.D.1.b. no longer applicable (see 4. below).

<sup>&</sup>lt;sup>1</sup>References to reservoir elevations throughout this correspondence are to January 1 most probable elevations as predicted by the preceding August 24-month study.

- 4. Section 2.D.1.c. This provision, involving "Tier 3" shortages below elevation 1025, is moved up to elevation 1050 (i.e., elevation 1025 is replaced with elevation 1050), such that Arizona is apportioned 2.32 maf at elevation 1050 and below, and Nevada is apportioned 280,000 at elevation 1050 and below.
- 5. Arizona, California, Nevada, and Mexico would make DCP contributions in the amounts set forth in Table 1 of the LBOps as if Lake Mead is at or below elevation 1025 when the actual elevation of Lake Mead is at or below 1050. This would require for years when Lake Mead's elevation is below 1050 feet DCP Contributions from Arizona in the amount of 240,000 acrefeet, from California in the amount of 350,000 acre-feet, and from Nevada in the amount of 10,000 acre-feet. To maintain parity and alignment of operations during those same years, Mexico would contribute 150,000 acre-feet towards Mexican Water Reserve (under the Binational Water Scarcity Plan of Minute 323).
- 6. In addition to the above, reductions at elevation 1030 and below and elevation 1020 and below are also part of this CBMA as follows:
  - a. At elevation 1030, a 250,000 acre-feet apportionment reduction in addition to all reductions at higher elevations that shall be apportioned 93,000 acre-feet to Arizona, 10,000 acre-feet to Nevada, and 147,000 acre-feet to California.
  - b. At elevation 1020, a 200,000 acre-feet apportionment reduction in addition to all reductions at higher elevations that shall be apportioned 75,000 acre-feet to Arizona, 8,000 acre-feet to Nevada, and 117,000 to California.
  - c. Additional reductions as necessary to protect elevation 1000.

Lake Powell and Lake Mead cannot be further diminished without unacceptable risk to the Colorado River System. Accordingly, to satisfy the Notice's purpose and need, any preferred alternative must be sufficiently certain that system storage is maintained without reliance upon remote or speculative actions by third parties.

#### **PARALLEL ACTIVITIES**

The undersigned recognize that modifying the '07 Guidelines is an important piece of the puzzle that might be formulated to protect and maintain the Colorado River's ability to support 40,000,000 people in the Basin. However, other methods that help secure the water supply of the Basin have been proposed by Reclamation and others. These additional actions should be pursued with alacrity and in parallel with the operational changes contemplated by the SEIS.

One such action is beneficial use definitions and determinations under 43 C.F.R. Part 417 (Procedural Methods for Implementing Colorado River Water Conservation Measures with Lower Basin Contractors and Others). Each industrial, municipal, and agricultural user should be held to the highest industry standards in handling, using, and disposing of water; there is precious little water left to waste.

The Lower Colorado River Multi-Species Conservation Program provides Endangered Species Act compliance for operations of the Lower Colorado River, including water deliveries and hydropower. The actions contemplated in the preferred alternative will likely necessitate expanded compliance for lower Lake Mead elevations and reduced deliveries to all water users, including reductions to only those delivery volumes necessary to protect elevation 1,000 in Lake Mead. It is imperative this compliance moves swiftly and in parallel with this SEIS.

In addition to limiting releases from Glen Canyon Dam when Lake Powell drops below elevation 3550, measures to increase flows into Lake Powell may be needed to help protect water delivery infrastructure and hydropower operations. Accordingly, at appropriate elevations in the modified LEBT, there are parallel complementary actions that are not within the scope of this federal action. However, a reasonable range of their impacts, as further described below, should inform the modeling effort. Those actions include operations pursuant to the Drought Response Operations Agreement (DROA) and additional Upper Division State (UDS) considerations.

DROA planning and operations, including recovery, are conducted consistently with the DROA and existing authorities.  $^2$  The CBMA includes assumptions regarding DROA releases from zero to 500,000 acrefeet per DROA Year (May 1 – April 30), which will conform to the DROA and its implementing documents and will be made only to help protect Lake Powell elevation 3500 feet.

#### Additional UDS considerations:

- Hydrologic shortages are involuntary reductions in consumptive water use due to the lack of
  physical and legal availability of water. Hydrologic shortages occur to varying degrees annually
  and on a regular basis. Though hydrologic shortage quantification is complex and unique to
  each sub-basin each year, it should be estimated to inform this SEIS process using the best
  available science.
- 2. Voluntary contributions are voluntary reductions of consumptive use approved by the UDS to help protect elevations in Lake Powell for the duration of this SEIS. Voluntary contributions are generated from programs that result in reductions in consumptive use, such as the System Conservation Pilot Program, an Upper Basin Demand Management Program (if established), or similar actions. Voluntary contribution volumes will likely vary widely based on hydrologic conditions.

Finally, the SEIS should include modeling for the reconciliation of the 480,000 acre-feet withheld by the Secretary in Lake Powell in 2022, without making a final determination.

#### **INCLUSION OF MEXICO**

Mexico has been a progressive and dependable partner to the United States and Colorado River water users within the United States even as the worsening supply/demand imbalance has depleted storage within the system. In 2017's Minute 323 to the "United States-Mexico Treaty on Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande" signed February 3, 1944 ("1944 Water Treaty") for example, the United States and Mexico agreed on the "importance of aligning operations for

<sup>&</sup>lt;sup>2</sup> 2019 Colorado River Drought Contingency Plan Authorization Act (Pub. L. 116-14).

both countries" and the need for their respective "governments and stakeholders to seek mechanisms to avoid reaching critically low reservoir elevations." Glen Canyon dam's infrastructure is currently threatened by significantly reduced inflows over the past two decades, in turn threatening to make deliveries to users in the Lower Basin difficult or impossible. We recognize that the Record of Decision will not determine actions regarding Mexico, and any participation shall be coordinated through the U.S. Section of the International Boundary and Water Commission. However, it is critical to consider the potential impacts of a range of actions including Mexico's participation.

Accordingly, this CBMA and Attachment 1 hereto contemplate continued alignment of operations for users in both countries. Specifically, for modeling purposes, Mexico is allocated approximately 356,000 acre-feet of IPV reductions when Lake Mead's elevation is below 1145, Mexico's shortage volume and Mexico's Water Reserve savings under Minute 323 is moved to Tier 3 along with the U.S. Contractors any time Lake Mead's elevation is below 1050.

#### **TERM**

The Notice anticipates operational changes in 2024 but indicates that a selected alternative may "inform potential operations in the 2025 and 2026 operating years." To protect the system through the expiration of the '07 Guidelines, the undersigned suggest that any preferred alternative be sufficiently robust, even under very dry hydrology, to maintain Lake Powell at elevation 3500 and Lake Mead at elevation 1000 through at least 2026 or the establishment of new guidelines. The NEPA evaluation should similarly be robust enough to avoid a further supplementation process for years 2025 and 2026.

#### **RESERVATION OF RIGHTS**

By providing this CBMA, we do not waive any rights, including any claims or defenses, we may have or that may accrue under any existing federal or state law or administrative rule, regulation, or guidelines, including without limitation the Colorado River Compact of 1922, the Boulder Canyon Project Act, the Mexican Water Treaty of 1944, the Upper Colorado River Basin Compact of 1948, the Consolidated Decree of the U.S. Supreme Court in *Arizona v. California*, the Colorado River Storage Project Act of 1956, the Colorado River Basin Project Act of 1968, and any other applicable provision of federal law, rule, regulation, or guideline, including the Administrative Procedure Act. Any failure by the undersigned to address specific aspects of the SEIS, shall not be construed as an endorsement or an admission with respect to any factual or legal issue for the purposes of any future legal, administrative, or other proceeding. Moreover, we reserve the right to provide further comments and engage with Reclamation as it proceeds with subsequent phases of the SEIS process.

#### **CONCLUSION**

We appreciate the opportunity to provide this Consensus Based Modeling Alternative for Reclamation's review within its SEIS process. While Reclamation is preparing the draft SEIS, we commit to continue to work with Reclamation on the CBMA and any additional development and refinement.

We recognize that over the past twenty-plus years there is simply far less water flowing into the Colorado River system than the amount that leaves it, and that we have effectively run out of storage to deplete. Accordingly, we will continue to work together and with the federal government, water users,

Basin Tribes, non-governmental organizations, and other Colorado River stakeholders to reach consensus on how best to share the burden of protecting the system from which we all derive so many benefits.

Sincerely,

Thomas Buschatzke Governor's Representative State of Arizona

Governor's Representative
State of Colorado

John J. Entsminger

Governor's Representative

State of Nevada

Estevan Lopez

Governor's Representative State of New Mexico

cea mitchel

Gene Shawcroft

Governor's Representative

State of Utah

Brandon Gebhart

Governor's Representative

State of Wyoming

cc: David M. Palumbo, Deputy Commissioner – Operations, Bureau of Reclamation
Reclamation 2007 Interim Guidelines SEIS Project Manager, Upper Colorado River Basin Region
Via email: CRinterimops@usbr.gov

**Attachments** 

#### Attachment 1 - Distribution of Infrastructure Protection Volumes

The modelling assumptions for the Consensus Based Modelling Alternative (CBMA) should allocate Infrastructure Protection Volumes (IPV) and additional reductions among Contractors in the Lower Basin and Mexico using the following method. Please consult with Arizona and Nevada's technical representatives for details or questions.

- 1. A Contractor's recent Historical Baseline Consumptive Use (Historical Baseline), representative of non-shortage conditions, will be determined in the following manner:
  - a) Compute baseline consumptive use for each Contractor as its 3-year average consumptive use for the 2019-2021 period.
  - b) Any approved (intrastate forbearance) conservation activities, including ICS creation, and system conservation should be added to consumptive uses for each year.
- 2. Once Lake Mead operating conditions and associated reductions are determined in accordance with the 2007 Interim Guidelines and DCP, Historical Baseline shall be modified to reflect shortage and DCP conditions on the Central Arizona Project, Southern Nevada Water Authority and the Metropolitan Water District of Southern California (CAP/SNWA/MWD) consumptive use. Using the shortage schedules, compute the total shortage assigned to each State as the sum of the 2007 Interim Guidelines and DCP. Compute the adjusted CAP/SNWA/MWD entitlement by subtracting the total state shortage from their respective entitlement. DCP contributions being satisfied with stored ICS shall not be included in this calculation.
- 3. Historical Baseline shall be modified based upon the water available for consumptive use in the upcoming year (Modified Historical Baseline). For example, if Nevada is taking 20,000 acre-feet (af) of shortage reductions and 10,000 af of DCP contributions, the historical baseline shall be adjusted such that Nevada is not being assessed an IPV charge for more water than is available to Nevada in the coming year (270,000 af). If the Historical Baseline is less than the Modified Historical Baseline, carry the Historical Baseline forward.
- 4. Below elevation 1145' System losses will be assessed as follows:

Reach 1 Lee's Ferry to Hoover Dam (580,000 af)

Reach 2 Hoover Dam to Davis Dam (193,000 af)

Reach 3 Davis Dam to Parker Dam (329,000 af)

Reach 4 Parker Dam to Imperial Dam (365,000 af), and

Reach 5 Imperial Dam to the NIB (76,000 af)

- 5. For each reach, the Contractors that rely on the reach to store and/or transmit water deliveries would share proportionally in the system loss for the reach based on their fraction of the total water deliveries within the reach as modified for the upcoming year.
- 6. The system loss reduction shall be applied to the anticipated consumptive use for the year in which reductions will be applied. Anticipated consumptive use shall be based on the Modified Historical Baseline.

- 7. Between elevations 1030' and 1020' additional reductions will be assessed pro rata to Contractors' remaining allocations in each State as follows:

  Arizona (93,000 af), Nevada (10,000 af), and California (147,000 af)
- 8. Below elevation 1020' additional reductions will be assessed pro rata to Contractors' remaining allocations in each State as follows:

  Arizona (168,000 af), Nevada (18,000 af), and California (264,000 af)

A table of the anticipated Lower Basin and state level reductions is included below. Because past consumptive use, ICS, shortage, and DCP obligations all impact the IPV, these are estimates that should be updated and refined with the help of Reclamation staff.

Lower Basin Totals (all reductions in 1000 acre-feet)						
Tier	Elevation	IG	DCP	IPV	Add'l Reductions	Total
Tier 0	1090-1075	0	241	1,543	0	1,784
Tier 1	1075-1050	383	230	1,543	0	2,156
Tier 2a	1050-1045	625	750	1,543	0	2,918
Tier 2b	1045-1040	625	750	1,543	0	2,918
Tier 2c	1040-1035	625	750	1,543	0	2,918
Tier 2d	1035-1030	625	750	1,543	0	2,918
Tier 2e	1030-1025	625	750	1,543	250	3,168
Tier 3a	1025-1020	625	750	1,543	250	3,168
Tier 3b	1020-1015	625	750	1,543	450	3,368
Tier 3c	1015-1000	625	750	1,543	450	3,368

Tier					izona				N	evada				Ca	lifornia				IVI	exico	
	Elevation	IG	DCP	IPV	Add'l Reductions	Total	IG	DCP	IPV	Add'l Reductions	Total	IG	DCP	IPV	Add'l Reductions	Total	IG	DCP	IPV	Add'l Reductions	Total
Tier 0 1	1090-1075	0	192	408	0	600	0	8	17	0	25	0	0	766	0	766	0	41	351	0	392
Tier 1 1	1075-1050	320	192	387	0	899	13	8	18	0	39	0	0	782	0	782	50	30	356	0	436
Tier 2a 1	1050-1045	480	240	374	0	1,094	20	10	19	0	49	0	350	816	0	1,166	125	150	335	0	610
Tier 2b 1	1045-1040	480	240	374	0	1,094	20	10	19	0	49	0	350	816	0	1,166	125	150	335	0	610
Tier 2c 1	1040-1035	480	240	374	0	1,094	20	10	19	0	49	0	350	816	0	1,166	125	150	335	0	610
Tier 2d 1	1035-1030	480	240	374	0	1,094	20	10	19	0	49	0	350	816	0	1,166	125	150	335	0	610
Tier 2e 1	1030-1025	480	240	369	93	1,182	20	10	19	10	59	0	350	813	147	1,309	125	150	343	0	618
Tier 3a 1	1025-1020	480	240	369	93	1,182	20	10	19	10	59	0	350	813	147	1,309	125	150	343	0	618
Tier 3b 1	1020-1015	480	240	364	168	1,252	20	10	19	18	67	0	350	810	264	1,424	125	150	350	0	625
Tier 3c 1	1015-1000	480	240	364	168	1,252	20	10	19	18	67	0	350	810	264	1,424	125	150	350	0	625

<sup>\*</sup> All values are in 1000 acre-ft



January 31, 2023

Deputy Interior Secretary Tommy Beaudreau
Assistant Secretary for Water and Science Tanya Trujillo
Bureau of Reclamation Commissioner Camille Calimlim Touton

Dear Deputy Secretary Beaudreau, Assistant Secretary Trujillo, and Commissioner Touton:

The Colorado River Board of California (CRB)<sup>1</sup> appreciates the opportunity to submit an alternative for the Bureau of Reclamation (Reclamation) to analyze as part of Reclamation's preparation of a Supplemental Environmental Impact Statement (SEIS) for the December 2007 Record of Decision entitled "Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead."

As described in the Notice of Intent (NOI) to prepare this SEIS, if low runoff conditions into Lake Powell and Lake Mead continue, Reclamation's ability to protect dam infrastructure, make full water deliveries, and generate hydropower could be significantly impacted and result in the need to operate Glen Canyon and/or Hoover Dam in a manner beyond the scope of the 2007 Guidelines Record of Decision (2007 Guidelines ROD). 87 FR 69043 (November 17, 2022). Any modifications made to the operations of Lake Powell and Lake Mead as part of this process — particularly in the absence of a true consensus approach — need to be consistent with applicable federal laws, interstate compacts, and decrees and provide certainty to water contractors, protection of stored Intentionally Created Surplus and public health, safety, and welfare (as determined by each state) through the interim period.

Since Reclamation published the NOI in November, California has worked with the other Colorado River Basin States in an attempt to develop a joint Framework Agreement Alternative. Unfortunately, despite numerous meetings and intensive goodfaith efforts, a seven-state consensus was not reached. Therefore, California respectfully submits the attached alternative for Reclamation's consideration, modeling, and analysis. The development of alternatives is the first step of the SEIS process. California looks forward to continuing collaborative work with the Basin States,

<sup>&</sup>lt;sup>1</sup> Established in 1937, the Board protects the interests and rights of the agencies and citizens of the State of California to the water and power resources of the Colorado River System. The ten-person Colorado River Board is comprised of representatives from the 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, California Department of Water Resources, California Department of Fish and Wildlife, and members of the public.

Reclamation, and the Interior Department to develop consensus-based approaches. California appreciates Reclamation's recognition of the need to initiate this process. Our state's proposed alternative makes a constructive effort to uphold the Law of the River while making substantial efforts to protect the Colorado River system with voluntary reductions far beyond California's legal obligations. The 40 million people, nearly 6,000,000 acres of agriculture, and 30 Indian tribes that rely on the Colorado River require us to be successful in this effort. As this process moves forward, the State of California and California's Colorado River Contractors remain committed to continuing to work with you and others across the basin to protect the system. Now is the time to step up and demonstrate leadership through action and the development of other collaborative, innovative opportunities for basin-wide solutions.

## <u>Development and Evaluation of Alternatives</u>

California proposes the attached alternative for Reclamation to analyze as part of the SEIS. California's alternative includes actions that build on the existing Colorado River reservoir management and operations framework. The NOI identifies that Reclamation may propose modifications to Sections 2, 6, and 7 of the 2007 Guidelines ROD for 2023, 2024, and possibly through the expiration of the 2007 Guidelines in 2026. The NOI anticipates that Reclamation will analyze alternatives, including a No Action Alternative and a Reservoir Operations Modification Alternative to be developed by Reclamation as a set of actions and measures adopted under Secretarial authority pursuant to applicable federal law. Given the brief period of time before the 2007 Guidelines ROD expires, California's alternative emphasizes additional voluntary reductions in water use.

California intends through its alternative proposed modifications to the 2007 Guidelines ROD to protect Lake Mead elevation of 1,000 feet and Lake Powell elevation of 3,500 feet by discontinuing the use of operational neutrality described in the May 3, 2022 letter regarding actions to protect Lake Powell, making changes to Lake Powell operational tiers and releases, modifying shortage conditions, and other changes described in the attachment. This alternative provides a realistic and implementable framework to address reduced inflows and declining reservoir elevations by building on voluntary agreements and past collaborative efforts in order to minimize the risk of legal challenge or implementation delay. California's alternative uses adaptive management to protect critical reservoir elevations through the interim period.

## California's Actions Benefitting Lake Mead

California's Colorado River Contractors committed to conserving up to an additional 1,600,000 acre-feet of Colorado River water starting in 2023 and continuing until 2026, as described in CRB's October 5, 2022 letter. California was the first state to commit to conserving specific volumes of additional water after Commissioner Touton's call for further basin-wide conservation in June 2022. The State of California and California's Colorado River Contractors appreciate the Interior Department's collaboration and partnership at the Salton Sea, which will help facilitate this additional conservation of

Colorado River water in California. In 2019, California also agreed to participate in the Drought Contingency Plan (DCP), committing to make up to 350,000 acre-feet of DCP contributions annually. Between these two commitments, California could voluntarily reduce its use of Colorado River water by up to 750,000 acre-feet annually — even though California is not required to take shortages under the 2007 Guidelines ROD. Since the 2007 Guidelines ROD was adopted, California's investments and conservation in various efforts including Intentionally Created Surplus, the 500+ Plan, and other forms of voluntary conservation raised the elevation of Lake Mead by more than 20 feet preventing Lower Basin shortage conditions for years before the first shortage was declared in 2022.

## California's Quantification Settlement Agreement

Prior to 2003, California historically relied on and put to beneficial use surplus Colorado River water. As Arizona and Nevada fully developed their allocations, this surplus water was no longer available. Federal action to ensure that California reduced its use of Colorado River water to the state's legal entitlement triggered a difficult and expensive intra-state process that necessitated transfers and exchanges of Colorado River water from agricultural to urban uses through a complex set of agreements. California's 2003 Quantification Settlement Agreement (QSA), the Colorado River Water Delivery Agreement (Federal QSA), and associated agreements permanently reduced California's Colorado River water use by 800,000 acre-feet per year — even after decades of dependence on that supply by millions of urban users — through various water management programs that form the nation's largest agricultural-to-urban water conservation and transfer agreement. These agreements also include shortage sharing provisions and obligations between California water providers that could be affected by the SEIS and related modifications to the 2007 Guidelines ROD in ways that cause disproportionate and unintended consequences on these California water providers. These shortage sharing provisions in California's intrastate agreements are not well understood outside of California.

Just as the State of California was able to find ways to develop and implement intrastate agreements to drastically reduce water use and live within the state's limited Colorado River water supply, so too may the State of Arizona be required to make similar arrangements to live within its available Colorado River water supplies. While California was able to complete the QSA only after a highly contentious legal, political, and policy process between various parties driven by the threat of unilateral federal action. Twenty years later the QSA serves as an example of temporary conflict caused by scarcity leading to long-term cooperation for sustainability — a model that other basin states and Reclamation should strongly consider.

#### The Absence of Consensus Agreement Between States Defaults to the Law of the River

In the absence of a seven-state consensus proposal, the SEIS process and the preferred alternative should maintain existing protections to California's senior entitlements, protect stored ICS, and protect public health, safety, and welfare as

determined by each state (and particularly for disadvantaged communities with no alternative water supplies) through the interim period. The SEIS documents should address the manner in which the water demands within the states affected by a shortage declaration will be managed pursuant to the 1968 Colorado River Basin Project Act and the *Arizona v. California* consolidated decree. This approach would be comparable to the one used to develop Exhibit B contained in the 2003 Colorado River Water Delivery Agreement executed by the Department of the Interior pursuant to the Interim Surplus Guidelines.

The CRB appreciates the opportunity to provide California's alternatives for analysis in the SEIS and looks forward to working with Reclamation, the Interior Department, the Basin States, and Basin State Tribes throughout this process.

In partnership,

JB**\***Hamby

Chairman, Colorado River Board of California Colorado River Commissioner, State of California

## ATTACHMENT 1

## CALIFORNIA SEIS MODELING FRAMEWORK ALTERNATIVE

## PROPOSED LAKE POWELL & GLEN CANYON DAM OPERATIONS

- 1. Remove Operational Neutrality (i.e., use Powell actual water surface elevation to determine release tier).
- EQUALIZATION TIER Operations in this Tier conducted pursuant to the 2007 Interim Shortage Guidelines (ISG) Record of Decision (ROD).
- 3. UPPER ELEVATION BALANCING TIER Below Equalization Tier to 3,575'. Balancing releases range between 9.0-7.0 MAF. Potential for recovery of prior Drought Operations Agreement (DROA) releases and the WY-2022 reduced Lake Powell release volume of 480 KAF.
- 4. MIDDLE ELEVATION RELEASE TIER Spans Lake Powell elevations 3,575' to 3,550'. Annual releases from Glen Canyon Dam range between 8.23-7.48 MAF. Implement up to 100 KAFY of Upper Basin Demand Management activities to create additional protection volume for Lake Powell.
- 5. LOWER ELEVATION BALANCING TIER Spans Lake Powell elevations 3,550' to 3,500'. Lake Powell annual release ranges between 7.48 7.0 MAF, unless lower releases are necessary to keep Lake Powell above elevation 3,500'. Implement up to 500 KAF DROA releases and up to 500 KAF of Upper Basin Demand Management activities to create additional protection volume for Lake Powell to absolutely protect elevation 3,500'.
- 6. ≤ 3,500' Lake Powell releases restricted to maintain absolute Lake Powell protection of elevation 3,500'.

## PROPOSED LAKE MEAD & HOOVER DAM OPERATIONS

- Remove Operational Neutrality (i.e., use Mead actual water surface elevation to determine operating condition). This will increase the frequency and volume of shortage and Lower Basin Drought Contingency Plan (DCP) contributions without the need to modify agreements.
- 2. At all elevations below 1,145', provide 1.0 MAFY of additional interim period protection volumes. These volumes could be achieved through voluntary or mandatory means. California has proposed to conserve 400 KAFY of this volume through voluntary actions and its water districts are developing programs to initiate this plan in 2023. Proposed allocation of the remaining volume is based

on previous negotiations among the states: 560 KAFY to Arizona and 40 KAFY to Nevada.

- Implement reductions described in the ISG, DCP, and Minute No. 323 using the
  existing schedules and volumes specified in those agreements, except that
  stored ICS may be delivered below 1,025' to meet human health and safety
  requirements.
- 4. If Lake Mead elevations decline further, Reclamation should reduce releases from Lake Mead in addition to the above volumes as follows:
  - a. ≤1,025': 150 KAFY
  - b. ≤1,020': 300 KAFY
  - c. ≤1,015': 500 KAFY
  - d. ≤1,010': 750 KAFY
  - e. ≤1,005': 950 KAFY

These reductions should be applied using existing authorities or implemented through additional voluntary compensated conservation agreements.

- 5. If these actions are insufficient, Lake Mead releases should be further restricted in order to preserve elevation 1,000'. Utilize the existing framework of the "Law of the Colorado River" and Priority System to deliver available supply to Present Perfected Rights, Federal Reserved Rights, and other senior water rights until available annual supply exhausted. If additional water is required to meet human health and safety requirements, stored ICS water may be released below 1,000'. Facilitate development of intrastate partnerships and/or temporary transfers to meet outstanding HHS needs if contractor's alternative water supplies are insufficient.
- 6. If necessary to keep Lake Mead above elevation 1,000', consider utilization of a periodic release (e.g., 250-500 KAF) from Lake Mohave to assist in meeting the annual U.S./Mexico Water Treaty delivery obligation.

Table 1: Proposed Lower Basin Reductions

Lake Mead Elevation	Baseline Reductions (ISG, DCP, Minute 323) (KAF)	Additional 1.0 MAF below 1,145' (KAF)	Additional Protection Volumes (KAF)	Cumulative Protection Volumes (KAF)
1,145				
	-	1,000	-	1,000
1,090	241	1,000	_	1,241
1,075		,		•
	613	1,000	-	1,613
1,050	721	1,000	_	1,721
1,045		1,000		1,721
,	1,013	1,000	-	2,013
1,040				
	1,071	1,000	-	2,071
1,035				
	1,129	1,000	-	2,129
1,030				
	1,188	1,000	-	2,188
1,025	1,375	1,000	150	2,525
1,020		·		· · ·
	1,375	1,000	300	2,675
1,015				
	1,375	1,000	500	2,875
1,010				
	1,375	1,000	750	3,125
1,005	1,375	1,000	950	3,325
1,000*		_,:00		2,320
,- 3 -	1,375	1,000	950	3,325
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<sup>\*</sup>Additional reductions would be implemented to prevent Lake Mead from declining below elevation 1,000'.