gilbert

Shaping a new tomorrow, today.

August 15, 2023

Commissioner Camille Touton
U.S. Bureau of Reclamation
Attn: Post-2026 (Mail Stop 84–55000)
P.O. Box 25007
Denver, CO 80225

Via email to crbpost2026@USBR.gov

Dear Commissioner Camille Touton,

Gilbert appreciates the opportunity to comment on the Post-2026 Colorado River operations and is submitting this letter to support and reiterate the comments made by the Arizona Municipal Water Users Association (AWMUA), of which we are a member.

Gilbert holds multiple subcontracts and leases for Colorado River water delivery through the Central Arizona Project (CAP) system. The Colorado River is a critical water supply for the community, making up approximately 50% of our annual water deliveries. The historically low reservoir conditions on the Colorado River have caused a large degree of uncertainty that is unacceptable to Gilbert given that our existing residents and businesses rely on the Colorado River supply.

We work hard to provide reliability to our customers and the uncertainty regarding the future of Colorado River supply availability makes it difficult to plan for and invest in the necessary infrastructure, alternative supplies, and conservation programs to overcome reductions. These efforts require a great deal of financing, time, and in many instances, Town Council approval. Our infrastructure and community cannot turn on a dime to adjust to drastic shortages and we need advanced notice to make the necessary adjustments to system operations and water usage. To ensure our long-term ability to provide water to residents and businesses, and sustain our economy, we need increased clarity and reliability with regards to the future of our Colorado River supplies. The Post-2026 operations are critical to that outcome.

To that end Gilbert asks for Reclamation's serious consideration of the responses submitted by AMWUA to Reclamation's request for feedback in the Notice as summarized below.

- Post-2026 Operations Should Provide for Increased Flexibility – As climate change continues to impact the availability of Colorado River supplies, water users will need increased flexibility to mitigate shortages and adapt. While strategies such as system conservation and Intentionally Created Surplus (ICS) have provided flexibility to the system and should continue, Reclamation should explore additional operational strategies in the Post-2026 operations.

- **Post-2026 Operations Should Increase Reliability for Water Users–** Municipal water providers need increased clarity from Post-2026 Operations on water supply availability. The system should be managed for increased reliability (instead of maximizing diversions and releases), to provide more stability for water users reliant on Colorado River supplies.

- **Management Tools Should Utilize the Best Available Science** – Reclamation's modeling tools and processes must be updated to incorporate the best available climate science, and to remove biases from past, wetter hydrology. Estimates of what constitutes a "normal" supply need to be consistent with the new reality of the aridification in the Colorado River Basin.

- **Shortage Sharing Should be Equitable and Basin-Wide**– Water users throughout the Basin and Mexico should all share in the responsibility of taking shortage reductions and making efforts to protect the system. This should include spreading Lower Basin reductions equitably across the three Lower Basin States and analysis of the impacts of actions to be taken by Upper Basin States.

- **The Post-2026 Process Should Involve Meaningful Collaboration and Consultation with Municipal Water Providers –** Continued collaboration and consultation with the Basin States, water users, Mexico, Tribes, NGOs, and stakeholders - including municipal water providers - throughout the Basin is crucial for a successful NEPA process and implementation of the Post-2026 Operations. The Post-2026 guidelines would benefit from the creation of a Basin-wide Municipal Sector Committee. This Committee should be in addition to Reclamation's consultation with the Governor's representatives from each Basin State.

Sincerely,

Jessica L Marlow

Jessica Marlow, P.E.
Public Works Director

Letter #: 652

Date Received: 7/24/2023

Sender Names: 339: Kathleen Coates Hedberg

Emails: 339: kchedberg@cox.net

Organizations: Helix Water District

Subject: FW: Colorado River Guidelines and Strategies

Good Afternoon,

Conservation is the most affective way of cutting back water use (low flow toilets, appliances, landscape solutions, paying for removal of grass, recycled water, repurified water).

Southern CA has been conserving for over 30 years and now we are on to creating water supplies (desal and water repurification). Also, Nevada has done an excellent job in conservation. These programs are very expensive, especially, the creating water supplies. While the Federal WIFIA loans are great, they still need payback. It would be nice to offer grant funding for large reuse projects so we can offset cost impacts to our rate payers who pay on average $100 a month for water.

I also, would suggest you look at the State of Arizona and encourage them to do more with conservation and new water supplies, the City of Phoenix water bill is a mere $15 for over 7480 gallons (and this is there new rate increase s). That same amount costs us over $100 a month . There is room for the City of Phoenix to pay for conservation, improvements and reuse. Equity. We all need to have water, every drop is valuable from the Colorado River and we should ALL share, conserve and reuse.

I just saw an article from the City of Lake Havasu, they are considering putting their effluent back into the Lake what a great start! Lets support this project! And others like it.

Respectfully,

Kathleen Coates Hedberg, PE, MPH

President, Helix Water District

619.994.6900

August 15, 2023

Via Electronic Mail
(For convenience, paper copy to follow via Federal Express)

United States Department of the Interior
Bureau of Reclamation
Amanda Erath
Colorado River Post-2026 Program Coordinator
Attn: Post-2026 (Mail Stop 84–55000)
P.O. Box 25007
Denver, CO 80225
crbpost2026@usbr.gov

Re: Written Comments of the Imperial Irrigation District on the "Notice of Intent to Prepare an Environmental Impact Statement and Notice to Solicit Comments and Hold Public Scoping Meetings on the Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead" (87 FR 39455)

I. Introduction

These comments are submitted on behalf of the Imperial Irrigation District ("IID"), an irrigation district formed under the laws of the State of California. IID depends solely on the Colorado River to supply water to the Imperial Valley, one of the most productive agricultural regions in the world, and an area that has been irrigated with Colorado River water since 1901. IID is one of the Colorado River's largest contractors or entitlement holders with senior agricultural water rights. As the sole water supply for the Imperial Valley, the Colorado River also plays a crucial role in the Imperial Valley's rural communities and agrarian economy.

IID therefore appreciates the opportunity to provide input on the scoping process for the Environmental Impact Statement ("EIS") preparation for the Post-2026 Operational Guidelines and looks forward to collaborating with the Bureau of Reclamation ("Reclamation") and fellow Colorado River contractors and entitlement holders, water users, and stakeholders throughout this process.

IID has four key recommendations for Reclamation's EIS analysis: (1) comply with the Law of the River; (2) use the best available science to provide the most appropriate data and advanced methods for forecasting hydrological conditions; (3) employ an accurate geographic and temporal scope of analysis that captures reasonably foreseeable direct, indirect, and cumulative significant effects, including short-term and long-term effects, of implementing the new Operational Guidelines across local, regional,

national and global contexts, as appropriate, and (4) evaluate a diverse and realistic range of alternatives. Addressing these issues will deliver a robust and practical environmental analysis that fulfills Reclamation's obligations under the National Environmental Policy Act ("NEPA").

II. NEPA Requires an EIS Analysis Based on the Law of the River

The Law of the River is a collection of compacts, treaties, statutes, U.S. Supreme Court Decisions and Decrees, and other authorities and binding contracts that govern Colorado River allocations and apportionments. Under the Law of the River, IID has a senior entitlement to Colorado River water pursuant to a permanent 1932 contract with the Secretary of the Interior ("Secretary"). Reclamation needs to account for the Law of the River and priority system to avoid analyses, conclusions, or proposed alternatives that would be illegal or infeasible and that would accordingly fail to comply with NEPA's requirements. Reclamation's analysis should therefore be based on the priority system under the Law of the River, which is based on Lower Basin water rights and factors such as priority dates (particularly present perfected rights), the 1928 Boulder Canyon Project Act, the 1964 *Arizona v. California* Supreme Court decree, and the 1968 Colorado River Basin Project Act (43 U.S.C.A. § 1521(b)), which provided for the subordination of Central Arizona Project water users to California's 4.4 million acre-feet apportionment in times of shortage.

Reclamation should set aside political or societal influencing factors, including more recent calls for human health and safety water and deliveries of Intentionally Created Surplus storage water to be delivered outside of, or inconsistent with, fundamental legal requirements, particularly when those water demands can be met through existing or new partnership agreements or by alternative (non-Colorado River) water sources.

Reclamation's analysis should also conform with the Law of the River and the priority system to ensure a factual accounting of Indian Trust Assets. Analysis of impacts to Native American tribes needs to accurately assess and reflect differing water rights and priorities to the Colorado River and/or other surface and groundwater rights. Not all Native American tribes have the same water rights or priority to the Colorado River, and these critical distinctions need to be reflected in the EIS, including in the environmental justice analysis, to ensure accurate, informed conclusions regarding adverse effects which may disproportionately affect communities with environmental justice concerns. Similarly, the Imperial Valley, with no alternative supplies to the Colorado River, and a large environmental justice community, requires an environmental justice analysis distinct from Indian Trust Assets and many other areas of use within California, Arizona, or Nevada, which have alternative water supplies.

The 1944 Mexican Water Treaty also provides for Mexico to participate in proportional consumptive use reductions in times of extraordinary drought, and Reclamation should address this obligation in its NEPA analysis to provide for any actions that might be necessary under future Minutes as well as the Upper and Lower basins' obligation to provide for their respective halves of the Treaty delivery requirement.

The No Action Alternative should be developed in consultation with the Basin States and default to the 1970 Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs upon expiration of the 2007 Interim Guidelines, 2019 Drought Contingency Plan ("DCP"), and other agreements and Minutes that will no longer be in effect post-2026.

III. Use Best Available Data and Scientific Methods; Explain Assumptions and Limitations

Reclamation should endeavor to use high-quality information, incorporating the best available science and data, to describe reasonably foreseeable environmental trends and effects, including anticipated climate-related changes to the environment in its analyses and forecasting methodologies to quantify reservoir conditions, inflow projections, and operational decision-making. With regard to data, Reclamation needs to use current, accurate data reflecting recent meteorological and runoff conditions, which have varied widely in recent years notwithstanding long-term, climate change-related decreases in overall precipitation and snowpack. Reclamation should clearly explain its data and modeling assumptions and/or limitations of the information so that the public and decisionmakers can understand whether the EIS's assumptions are substantiated and how Reclamation reaches its conclusions.

Reclamation should also consider the role of Colorado River tributary flows to meet state consumptive uses and agency entitlements, using the data and analysis included in the Consumptive Uses and Losses Reports required pursuant to the Colorado River Basin Project Act of 1968. Lower Basin and Mexico reporting, while current through 2022 in the annual *Colorado River Accounting and Water Use Report: Arizona, California and Nevada,* does not include tributary consumptive uses and system losses in the Lower Basin which were a key feature of Consumptive Uses and Losses Reports until 2005. Reclamation's last basin wide Consumptive Uses and Losses Report covered the period 2001-2005, and for periods 2006-2010, 2011-2015, and 2016-2020 only addressed the Upper Basin. Reclamation should resume its reporting of Consumptive Uses and Losses Reports for the *entire* Colorado River Basin consistent with the standing 1968 Congressional directive to do so and Reclamation's practice for 35 years.

IV. Establish an Adequate Scope of Analysis that Captures Reasonably Foreseeable Significant Effects

Reclamation needs to ensure that the EIS assesses reasonably foreseeable significant effects by using an accurate geographic and temporal scope and consistently assessing cumulative effects. Reclamation should bear in mind that the White House Council on Environmental Quality ("CEQ") currently proposes to expand the definition of "effects" resulting from a proposed action in the NEPA regulations to clarify that the effects to be analyzed in NEPA reviews include ecological, social, and economic considerations, including disproportionate and adverse effects on communities with environmental justice concerns, whether direct, indirect, or cumulative, as well as climate change-related

effects, including the contribution of a proposed action to climate change, and the reasonably foreseeable effects of climate change on the proposed action.

A. Geographic and Temporal Scopes

Reclamation needs to ensure that the temporal and geographic scopes employed in the EIS accurately and fully encompass the reasonably foreseeable direct, indirect, and cumulative significant effects, including short-term and long-term effects, of implementing the new Operational Guidelines across local, regional, national, and global contexts, as appropriate.

In terms of geographic scope, the analysis should include the Imperial Valley and extend to the Salton Sea given IID's large entitlement, the runoff and hydrologic connection to the Colorado River, the area's lack of an alternative water supply, and the socioeconomic value of agriculture to rural and disadvantaged communities who would be acutely affected by any water curtailments. Because the Imperial Valley is entirely dependent on the Colorado River, any reduction in water deliveries will cause environmental consequences that result from reduced farming and exposed fields, and lead to job losses for a socio-economically sensitive Environmental Justice community. Effects to the Salton Sea also should be evaluated and discussed. Reduction in water deliveries could quickly expose large areas of the Salton Sea playa, outpacing current mitigation and restoration activities intended to forestall this outcome and address environmental and public health concerns.

With regard to the temporal scope, the post-2026 term analyzed in the EIS needs to provide for long-term planning certainty. For example, the 2007 Interim Guidelines had a 20-year term (through 2026), but in hindsight did not include sufficient actions to address system risk. The term of the post-2026 Guidelines therefore needs to be of sufficient duration to establish long-term planning certainty, but the post-2026 Guidelines should also include adaptive management tools to address foreseeable and anticipated variability of supply-demand imbalances and variable hydrological and meteorological conditions.

B. Cumulative Effects

Changes to operations of the Colorado River portend far reaching cumulative effects. Therefore, Reclamation needs to analyze reasonably foreseeable cumulative effects resulting from the proposed action and alternatives, and that analysis should remain consistent across the proposed action and all alternatives.

The CEQ NEPA regulations explain that cumulative effects result from the incremental effects of the proposed action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time. Consequently, the cumulative effects analysis should include, at a minimum, reasonably foreseeable effects for downstream and off-River water bodies and users, including the

Salton Sea, and existing water conservation obligations that were not analyzed for the 2007 Interim Guidelines.

V. Analyze a Diverse Range of Feasible Alternatives

Reclamation should identify its proposed action and the no action alternative clearly in the Draft EIS (if not earlier), consistent with NEPA and the CEQ and Department of Interior NEPA regulations, so that the public and decision makers can easily understand what Reclamation proposes, what's being studied in the EIS, and how the alternatives analysis compares the considered alternatives to the proposed action.

IID also recommends that the Bureau include the following alternatives in the EIS:

- Analysis of management alternatives that protect critical elevations and establish shortage criteria while providing water supply certainty and operational flexibility, including the expansion of programs that allow for voluntary water conservation storage in the system and that build upon, but improve, the Intentionally Created Surplus and Inadvertent Overrun ("ICS") and Payback Policy included in the 2007 Interim Guidelines. Any future voluntary water storage program should provide elevation benefits to the system (i.e., be operationally neutral or top-water banking), and disallow one contractor's beneficial contribution from offsetting another's shortage obligation, which at best maintains the status quo but doesn't truly benefit the system.

- Evaluation of one or more alternatives that prioritize smaller, more frequent water use reductions as opposed to larger, less frequent reductions to address supply and demand imbalances. Such alternative(s) would analyze and explain the linkages between shortage triggers, reservoir storage, water use priorities and environmental impacts. IID is concerned that under the 2007 Interim Guidelines, shortage triggers were not reached until 2022 due, in part, to the elevation buffer created by ICS and DCP contributions. By the time the first shortage operating condition under the 2007 Interim Guidelines occurred, reservoirs had been so severely depleted that the risk of jeopardizing critical operational elevations became a real-time concern that suggested a need for significant, drastic responses. The environmental impacts of the actions taken to address these shortages were much greater than they would have been had more frequent, less severe shortages triggered earlier actions. Infrequent severe shortages put all water users at risk, but particularly threaten senior water rights that would not be impacted under a more proactive, conservatively managed system. More frequent, but smaller, shortage reductions at higher elevation triggers and/or shortage reductions in parity with reduced releases from Lake Powell would be more likely to prevent the reservoirs dropping to critical elevations, create less significant environmental and environmental justice impacts, and better adhere to the Law of the River's priority system.

- Evaluation of alternatives that manage reservoirs based on actual hydrology and total system contents, rather than simply Lake Powell and Lake Mead elevations as under the current 2007 Interim Guidelines.

- Evaluation of alternatives that adequately assesses the severe impacts on communities that have no alternative source of water, like Imperial Valley.

- Analysis of alternatives that minimize the probability of material curtailments, such as augmentation, voluntary conservation efforts, water transfers, efficiency improvements, desalination, water recycling, agency partnerships, groundwater use, and/or other programs that address supply and demand imbalances without relying exclusively on substantial water curtailments.

- Evaluation of different tiers of curtailment, instead of only analyzing either a full curtailment or a no-action alternative. A less polemic range of alternatives is warranted to enable Reclamation, decision makers, and the public to understand whether different curtailment percentages result in a linear one-to-one reduction in impacts, or if there is a curtailment volume that delivers fewer impacts but only marginal reductions in water as compared to a full curtailment.

VI. Conclusion

Thank you for the opportunity to comment. IID believes that the balancing of overall demands on the system with available supply, consistent with the Law of the River, is the foundation for the long-term sustainable management of the Colorado River system upon expiration of the 2007 Interim Guidelines. IID intends for these recommendations to ensure that the EIS incorporates the legal parameters governing the Colorado River and inform the Colorado River's stewardship in a changing climate, while providing for the operational certainty, planning and investment necessary by all water users in the Basin to adapt to the hydrologic conditions that are anticipated to occur beyond 2026. IID looks forward to collaborating with Reclamation and other Colorado River stakeholders in this process.

Sincerely,

Tina Shields

Tina Anderholt Shields, PE
Water Manager

August 15, 2023

Ms. Amanda Erath
Colorado River Post-2026 Program Coordinator
U.S. Bureau of Reclamation
Attn: Post-2026
Mail Stop 84-55000
P.O. Box 25007
Denver, CO 80225

Delivered via email: Crbpost2026@usbr.gov

Re: Comments on Notice of Intent to Prepare an Environmental Impact Statement and Notice to Solicit Comments on the Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead

Dear Ms. Erath,

This letter provides comments from Imperial Valley Water (IVH2O) on the Bureau of Reclamation's Notice of Intent to Prepare an Environmental Impact Statement and Notice to Solicit Comments on the Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead. IVH2O is a 501(c)(5) nonprofit, voluntary membership organization established to represent and protect the water rights of Imperial Valley's landowners. We appreciate the opportunity to comment.

As noted in the Federal Register notice, the period from 2000 to 2023 is the driest period in more than a century and one of the driest periods in the last 1,200 years. IVH2O welcomes this opportunity to share organizational priorities for consideration in the post-2026 Colorado River reservoir operational guidelines which we believe will maximize system flexibility and resilience during this period of challenging hydrology.

One of the primary components of the 2007 Interim Guidelines was improved Reclamation management of the Colorado River. They provide additional mechanisms for the storage and delivery of water supplies in Lake Mead to increase flexibility in meeting water use needs from Lake Mead, particularly under drought and low reservoir conditions. In light of the current hydrologic conditions, we believe this will remain a primary component of post-2026 operating guidelines. To enhance system flexibility, IVH2O requests the Bureau of Reclamation consider and evaluate additional Intentionally Created Surplus (ICS) storage behind Hoover Dam for the Imperial Irrigation District (IID).

Imperial Valley farmers are leaders in water conservation. We utilize integrated technology, irrigation innovation, and water reuse opportunities to grow more food with less water. To continue being the best steward of scarce and valuable resources, IVH2O requests the Bureau evaluate additional Intentionally Created Surplus (ICS)

Imperial Valley Water (IVH2O)

P.O. Box 1604

El Centro, CA 92244

916.690.3111

ccwatte@hotmail.com

501 (c) (5) Non Profit Organization

exhibits for IID water users. To fully incentivize water saving efforts, there must be recognition and credit for as-of-yet unrecognized, on-farm conservation efforts. Progressive policy changes should allow for flexible management of water generated through efficiency-based conservation measures. To this end, IID should pursue Basin recognition of known, verifiable, intentionally created conserved water, such as, but not limited to, cascading, well pod seepage recovery, crop rotation, organic cropping, cultural practices such as but not limited to drip irrigation, on-farm seepage recovery, solid set sprinklers, overhead sprinklers, center pivots, etc. Fallowing is the least desirable method of conservation due to its social and economic impacts. However, limited use of seasonal fallowing with in-place crops, like forage products, should be reviewed and evaluated for Post-2026 Colorado River guidelines.

To best support elevations in Lake Mead, we believe IID should have named storage for Intentionally Created Surplus (ICS) water with no cap or restriction on storage of conserved water. Any ICS water stored by IID should not be considered top water in the event of an overflow at Lake Mead/Lake Powell. While in this time of drought this is highly unlikely, we need to ensure our efforts are not wasted.

Over the last 20 years, California's urban/rural partnerships in on-farm water conservation, known as the Quantification Settlement Agreement, has become a model of success in creating dependable domestic water supplies while enhancing the efficient production of fruit, vegetable, and forage products that feed America. Because of these efforts, the Imperial Irrigation District now conserves over 500,000 acre-feet of water every year, totaling over 7 million acre-feet since 2003. The water savings represent a 28 percent reduction in IID's annual usage and transfer to urban users within California. The QSA illustrates how on-farm conservation in California's Imperial Valley is already helping to provide dependable water supplies for California cities and we've pledged even more to protect Colorado River reservoirs. Utilizing California's experience, other states need to implement aggressive intra-state conservation partnerships. Urban/rural partnerships which invest in on-farm conservation free up water supplies that should have been developed to meet the increased demands from population growth. Solving the Colorado River's looming shortage with urban-funded on-farm water conservation in the seven Basin States will be smarter, faster and more predictable than a chaotic effort to change priority rights dating back more than 100 years.

IVH2O believes the Imperial Irrigation District has no obligation for further reduction in its water allocation and we oppose any modification of our water rights. Therefore, it is our opinion that future Colorado River reservoir operating guidelines must follow and respect the priority system. Several months ago, the Bureau proposed a Supplemental Impact Statement (SEIS) for near-term Colorado River Operations. IVH2O took issue with several alternatives proposed. Action Alternative 2 utilized the terms "pro rata," "fair and equitable" which are not terms used in legal interpretation of Colorado River water rights. We discourage the Bureau from evaluating future operating guidelines which resemble Action Alternative 2 and disregard the priority system, a tested principle of water law. As landowners in the Imperial Valley, we view any action that infringes upon our Present Perfected Rights (PPR) as an unconstitutional "taking."

We also object to the use of the term "Concept of Priority" in the Bureau of Reclamation's four public webinars associated with the SEIS for near-term Colorado River Operations. How can you refer to an act of Congress which has been adjudicated at all levels of the U.S. court system simply as a concept? During the Bureau webinars, tribal water rights were referred to as a matter of settled

law. Imperial Valley landowners have the same water rights standing as Native American Tribes with pre-1922 water rights. Why then relegate PPRs, with the same interpretation of water law, simply as a "concept of priority?" This illustrates a deliberate attempt to diminish the Law of the River as it pertains to the priority system. We request the Bureau maintain the integrity of Law of the River in developing post-2026 Colorado River operating guidelines.

Regarding water accounting, we suggest the Bureau evaluate implementation of a July-June water year. This timing better suits Colorado River Basin agriculture production seasonality and crop planning needs. Furthermore, we ask that the Bureau consider providing a ten-year rolling average of IID's water allocation offering credit for unused water which is made available to junior priority users and avoiding single year overrun payback.

We also ask the Bureau avoid consideration of misleading hydrology projections. "Effective" reservoir elevation is clearly double counting to facilitate manipulation of Junior water in dry years. The Imperial Valley, holders of Senior water rights, is effectively subsidizing urban economic expansion by holders of Junior water right. Also, while modeling addresses economic impacts, it fails to evaluate impacts on domestic food production, food supply and food prices. Modeling also doesn't address negative impacts, including economic impacts, air quality, loss of electric power generation and environmental degradation, to predominantly agricultural communities from conservation measures such as fallowing. Finally, we point out environmental impact analysis must take into consideration impacts to Salton Sea or nearby wildlife reserve due to major curtailments in water deliveries to Imperial Irrigation District (IID) customers.

The 2007 Interim Guidelines for Lower Basin Shortages and Coordinated Operations of Lake Powell and Lake Mead offered valuable experience in reservoir management and recognition that more specific management tools need to be implemented for future operational decisions. As we work together with our neighboring states and the Federal government on Post-2026 Colorado River operations providing long-term solutions to sustaining the Colorado River, we are equally committed to upholding the law and being responsible water users, doing our part to keep the river healthy enough to meet the needs of all seven states.

Thank you for consideration of IVH2O's comments.

Sincerely,

Stephen W. Benson
Chairman

Cc: President Alex Cardenas IID Board of Directors
Vice President J.B. Hamby, IID Board of Directors
Director Gina Dockstader, IID Board of Directors
Director Karin Eugenio, IID Board of Directors
Director Javier Gonzalez, IID Board of Directors
Ms. Jamie Asbury, General Manager, IID
Ms. Tina Shields, Water Department Manager, IID
Mr. Mike Pacheco, Water Department Manager, IID

Colorado River Basin States Representatives of
Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming

August 15, 2023

The Honorable Camille Touton
Commissioner
U.S. Bureau of Reclamation
1849 C Street, NW
Washington, D.C. 20240

Sent via Electronic Mail

Dear Commissioner Touton:

The undersigned Governors' Representatives of the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming (collectively, the Basin States) respectfully submit the following comments in response to the Bureau of Reclamation's *Notice of Intent To Prepare an Environmental Impact Statement and Notice To Solicit Comments and Hold Public Scoping Meetings on the Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead*, Fed. Reg. Vol. 88, No. 116, p. 39455 (June 16, 2023). We appreciate this opportunity to provide comments to be considered in the upcoming environmental impact statement for post-2026 operations for Lake Powell and Lake Mead (EIS or Post-2026 EIS).

The Basin States have a unique interest in the management of the Colorado River. Reclamation's engagement with the Basin States will therefore be essential to ensure the effectiveness of post-2026 operations. As parties and beneficiaries to the interstate compacts, treaties, laws, and supreme court decrees that govern the Colorado River, the Basin States have significant interests in protecting the water supplies of the forty million people who rely on the Colorado River. Recognizing the unique status of the Basin States, the Secretary of the Interior ("Secretary") must consult with the Governors' Representatives from each Basin State and collaborate on the development of alternatives for the Post-2026 EIS at Lake Powell and Lake Mead. The Secretary's options for post-2026 operations will be significantly limited without the Basin States' participation. The Basin States are committed to working with Reclamation through the NEPA process to develop the new guidelines for the Post-2026 EIS. In addition, the Basin States anticipate working together to develop an alternative for consideration and evaluation, as the States did for the NEPA process for the 2007 Guidelines.

Operational experience illustrates that the 2007 Guidelines and the 2019 Drought Contingency Plans are insufficient to properly manage Lakes Powell and Mead. Extended periods of dry hydrology and depleted reservoir conditions have highlighted the inadequacy of these measures to adapt to worsening hydrology.

The unprecedented challenges we face require greater collaboration to achieve sustainable solutions. We understand that the success of future operations of Lake Powell and Lake Mead depends on working closely with Colorado River Basin Tribes, water users, non-governmental organizations, and other stakeholders.

Collaboration with Mexico is also critical. This should occur through a separate process involving the International Boundary and Water Commission. We expect that process to occur simultaneously with the Post-2026 EIS. Additionally, the active and direct participation of the Basin States in formal meetings with Mexico is essential.

By providing these comments, 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 guideline. Any failure by the undersigned to address specific aspects of the NOI, 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 NEPA process.

We look forward to continuing our work to protect the Colorado River system now and in the future.

Respectfully,

Thomas Buschatzke
Governor's Representative
State of Arizona

Rebecca Mitchell
Governor's Representative
State of Colorado

J.B. Hamby
Governor's Representative
State of California

John J. Entsminger
Governor's Representative
State of Nevada

Estevan Lopez
Governor's Representative
State of New Mexico

Gene Shawcroft
Governor's Representative
State of Utah

Brandon Gebhart
Governor's Representative
State of Wyoming

cc: U.S. Bureau of Reclamation via Electronic Mail - crbpost2026@usbr.gov

Central Arizona Water Conservation District
23636 North Seventh Street
Phoenix, Arizona 85024

Southern Nevada Water Authority
100 N. City Pkwy, Suite 700
Las Vegas, Nevada 89106

The Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, California 90012-2944

August 15, 2023

The Honorable Camille Touton
Commissioner
U.S. Bureau of Reclamation
1849 C Street, NW
Washington, D.C. 20240

Sent via Electronic Mail

Dear Commissioner Touton:

The Southern Nevada Water Authority (SNWA), Central Arizona Water Conservation District (CAWCD) and The Metropolitan Water District of Southern California (Metropolitan) appreciate the opportunity to comment on the Notice of Intent to Prepare an Environmental Impact Statement and Notice to Solicit Comments and Hold Public Scoping Meetings on the Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead) (NOI). Fed. Reg. Vol. 88, No. 116, p. 39455 (June 16, 2023).[1] Our agencies support the letters submitted by the Colorado River Basin States and Lower Division States, and also ask that the scope of the Environmental Impact Statement (EIS) for the Post-2026 Operational Guidelines and Strategies and proposed federal action ensure sufficient water for public health, safety and welfare, protect Intentionally Created Surplus (ICS) created under the 2007 Record of Decision entitled Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations For Lake Powell and Lake Mead (2007 Guidelines), provide for continued incentives to add conserved water to Lake Mead, address the imbalance between supplies and demands in the Colorado River Basin, an imbalance to which evaporative and system losses contribute and include a framework that incentivizes voluntary conservation, augmentation, and exchange.

The Colorado River Basin States letter noted the Basin States' intent to develop a consensus alternative for the Post-2026 Operational Guidelines. The undersigned agencies support the development of a Basin States consensus alternative. If successful, a consensus-based alternative would build on the approach the Basin States took in developing the alternative that became the basis for the 2007 Interim Guidelines Record of Decision and more recently when the Basin States, Tribes, Section 5 Contractors and NGOs worked together to develop the 2019 Drought

[1] By providing these comments, 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 guideline. Any failure by the undersigned to address specific aspects of the NOI, 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. We reserve the right to provide further comments and engage with Reclamation as it proceeds with subsequent phases of the NEPA process.

Contingency Plan. As demonstrated since adoption of the 2007 Interim Guidelines, Basin States consensus improves opportunities for the collaboration and investment that will be essential to managing Colorado River resources in a hotter and drier future.

Collectively SNWA, CAWCD and Metropolitan provide water to 27 million residents in the Lower Basin. Each agency takes delivery of water from Lake Mead pursuant to contracts with Secretary of the Department of the Interior. The Colorado River is a significant or exclusive source of water for our agencies and as such, operations of Lake Powell and Lake Mead are directly relevant to our ability to provide water to our service areas.

SNWA is a political subdivision of the State of Nevada and a joint-powers organization created by a cooperative agreement pursuant to NRS 277.080 to 277.180. SNWA provides Colorado River water to its purveyor-member agencies throughout southern Nevada. Colorado River water comprises nearly 90 percent of these water supplies, which serve the needs of the Las Vegas area's 2.3 million residents and more than 40 million tourists each year. SNWA cooperates with its member agencies by providing water treatment, wholesale water delivery, and overseeing conservation-program implementation.

CAWCD is a political subdivision of the State of Arizona, established pursuant to Arizona Revised Statutes § 48-3701 et seq., which operates the Central Arizona Project (CAP) pursuant to various contracts and agreements with Reclamation. The CAP canal is a 336- mile system that brings Colorado River water to central and southern Arizona, delivers the State of Arizona's single largest renewable water supply, and provides water to municipalities, tribes and agriculture. CAWCD's service area encompasses Maricopa, Pinal and Pima counties where more than 80% of Arizona's population resides. CAP's water supply is a critical component of many Arizona tribal water right settlement agreements and provides tribal homeland water to meet the needs of tribal communities in Arizona.

After being formed in 1928 by election and an act of the California legislature, Metropolitan's first project was to build the Colorado River Aqueduct (CRA). Metropolitan continues to bring Colorado River water into Southern California through the CRA. The Colorado River has been Metropolitan's most secure source of imported water since the district was formed. Over the decades, Metropolitan has worked to develop other sources of supply including the State Water Project and local resources projects, but the Colorado River continues to be a vital source of water for Metropolitan's 5,200 square mile service area.

The period since 2007 has provided significant operational experience for both Reclamation and water managers, making it clear that the Post-2026 Operational Guidelines must address the imbalance between supplies and demands in the Colorado River Basin, an imbalance that evaporative and system losses contribute to.

Recent experiences including declining reservoir inflow and historically low elevations of Lake Powell and Lake Mead in 2022 have made it clear that the Post-2026 Operational Guidelines need to include provisions that protect sufficient storage in Lake Mead and provide for water deliveries to meet public health, safety, and welfare needs if hydrologic conditions are so dry and reservoir conditions are so low that human health, safety and welfare needs would not be otherwise met by Colorado River deliveries.

The Post-2026 Operational Guidelines need to protect the ICS currently stored in Lake Mead. SNWA, CAWCD and Metropolitan have spent years and invested millions of dollars to intentionally conserve water that has helped to prop up Lake Mead elevations. This storage must be preserved for the benefit of agencies funding or implementing ICS creation and to Contractors to whom funding agencies have directed credit in accordance with Section 3.B.8 of the 2007 Interim Guidelines and must not be delivered to any other user. The Guidelines should also provide for continued incentives to conserve water for the benefit of Lake Mead.

The unprecedented challenges we face require greater inclusivity and collaboration to achieve sustainable solutions. SNWA, CAWCD and Metropolitan understand that the success of future operations of the Colorado River system depends on working with water users and others invested in the outcomes of effective Post-2026 operations. In particular, successful management of the Colorado River will depend on the support and participation of the Tribes. Continued collaboration with Mexico is critical for success of Post-2026 reservoir operations and management. Collaboration with Mexico is critical to charting the course of Colorado River through Post-2026 operations. While we recognize that any actions involving deliveries to Mexico will be determined through a separate process involving the International Boundary and Water Commission (IBWC), we expect that process to occur simultaneously. In particular, and the Post-2026 EIS should consider and evaluate potential future actions to ensure environmental compliance. Additionally, the active and direct participation of the Basin States' representatives in formal meetings with Mexico has also been essential to the development and implementation of Minute Nos. 317, 318, 319, and 323. The direct engagement between the States, the U.S. (including both Interior and the IBWC) and Mexico has consistently demonstrated the path to success. Engagement with other stakeholders, including NGOs, interested in the Colorado River is also important to success of this process.

In addition to the development of the Post-2026 Operational Guidelines, we also ask that Reclamation update and apply Part 417 reasonable and beneficial use determinations to ensure that water delivered is not being wasted. Each of our agencies signed on to the August 2022 Memorandum of Understanding by and among Colorado River Basin Municipal and Public Water Providers (MOU) in which we committed with water providers in all seven Colorado River Basin States to improving municipal and public water use efficiencies. Our agencies recognize that part of adapting to hotter and drier conditions requires improved efficiency and conservation. This commitment has also been demonstrated through the hundreds of millions of dollars in past and ongoing investments that our agencies have made in conservation and water use efficiency. However, less than 20% of consumptive uses in the Colorado River Basin are municipal and industrial. We cannot solve this problem on our own. In this time of shortages and other possible mandatory reductions, as the water providers with more junior rights, our agencies are potentially the most at risk if water is wasted. The Department must update the reasonable and beneficial use determinations across water sectors.

We also ask that the Department identify a durable source of funding to assist in paying for conservation. Given the reduced inflow into the reservoirs and ongoing drought conditions exacerbated by climate change, the need for conservation will be higher than ever. Current sources of federal funding like the Inflation Reduction Act of 2022 will not be available for new programs

started after 2026. As such, identifying a long-term source of funding to support the conservation needed to respond to climate change will be an important part of success.

Because the scope of the Post-2026 Operational Guidelines will likely be large, we recommend that Reclamation contemplate whether and how certain aspects could be staged, if appropriate. Having an understanding of certain elements, such as beneficial use criteria, conservation funding, and health, human safety and welfare limitations will help inform the total volume of mandatory reductions necessary and may provide a more successful framework for negotiating consensus.

Our agencies look forward to working with Reclamation during the development of the Post-2026 Operational Guidelines and related efforts to protect the Colorado River system reservoirs. Reclamation's continued partnership with our agencies is essential to our success.

Respectfully,

John J. Entsminger, General Manager
Southern Nevada Water Authority

Adel Hagekhalil, General Manager
The Metropolitan Water District of Southern California

Brenda Burman, General Manager
Central Arizona Water Conservation District

cc: U.S. Bureau of Reclamation via Electronic Mail – crbpost2026@usbr.gov

SALMON, LEWIS & WELDON, P.L.C.

Attorneys at Law

Riney B. Salmon II (Retired)
John B. Weldon, Jr.
Mark A. McGinnis
Kristin D. Magin
Blake W. Rebling
Michael K. Foy
Jonathan K. Charlton

2850 E. Camelback Road, Suite 200
Phoenix, Arizona 85016
Telephone 602-801-9060
Facsimile 602-801-9070

M. Byron Lewis
Lisa M. McKnight
James R. Huntwork
Douglas J. Kunath
Daniel B. Jones
Katrina L. Wilkinson

Of Counsel
Paul R. Orme, P.C.
G. Van Velsor Wolf Jr.
George J. Coleman, III

Writer's Direct Line
602-801-9083
Writer's Internet Address
dbj@slwplc.com

August 15, 2023

Via U.S. Mail and Email

Bureau of Reclamation
Attn: Post-2026 (Mail Stop 84-55000)
P.O. Box 25007
Denver, CO 80225
Crbpost2026@usbr.gov

Re: Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead

Dear Commissioner Touton:

We are writing on behalf of Central Arizona Irrigation and Drainage District ("CAIDD"), Maricopa-Stanfield Irrigation & Drainage District ("MSIDD"), New Magma Irrigation and Drainage District ("NMIDD"), Queen Creek Irrigation District ("QCID"), and San Carlos Irrigation and Drainage District ("SCIDD") (collectively "Districts") regarding the Bureau of Reclamation's ("Reclamation") Notice of Intent to Prepare an Environmental Impact Statement and Notice to Solicit Comments and Hold Scoping Meetings on the Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead ("Post-2026 Guidelines"), under Federal Register Notice 88 FR 39455 ("Notice").

The Central Arizona Project ("CAP") has long been an essential source of irrigation water for agriculture in the Districts, comprising more than 260,000 acres located principally in Pinal County, Arizona. The Districts are the primary users of the CAP Agricultural Settlement Pool ("Ag Pool") dedicated to agricultural users who relinquished long-term subcontracts and allocations of CAP Non-Indian Agricultural ("NIA") Priority water to help facilitate Indian water rights settlements and resolve CAP repayment issues in connection with the Arizona Water Settlements Act of 2004 and underlying settlement agreements. CAP water delivered to the Districts helps sustain some of the most productive agriculture in the Nation. For example, a December 2018 study conducted by the University of Arizona found that, relative to all U.S. counties, Pinal County ranks in the top 2% for total value of agricultural sales, the top 1% for animal product sales, the top 1% for milk sales, the top 3%

for total crop sales, and the top 7% for vegetable, fruit, and nut production.[1] Future access to CAP water is crucial for the long-term viability of agriculture in the Districts, which is a cornerstone of the regional economy and a bulwark against food security issues.

The Districts are among the water users impacted earliest and most dramatically by operations under the current 2007 Interim Guidelines and Drought Contingency Plan ("DCP"). The Districts are keenly aware of the challenges of balancing the needs of water users and protection of the Colorado River system, and appreciate the opportunity to offer the following comments to aid Reclamation in developing the Post-2026 Guidelines.

1. Shortage Reductions

Under the 2007 Interim Guidelines and DCP, Arizona overwhelmingly bears delivery reductions, including nearly all reductions until Lake Mead reaches the lowest elevation tiers. In the years since DCP took effect, however, Lower Basin users faced the need to conserve significant volumes in addition to Arizona's mandatory reductions to help prevent Lake Mead declining to critical elevations. Thus, relying on reducing deliveries to Arizona until lower Lake Mead elevations has proved ineffective to protect the Colorado River system under hydrologic conditions like those experienced after 2019.

Merely extending the existing framework to expand reduction volumes and shortage tiers borne by Arizona is not a viable solution. Meaningfully increasing shortages for Arizona would cause irreparable harm while offering uncertain prospects for success. Rather, experience under the 2007 Interim Guidelines and DCP shows that protecting the system requires greater cooperation among all Lower Basin users in sharing delivery reductions. To the extent that more Lower Basin delivery reductions are a necessary element of the Post-2026 Guidelines, those reductions should be spread more equitably among Lower Basin states across all tiers to increase the chances of achieving their intended purpose. The Districts also urge Reclamation to consider allocating losses proportionately among entitlement holders, which would be a fair and rational method to reduce the structural deficit and encourage efficient water use practices.

In addition to the method of imposing reduction volumes, Reclamation should consider alternatives to the existing tier framework. Currently, tiers act as stark cliffs by which inches of projected elevation affect hundreds of thousands of acre-feet of water, and for some users mean the difference between a full supply or no supply. The Districts encourage Reclamation to evaluate whether adopting more incremental reductions across a broader range of elevation tiers could achieve protection goals, while also enabling more water users to have access to at least some supply more often than the current framework allows.

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[1] Ashley Kerna Bickel et al., Contribution of On-Farm Agriculture and Agribusiness to the Pinal County Economy (2018).

2. Reservoir Operations

The Districts believe that continuing to operate Lake Powell and Lake Mead in a coordinated manner that balances reservoir contents to the extent feasible is imperative for the Post-2026 Guidelines. Releases from Lake Powell effectively serve as the sole source of inflows to Lake Mead, and limiting those releases can lead to catastrophic declines in Lake Mead's elevation that Reclamation and Lower Basin users cannot reverse by delivery reductions and conservation.

The Districts also appreciate the need to protect elevations in Lake Powell for the overall health of the Colorado River system, continued deliveries of water to the Lower Basin, and generation of hydropower on which many of the Districts rely to produce and distribute irrigation water. A more holistic operational strategy for the Colorado River system that accounts for storage contents in other Colorado River Storage Project reservoirs may be more effective than an approach focusing primarily on adjusting releases from Lake Powell to Lake Mead.

3. Voluntary Conservation

Despite the sophisticated modeling tools available today, projecting actual future conditions with precision remains virtually impossible, especially over a period of multiple years or decades. The Districts recognize that modeling is a useful tool to help evaluate potential future risk, but urge Reclamation to temper expectations as to the predictive value of models for the post-2026 period with respect to determining any new mandatory reductions in the Post-2026 Guidelines.

Although mandatory reductions under the 2007 Interim Guidelines and DCP were insufficient to protect the system during the last few years, the flexibility afforded water users to voluntarily conserve water has proved effective. The Districts were early participants in voluntary conservation efforts through forbearance agreements with Central Arizona Water Conservation District, which helped sustain Lake Mead elevations above shortage tiers starting in 2014. Voluntary conservation by Lower Basin users has been essential in preventing Lake Mead from declining to critically low elevations during the Interim Period.

Adopting a perfect set of shortage tiers and reduction volumes that mitigates risk during the post-2026 period is not a realistic goal. Rather than overestimating reductions required to protect the system, however, the Districts contend that Reclamation should set a baseline that allows reasonable water deliveries over a broad range of elevations, and preserve programs that allow conservation by water users to address immediate term water level declines that may occur at times during the post-2026 period.

Please do not hesitate to contact us if you have any questions.

Very truly yours,

Salmon, Lewis & Weldon, P.L.C.

By 

Daniel B. Jones
Paul R. Orme

MUNGER, TOLLES & OLSON LLP
560 MISSION STREET
SAN FRANCISCO, CALIFORNIA 94105-2907
TELEPHONE (415) 512-4000
FACSIMILE (415) 512-4077

August 15, 2023

Writer's Direct Contact
(415) 512-4066
(415) 644-6966 FAX
Ben.Horwich@mto.com

VIA ELECTRONIC MAIL

United States Bureau of Reclamation
Attn: Post-2026 Colorado River Operations
crbpost2026@usbr.gov

Re: Environmental Impact Statement on the Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead

Yuma County, Arizona, is a nationally significant agricultural community at the far southern end of the Colorado River. Because Yuma farmers rely on Colorado River water to grow the majority of America's winter leafy greens and a wide variety of other valuable agricultural products, they have a deep interest in the post-2026 operational plans for the River. I therefore write on behalf of several Yuma-area irrigation districts to comment on the scope of the Bureau of Reclamation's evaluation of post-2026 plans for the River.

I represent four of Yuma's five irrigation districts: Wellton-Mohawk Irrigation and Drainage District (WMIDD), Yuma Mesa Irrigation and Drainage District, Yuma Irrigation District, and North Gila Valley Irrigation and Drainage District (collectively, the "Districts"). The Districts receive Colorado River water almost entirely under third-priority contracts with the United States Bureau of Reclamation (the "Bureau"), and they supply it to agricultural (and in some instances, domestic) users within their service areas. Despite the tenure and legal clarity of those water rights, they have been threatened by alternatives the Bureau has evaluated for near-term operations and by wider negotiations over the River's water. The Districts therefore have a substantial interest in the scope of the Bureau's evaluation of plans for the post-2026 future of the River.

There is no agricultural region within the United States that can replace Yuma, especially in the winter, when much of the Nation is subject to freezing, frost, mildew, or other unsuitable conditions. Replacement of Yuma vegetables with imported products would have untold consequences for the Nation's trade balances, employment rates, carbon emissions, and food security and safety. We submit these comments on the scope of the Bureau's analysis in the hope that the Bureau will remember that Yuma feeds the Nation.

I. The Bureau must conduct an equitable, transparent, and comprehensive process that abides by applicable Federal procedural law.

A. The Bureau must ensure that its administrative process is equitable and transparent. Stakeholders have not been represented equally in discussions over the use of Colorado River water. Some groups have the ear of sympathetic government officials, while others struggle to receive an audience. Some with low-priority water rights are invited into closed-door negotiations, while others are excluded even as their senior rights are debated. And some are asked to sacrifice water used for the benefit of all, while others store vast quantities of under-utilized water.

It can be difficult for state representatives to properly represent the disparate interests of all users within their States. The Bureau must ensure full input from major water users with compelling and federally protected interests, such as agricultural and military users in the Yuma area. When stakeholders cannot participate in important discussions, they must be apprised of what discussions have occurred, what policies have been developed, and what actions will be taken—such that all entities have notice and an opportunity to be heard.

At the same time, discussions among appropriate groups of stakeholders are an important avenue to finding sustainable solutions for managing the River's limited resources. Indeed, the best solutions—or key parts of them—may not be within the Bureau's power to adopt through its administrative processes. These comments necessarily focus on the Bureau's process and the limits of its authority. But the Districts are committed to cooperating with other parties and continuing to explore solutions that lie outside the Bureau's control. Clear messages from the Bureau are an essential foundation for those broader discussions because they offer parties a shared starting point from which to negotiate and develop better approaches.

B. The scope of the Bureau's analysis should not be constrained by the scope of prior analyses, nor should it be limited to the Lower Basin when the goal is a sustainable River system as a whole.

Prior analyses should not limit the scope of the current proceedings. For example, Alternative 1 and Alternative 2 from the Draft Supplemental Environmental Impact Statement (DSEIS) for Near-term Colorado River Operations released in April 2023 (and later withdrawn) should not inform the current process. Additionally, although the scoping process and operating experience under the 2007 Colorado River Interim Guidelines and the 2019

Colorado River Drought Contingency Plan should inform the development of post-2026 plans, the Bureau's post-2026 analysis should not be limited to that scope, as these agreements will no longer be in place in 2026. Finally, the existing Colorado River Simulation System modeling cannot drive development of alternatives alone.

At the broadest level, the Bureau's plan and analysis should include actions in the Upper Basin and Mexico as well as the Lower Basin. For example, the evaluation of potential Upper Basin demand management programs should inform the development of alternatives for post-2026 operations. More generally, the process for determining the post-2026 plan must involve all stakeholders, including interests in the Upper Basin, the Department of State and Mexico, the Tribes, and major water users throughout the Basin. While we recognize that negotiations with Mexico may not be within the Bureau's control, we encourage the use of the same processes that have previously led to the successful development of Minutes with Mexico.

C. In preparing an environmental impact statement (EIS) for post-2026 operations, the Bureau must comply with the Administrative Procedure Act ("APA"), 5 U.S.C. §§ 701 *et seq*. The Bureau may not unlawfully withhold or unreasonably delay mandatory acts; cannot act in a manner contrary to law; must not be arbitrary or capricious in making discretionary decisions; and must have substantial evidence for any fact-based decisions. *Id.* § 706.

The Bureau must also ensure that its processes satisfy the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321 *et seq*. NEPA requires the Bureau to analyze the direct and indirect effects of a decision of this magnitude in an EIS with reasonable specificity. *See* 40 C.F.R. § 1508.1(g) (discussing direct and indirect effects). The Ninth Circuit has repeatedly insisted that "general statements" about future impacts do not satisfy NEPA. *Or. Nat. Res. Council Fund v. Brong*, 492 F.3d 1120, 1134 (9th Cir. 2007). Thus, an EIS for an oil development project that failed to analyze the carbon consequences of increasing foreign oil consumption by depressing oil prices did not satisfy NEPA. *Ctr. for Biological Diversity v. Bernhardt*, 982 F.3d 723, 740 (9th Cir. 2020). The governing regulations specifically require that changes to land use be considered among other indirect effects: "Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems." 40 C.F.R. § 1508.1(g)(2).

Thus, any EIS concerning restrictions on Colorado River water usage must analyze environmental impacts *at the level of the specific users denied water*. Under

present circumstances, it will not suffice to note, as the agency erroneously did in *Center for Biological Diversity*, that usage of a resource might generally increase or decrease. 982 F.3d at 722. Rather, the agency must determine the impacts of that increase or decrease, including how people who depend directly or indirectly on water from the Colorado River will foreseeably substitute for its loss—especially where changes in land use will result. That starts with clearly identifying where, precisely, reductions in water usage will occur. The Bureau must be candid about these reductions to allow the public and the Bureau itself to meaningfully evaluate their impacts. Such specificity is critical because those impacts vary across different users, both in Arizona and across the Lower Basin. The environmental impacts of sustaining or ending Yuma's high-efficiency agricultural production differ markedly from, for example, the environmental impacts of altering water usage in high-carbon-usage suburbs or water-inefficient agriculture elsewhere in the Basin. The DSEIS failed to analyze these differences, hiding behind averages, broad-brush assumptions, and a refusal to identify how water would actually be distributed under any operational plan. The Bureau's post-2026 analysis must avoid those errors.

NEPA also requires the Bureau to analyze the environmental justice impacts of its alternatives. The DSEIS had significant gaps in this regard. In particular, the Bureau's post-2026 analysis should analyze the impacts on rural communities of reduced federal hydropower generation and any rate increases that result from higher hydropower prices or substitute power sources. Hoover, Parker-Davis, and Colorado River Storage Project hydropower ratepayers contribute significant revenue to the Lower Colorado River Basin Development Fund and Upper Colorado River Basin Fund to cover important operational and non-power Bureau programs and costs. This includes aid to irrigation, environmental, and endangered species recovery programs, the Colorado River Salinity Control Program, and others, as well as operations and maintenance costs necessary to support the multiple benefits of Bureau dams and facilities. Although hydropower customers may be able to absorb these annual expenses in normal water years, continuing to require them to pay for these programs while confronting the massive additional power replacement expenses due to extreme drought conditions and difficult power market conditions creates a significant hardship. In its environmental justice analysis, the Bureau should examine the effects on designated environmental justice communities from decreased electric reliability and access to affordable electricity. The Bureau should also evaluate the impacts of reduced funding for the Basin Funds.

II. The Bureau's proposed post-2026 plans, and the supporting environmental analysis, must follow the Law of the River.

The communities along the Colorado River rely on the Bureau for its leadership, policymaking experience, technical expertise, and commitment to the Nation. We also rely on the Bureau to follow federal law and the water delivery contracts already signed by the United States. This "Law of the River" encodes the priority system, which the Bureau lacks authority to alter within the current process. Reconsideration of the priority system is necessarily outside of the scope of the post-2026 process absent intervention from Congress or the Supreme Court. The alternatives the Bureau develops for consideration in the post-2026 process must all comply with the priority system. And proper application of the priority system—to determine how water deliveries may change in the future—is vital to correctly evaluating the impacts of those alternatives for post-2026 operations.

A. The priority system for apportioning Colorado River water in the Lower Basin works as follows: The Bureau, on behalf of the Secretary of the Interior, first satisfies present perfected rights ("PPR") without regard to state lines. *Arizona v. California*, 376 U.S. 340, 342 (1964); 43 U.S.C. § 1521; *Arizona v. California*, 547 U.S. 150, 155 (2006). The Bureau then satisfies non-PPR users with contract dates prior to 1968 ("middle-priority users") before satisfying post-1968 users, as stated in the Colorado River Basin Project Act ("CRBPA"). 43 U.S.C. § 1521(b). The CRBPA makes clear that the Bureau has a mandatory duty to satisfy the Districts' entitlements—which date prior to 1968—before it can deliver water to any users with post-1968 contract dates. All parties have long recognized that water is allocated in this way. *See, e.g.*, Director's Shortage Sharing Workgroup Recommendation, October 24, 2006 at 2 (prepared by Arizona Department of Water Resources workgroup and recognizing that users at Arizona Priority 4 and lower are reduced before reducing users at Arizona Priority 3).

This priority system is not an accident. Rather, it is a foundational political compromise that reflects a long-term bargain: Higher priority users such as the Districts receive a relatively steady supply of water, but in years of abundant water cannot receive more than their contractual entitlement. Arizona junior-priority users—Arizona Priority 4 and lower—receive a variable supply of water (potentially nothing in years of low flows) but enjoy the excess of Arizona's allocation in years of higher flows. Involuntary cuts out of order force higher priority users to bear the burden of reduced deliveries in bad years, while they receive none of the benefits in good years.

Users have acted in line with that bargain, and so enormous reliance interests are at stake, for which the Bureau's analysis must account. Under this bargain, for example, Arizona Priority 4 users have stored large amounts of excess water underground, in federal reservoirs using the Intentionally Created Surplus ("ICS") system, and elsewhere—water that higher-priority users such as the Districts did not use. That conservation by Arizona Priority 4 users is responsible water use that the Districts support. And under that bargain, users in the Districts have invested—and continue to invest every year—in efficiency at considerable cost, knowing that operating within their contractual entitlements and maximizing yields in a drier ecosystem contribute to the long-term viability of the River system. Indeed, due to the extraordinary efforts of their users, the Districts under-run their entitlements year after year.

B. Several points important to the scope of the Bureau's analysis flow from that law, history, and practice. *First*, all parties concerned have clearly relied upon the law as it has stood for decades. By following that law, the Bureau will not only fulfill its APA § 706(1) obligations, but also respect those multi-billion-dollar reliance interests that underpin our Nation's food system. Indeed, even if the priority system were purely a creature of the Bureau's administrative powers, the Bureau would need exceedingly persuasive justifications for departing from that system. *See, e.g.*, *Smiley v. Citibank (S. Dakota), N.A.*, 517 U.S. 735, 742 (1996) (citing *United States v. Penn. Indus. Chem. Corp.,* 411 U.S. 655, 670–675 (1973); *NLRB v. Bell Aerospace Co.,* 416 U.S. 267, 295 (1974)).

Second, the Bureau cannot arbitrarily assume that any cuts in water usage can be applied based on recent levels of consumption (as the DSEIS modeled) rather than based on contractual levels of entitlement (as the post-2026 EIS should). The baselines set in law are the property or contractual entitlements held by water users, not their actual usage in any given year. Actual usage is not an equitable baseline because it is the product of different practices for different users. For example, consumptive usage in the Districts is low because of investments in efficiency technology. It would be perverse to ignore those investments by adopting principles under which the Districts would have been better off engaging in profligate water use to set a high baseline.

Third, the Bureau should be sensitive to the reality that, in a priority-based system, conservation by junior-priority users *is possible because of* conservation by higher-priority users such as those in the Districts. Junior-priority users in Arizona have been rightly lauded for creating important stores of water underground and elsewhere. But that conservation would not be possible had the Districts not passed

along their unused entitlements to junior users through many of the same conservation measure for which users get credit elsewhere—extraordinary management practices in which the Districts are not obligated to engage, but which reduce their consumptive use and leave more water for others. That dynamic runs through many of the decisions facing the Bureau; for example, we discuss it below in connection with the ICS system.

Fourth, to the extent the priority system leaves the Bureau discretion in apportioning water—and we believe it has very little—the Bureau must have some reasoned basis for exercising that discretion. For example, it would be plainly arbitrary and unreasoned for the Bureau to apportion water to users that can obtain other sources of water or conserve (or have forgone opportunities to do so). Thus, to the extent that the Bureau expects to exercise discretion, the scope of its analysis for post-2026 operations must include an evaluation and disclosure to the public of which users might receive a favorable exercise of that discretion, why, and with what environmental effects.

C. One area in which the Bureau may have some limited discretion is in apportioning water to middle-priority users when insufficient water is available to fill all water orders, even after reducing junior-priority users' deliveries to zero. The Bureau must apportion that water equitably and consistently with the larger legal framework. This is a federal function, and is not subject to approval by State legislatures. *See* 43 U.S.C. § 617c (providing for contracts directly between the Bureau and water users). Because that apportionment will affect the distribution of water within the Basin, the Bureau must articulate principles now that will allow it to evaluate the actual impacts of its plans for post-2026 operations.

To our knowledge, no construct currently exists for apportioning limited water to middle-priority users—a group that crosses state lines, but whose rights are limited by state apportionments. Unlike PPRs, which predated federal appropriation of the Colorado River's waters, middle-priority uses arise as a result of federal contracts and within state apportionments. The CRBPA supports apportioning water to middle-priority users in each State in the familiar 4.4/2.8/0.3 proportion when it identifies those users across States as "users of the same character," placing all middle-priority users on equal footing. 43 U.S.C. § 1521(b). Contractual language supports understanding the Districts' contracts as arising within Arizona's apportionment, and thus likewise supports apportioning water to middle-priority users proportionately across state lines.

Conversely, there is no support for other methods, such as date-based allocation within middle-priority users. No affirmative provision exists in the

relevant statutes or court decrees for such a system. Such a system would necessarily ignore state apportionments. And it would be in extreme tension with Congress's consideration and *rejection* in the Boulder Canyon Project Act of making middle-priority contract rights "subject to the rights of prior appropriators." *See Arizona v. California*, 373 U.S. at 580.

III. Operating within the Law of the River, the Bureau should expand the legal and practical tools available for finding solutions for water shortages.

Within the Law of the River, the Bureau has considerable room to innovate to address the shortages of Colorado River water. Expanding the legal and practical tools available to the Bureau and to users may in some instances require separate administrative proceedings. But such tools should be available for all or most of the post-2026 period under examination in the EIS. Accordingly, the Bureau should—indeed, must—consider how those are likely to be used to improve management of Colorado River water and mitigate environmental impacts from shortages. And in many instances, sound policy development demands that the Bureau commence those processes now, so they can produce better outcomes sooner. The Districts identify and briefly discuss some promising avenues.

A. The Bureau should analyze post-2026 operations by assuming a revised set of regulations and processes governing the Intentionally Created Surplus ("ICS") system. However well-intentioned, the existing framework is prone to abuse and manipulation. Full revision of the ICS system may require separate proceedings. But if the ICS system is continued under post-2026 operations, the Bureau should reform it in ways that better align with the priority system and sound policy.

First, ICS should be administered in alignment with the Law of the River so as not to disrupt the priority system. The rules developed in the post-2026 process (and the corresponding analysis in the EIS) should ensure that the ICS system does not impact users with rights senior to those of users creating or taking delivery of ICS water. This issue has particular significance in shortage conditions. The Bureau should explicitly state (and analyze the ICS system under the principle) that ICS water retains its priority level for withdrawals: A water user that has created ICS water cannot take delivery of that ICS water in a given year unless all more senior users receive full deliveries of water in that year.

Second, the Bureau should consider an alternative under which it winds down the ICS system after 2026. The Districts recognize that the ICS system has

protected critical elevations in Lake Mead during an interim period. But because the system is built around ICS creators retaining rights in "conserved" water, rather than engaging in true conservation that permanently reduces the burden on the River system, the ICS system cannot be a path to living within the declining volume of the River indefinitely. At the very least, the limits on each State's creation and storage of ICS should not be increased. ICS water should be administered to benefit the system: A portion should be treated as system water, and ICS water should be charged evaporation losses annually at a minimum rate of six percent from creation to withdrawal (or depletion). Modeling such approaches would provide valuable insight into the relative contribution that the ICS system actually makes toward long-term stability of the River system.

Third, the Bureau should examine equitable participation in the ICS system. The most natural use of the ICS system would entail participation by various users within a State in proportion to their entitlement within the State. But in practice, certain users claim the benefit of an outsized share of their States' ICS space. Ensuring broad and equitable participation would tend to promote confidence and responsible use of the ICS system.

Fourth, the Bureau should audit the conservation activities users employ to create ICS, including the use of alternate sources of water to create ICS surplus, the methods otherwise used to conserve water, and the length of time such activities are deemed to conserve water. The system as it currently functions leads to arbitrary outcomes in ways that the Bureau should correct. Making these corrections may affect how the ICS system interacts with other measures to promote the long-term stability of the River system. Accordingly, they should be considered among the alternatives analyzed in the EIS.

The ICS system draws arbitrary lines between eligible and ineligible conservation measures. Some efficiency improvements implemented prior to 2006 that must be re-implemented every year have nonetheless been treated as categorically ineligible. For example, one of WMIDD's applications for ICS water arising from land retired from agricultural use was denied because that land was retired prior to 2006, and thus the water was considered "unused entitlement" rather than ICS-eligible savings—even though WMIDD could turn a profit by returning that land to production tomorrow. But an urban water district is eligible for ICS credit for homeowners who implemented low-flow technology prior to 2006. It appears, therefore, that the year of implementation constrains only some users arbitrarily, when nothing distinguishes next year's water savings from the retired agricultural land and next year's water savings from the low-flow showerhead.

This issue is especially salient to the Districts because their farmers implement many conservation measures annually—at high cost—and are frustrated to see that others receive credit for annual improvements while they do not. Those measures include laser-leveling fields at least once annually for more efficient water application; implementing tiered pricing schedules to discourage excess diversions; requiring costly sprinkler irrigation rather than the more cost-efficient "subbing" for germination; requiring growers to fight pests and disease through methods that are more expensive than traditional flooding of fields; and paying for furrow compression several times annually. The Districts struggle to understand why they have been told that these measures do not create ICS—while other users create ICS with analogous measures.

That arbitrary result is compounded by the fact that the ICS system is biased in favor of recognizing ICS creation by the most junior users. When a senior water user does not use all of its entitlement, it may be denied ICS credit on the theory that it was not engaged in conservation—and yet that unused entitlement is made available to junior users all the same. But many more junior users have rights to the remaining state apportionment of water, and typically have the option to take delivery of such water for surface or underground storage. If that junior user declines delivery of the water for storage, that user can claim ICS credit for simple inaction. The overall effect is that a senior user that engages in conservation activity may be denied ICS credit, but a junior user *not* engaged in conservation activity will obtain ICS credit for the same water.

The Bureau should consider reform of the ICS program to be within the scope of its post-2026 process. The Bureau should proceed with winding down the program or reforming it to make it more equitable, less arbitrary, and better adapted to the purposes of post-2026 operations.

B. All recognize that, at some point in the post-2026 period, the Bureau will need to reduce water deliveries below the level users prefer. Although the priority system answers many questions about how those reductions will occur, additional avenues for reduction exist. One underutilized but legally required tool for careful distribution of water is the suite of processes under 43 C.F.R. Part 417, which requires the Bureau to ascertain every year that each delivery of Colorado River water to "every public or private organization … in Arizona, California, or Nevada which … has a valid contract for the delivery of Colorado River water" "will not exceed those reasonably required for beneficial use," according to a number of factors. *Id.* §§ 417.1-417.3; *see also id.* § 417.5 (governing deliveries to Tribes).

Part 417 applies to agricultural and municipal areas alike. To the extent the Bureau has exempted municipal and industrial users pursuant to 43 C.F.R. 417.1(b), those exemptions can no longer be justified given the scale of municipal and industrial water use and the challenges facing the River. Moreover, the Bureau has long recognized that Part 417 applies to both PPRs and junior-priority users. *See, e.g.*, Federal Defendants' Brief Regarding Remedy for 43 C.F.R. Part 417 Breach Found by Court on Motion for Preliminary Injunction at 1, *Imperial Irrigation District v. United States*, No. 03-cv-00069 (S.D. Cal. 2003) (agreeing with court's finding that Part 417 applied to Imperial Irrigation District's PPR entitlements).

Part 417 uses mandatory language: The Bureau must determine that deliveries "*will* not exceed those reasonably required for beneficial use." 43 C.F.R. § 417.2 (emphasis added). In other words, Part 417 imposes a mandatory duty upon the Bureau. Thus, for example, the Bureau cannot refuse legal deliveries to junior users without first making any appropriate beneficial use reductions to more senior users.

This process must be implemented fairly and equitably. Users (including those in the Districts) who have invested in efficiency improvement over time need not fear such a process, while fair implementation of Part 417 will encourage appropriate measures by other users. As part of that equitable implementation, the Bureau must apply these processes to agricultural and municipal users alike. The Bureau should consider Part 417 processes (and, more importantly, their outcomes) to be well within the scope of analysis of post-2026 operations.

C. Reductions in water usage can be painful or devastating for communities that rely on Colorado River water. One way for the Bureau to reduce this impact is to prioritize compensated, voluntary reductions where possible. Thus, the Bureau should include within the scope of its post-2026 process assessing efficient systems to allocate and compensate for reductions in water usage.

Reductions work best where they are voluntary—and voluntary reductions happen most often when they are compensated. Growers within irrigation districts can best determine when foregoing their contractual entitlement in favor of compensation is advisable, as well as which crops to grow when and where. Local growers will be the first to understand the value of their crops and the market preference for conservation or vegetables. Conservation fiats lack the flexibility to achieve this efficient allocation. Existing programs demonstrate that this conservation format is practicable and can secure strong participation from entitlement holders. The "500+ Plan" and the "1a" and "1b" and "2" plans of the

Lower Colorado River Basin System Conservation and Efficiency Program funded by the Inflation Reduction Act offer a roadmap for incentivized, voluntary compensation programs.

These programs are also fundamentally fair. Where users in the Lower Basin bear the burden of conservation to stabilize the Colorado River system, compensation is both just and necessary. Compensation is fairly offered where entitlement holders forgo their contractual right to divert Colorado River water and conserve voluntarily. Compensation for these voluntary reductions encourages conservation and spurs efficient allocation of water usage in agricultural regions and beyond.

More broadly, expanded market-based systems for reallocating water within the Lower Basin have significant potential to improve outcomes. After all, when one person has something valuable that another person wants, the accepted solution is a purchase and sale in a free market—not an involuntary transfer without compensation. Such markets for Colorado River water exist in limited form today, including established programs for transfers between certain agricultural and urban users within California. The Bureau has recently entertained such a transfer within Arizona in the Queen Creek matter. Although such transfers can raise policy issues, they may be a promising avenue for reallocating water use in ways that the participants find advantageous, yet which the Bureau would otherwise have no insight into or authority to impose on its own. The Bureau could play a valuable role in facilitating such markets—for example, by ensuring that market forces set prices that will maximize participation in voluntary arrangements.

D. In setting annual policy, the Bureau must balance fidelity to natural systems with users' need for predictability. Currently, the Bureau sets its Annual Operating Plans based on near-term modeling of the actual year-to-year flow of the River, and it does not make changes mid-year to the volumes allocated for delivery to users. The Districts strongly support continuing to operate the River system in this way. Mid-year changes in operating plans based on River changes are devastating to communities (such as those in the Districts) that make agricultural plans, and corresponding contractual commitments, many months ahead of time. At the same time, the Bureau should, in setting annual plans, flexibly account for current hydrology and develop those plans based upon the actual flow of the River, rather than on a set, perceived annual volume of water.

E. In seeking to maximize available water, the Bureau should consider whether resources exist to recycle or reclaim water. For example, graywater

programs in urban areas can be useful tools for dramatically reducing the usage of Colorado River water on non-functional turf. And the Yuma Desalting Plant offers an enormous opportunity to reclaim water—perhaps even in a carbon-neutral way, given the availability of renewable energy in the desert Southwest. The Districts should be included in any conversation about providing reclamation or recycling credits to users.

F. Finally, the Bureau should take this opportunity to revise some of the logistical and bureaucratic hurdles to increased conservation. Most obviously, the Bureau should proceed immediately to articulate how it will apply the Law of the River in times of water shortages. The lack of clear, precise, public, legally valid rules for allocation of water in times of shortage is a serious impediment to planning within the Basin and evaluating the impacts (environmental and otherwise) of reduced deliveries. A significant failing of the original DSEIS was its silence on such fundamental issues; because the DSEIS was deliberately ambiguous about those issues, it failed to actually analyze the true impacts of the Bureau's operational proposals. Neither the Bureau nor stakeholders can afford to repeat that experience.

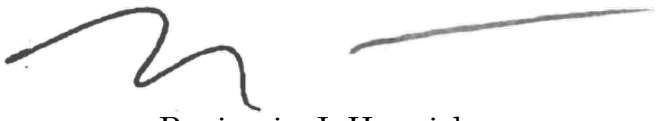
Another issue of this kind—specific to on-River users with consumptive use entitlements, such as the Districts—concerns how reductions will be administered in practice. Currently, the Bureau determines the Districts' consumptive use after the fact by mathematically netting out their diversions, measured return flows, and Bureau-calculated unmeasured return flows. That approach can be undesirably unpredictable, but it has proven workable in practice if the Districts leave a margin of error between their anticipated consumptive use and their true entitlements. That approach will become untenable if the Districts are told to reduce consumptive use significantly below their true entitlements, but can only control the amount of their diversions. Reconciling these two measurements in a predictable way may allow users to operate more effectively within reductions from their full contractual entitlements. Resolving this accounting issue is relevant to the scope of the Bureau's post-2026 analysis because the Bureau's rules themselves affect how users will respond to reduced flows under different alternatives.

* * *

Our generation has just one opportunity to get the future of the Colorado River right—to build a sustainable, equitable, sensible system that supports our communities, ensures our national security, preserves an extraordinary ecosystem, and feeds our Nation. But that task must proceed within the legal confines laid down by generations previous. We hope that, in doing so, the Bureau considers the

above comments—and protects the agricultural communities, including Yuma, that feed our Nation affordably and efficiently.

Yours truly,



Benjamin J. Horwich

cc: The Honorable Kyrsten Sinema
3333 East Camelback Road, Suite 200
Phoenix, AZ 85018-2324

The Honorable Mark Kelly
2201 East Camelback Road, Suite 115
Phoenix, AZ 85016-3446

The Honorable Camille Calimlim Touton
Commissioner
Bureau of Reclamation
1849 C. Street, N.W.
Washington, D.C. 20240-0001

Michael Brain
Assistant Secretary for Water and Science
Department of the Interior
1849 C. Street, N.W.
Washington, D.C. 20240-0001

Wayne Pullan, Regional Director
Marcie Bainson, Special Assistant to UCB Regional Director
Genevieve Johnson, Reclamation 2007 Interim Guidelines SEIS Project Manager
Upper Colorado Basin Regional Office
Bureau of Reclamation
125 South State Street, Room 8100
Salt Lake City, UT 84138-1147

Jacklynn Gould, Regional Director
Fernando Castro-Alvarez, Regional Liaison
Lower Colorado Basin Regional Office
United States Bureau of Reclamation
P.O. Box 61470
Boulder City, NV 89006-1470

Michael Norris, Area Manager
Yuma Area Office
United States Bureau of Reclamation
7301 Calle Agua Salada
Yuma, AZ 85364-9763

Tom Buschatzke, Director
Arizona Department of Water Resources
1110 W Washington St, Ste 310
Phoenix, AZ 85007

Wellton-Mohawk Irrigation and Drainage District
Robbie Woodhouse, Board President, *hrking00@aol.com*
Elston Grubaugh, Manager, *egrubaugh@wmidd.org*

Yuma Mesa Irrigation and Drainage District
James Weddle, Board President, *hayonewf@gmail.com*
Ronald D. Turner, Manager, *rturner@ymidd.org*

Yuma Irrigation District
Mark Smith, Board President, *msmith@smithfarmsyuma.com*
Rex Green, Manager, *yid@mindspring.com*

North Gila Valley Irrigation and Drainage District
Larry Ott, Board President, *larry@gilavalleyfarms.com*

Wade Noble
Meghan Scott
Noble Law Office
1405 W. 16th St. Ste. A
Yuma, AZ 85364

Jason Moyes
Moyes Sellers & Hendricks Ltd.
1850 North Central Ave. Ste 1100
Phoenix, AZ 85004

Ronald L. Olson
Munger, Tolles & Olson LLP
350 South Grand Ave., Fiftieth Floor
Los Angeles, CA 90071-3426

Patrick J. Cafferty
Matthew W. Linsley
Clare Kane
Munger, Tolles & Olson LLP
560 Mission St., Twenty-Seventh Floor
San Francisco, CA 94105-3089

The Colorado River Basin States Representatives of Arizona, California, and Nevada

August 15, 2023

The Honorable Camille Touton
Commissioner
U.S. Bureau of Reclamation
1849 C Street, NW
Washington, D.C. 20240

Sent via Electronic Mail

Dear Commissioner Touton:

The undersigned Governors' Representatives of the States of Arizona, California, and Nevada (collectively, the Lower Division States) respectfully submit the following comments in response to the Bureau of Reclamation's *Notice of Intent To Prepare an Environmental Impact Statement and Notice To Solicit Comments and Hold Public Scoping Meetings on the Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead*, Fed. Reg. Vol. 88, No. 116, p. 39455 (June 16, 2023). We appreciate this opportunity to provide comments on the scope of issues that should be considered in the upcoming environmental impact statement for post-2026 operations for Lake Powell and Lake Mead (EIS or Post-2026 EIS).

The Lower Division States have a unique interest in the management of the Colorado River based on the Compact, laws and agreements that have provided the framework for management of the Colorado River System for over a century. In particular, the past decades show that collaboration among the Secretary, the Basin States, Mexico, the Tribes, water users and NGOs can result in better management of the System and avoid the protracted water supply uncertainty and other risks associated with litigation. Engagement of the Lower Division States in the development of the Post-2026 EIS will be essential to ensure the effectiveness of the new guidelines. The Lower Division States are committed to working with Reclamation throughout the National Environmental Policy Act (NEPA) process and anticipate developing a Basin States alternative for consideration and evaluation for Post-2026 Operations, as we did in the NEPA process for the 2007 Interim Guidelines.

As acknowledged in the June 16, 2023 notice in the Federal Register, the Colorado River Basin is suffering from a prolonged period of drought and the period from 2000 through the present is estimated to be the second driest period of record. The 2007 Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead (2007 Guidelines) were intended to reduce the risks to Colorado River water users associated with the early years of the drought and the substantial reduction in storage on the Colorado River System. However, as the drought conditions continued, it became clear that additional responsive actions were needed to complement the 2007 Guidelines.

Since adoption of the 2007 Guidelines, the Lower Division States and water users have continued to take action to reduce demands and manage Lake Mead reservoir elevations. By developing partnerships and investing billions of dollars, Lower Division States and waters users conserved and contributed an additional 5.1 million acre-feet of water in Lake Mead through various activities including Intentionally Created Surplus (ICS), system conservation, partnerships with Mexico, and domestic programs. Together these actions have raised the elevation of Lake Mead by 72 feet. The Lower Division States also worked cooperatively with other river partners including the Upper Division States of Colorado, Wyoming, New Mexico and Utah, Reclamation, Mexico, Tribes, and NGOs. Those efforts include the Lower Basin Memorandum of Understanding, the Pilot System Conservation Program, the 500+ plan, projects enabled under Minute 319 and 323 to the Mexican Treaty, and system efficiency projects. The releases from Lake Mead in 2023 are anticipated to be only about 7.7 million acre-feet (maf), the lowest on record, demonstrating the success of the Lower Division States and water user efforts to reduce demands.

The Basin States and the Secretary of the Interior (Secretary) agreed to the federally authorized 2019 Colorado River Basin Drought Contingency Plans (DCP) to advance these efforts. More recently, in 2022, the Department of the Interior, after consultation with the Basin States and Tribes in the Colorado River Basin, took unprecedented emergency action to protect critical elevation and infrastructure in Lake Powell. As a result of these efforts, Lake Mead has remained above critical reservoir elevations. In this context, the Lower Division States offer the following comments:

I. Purpose and Need

The Post-2026 EIS must seek to provide reliability and water-supply certainty to the 40 million people who rely on the Colorado River for their lives and livelihoods. Operations of the two reservoirs must be consistent with the Law of the River and should respond to a wide range of hydrologies, storage conditions, and related elements in the Colorado River System, incorporating effective, flexible mechanisms to protect storage and critical elevations at Lakes Powell and Mead while providing predictable operations on which water users can rely. Most significantly, the Post-2026 operations should seek to address the imbalance between supply and demand on the Colorado River System in order to assure stability into the future.

II. Scope of Post-2026 EIS

As described above, the scope of the Post-2026 EIS should address operations of Lake Powell and Lake Mead, particularly water releases, water deliveries, and conservation associated with those two reservoirs. These concerns will be substantial enough that the scope must be limited if we are to succeed. In particular, the Post-2026 EIS should not revisit the Long-Term Experimental Management Plan or records of decisions for Upper Basin reservoirs above Lake Powell. Reconsultation with the Fish and Wildlife Service regarding the Multi-Species Conservation Program in the Lower Basin must occur simultaneously with the Post-2026 EIS process.

The Lower Division States believe the Law of the River must be the foundation for the Post-2026 Operations. The existing framework also allows for collaboration and consensus which

helps avoid the uncertain outcomes that result from litigation. The Post-2026 EIS must analyze whether alternatives are consistent with the 1922 Colorado River Compact non-depletion obligations and delivery obligations to Mexico. Alternatives should include actions necessary to ensure compliance with such obligations.

It should also incorporate the best available science, incorporating a broad but plausible range of hydrology to address the potential impacts of climate change and to establish guidelines for healthy management of the Colorado River System. Such a robust analysis will be necessary to withstand legal scrutiny. The management of Lake Powell and Lake Mead may depend on reservoir elevations, hydrologic projections, system contents and other factors throughout the Basin. The alternatives considered must incorporate the flexibility and adaptive management necessary to respond to changing conditions while ensuring sufficient certainty for the Basin States and Colorado River water users to manage water supplies.

In particular, the alternatives considered in the Post-2026 EIS should include the following components:

A. Manage Lake Powell and Lake Mead operations to reduce the risk of reaching critical elevations in either reservoir.

The Post-2026 operations must include predictable and easily understood criteria for releases from Lake Powell to Lake Mead. At the same time, the criteria should also include provisions for adaptation to unexpected changes in hydrology. Striking a balance will be critical to reducing the risk of reaching critical elevations in the two reservoirs while providing water users with the certainty necessary to manage water supplies throughout the term of the Post-2026 operations. We must continually improve our modeling framework by incorporating updated science regarding future inflows and demand projections in both the Upper Basin and the Lower Basin. Uncertainty about Upper Division water use makes it highly challenging to estimate depletions and flows and to quantify unmet demands. Upper Division States' diversions, return flows and depletions of Colorado River water must be accounted for to provide a foundational basis for the management of the contents in the Colorado River System. To help reduce the conflicts between the Upper Basin and Lower Basin regarding actions that would impact coordinated reservoir operation since the 2007 Guidelines were adopted, Reclamation should evaluate use of new triggers for releases other than Lake Mead and Lake Powell elevations, such as total system contents. Alternatives should also consider the use of storage in the Colorado River System to support critical elevations at Lake Powell and Lake Mead. Finally, in a parallel process with the Post-2026 EIS, Reclamation should evaluate potential improvements at Glen Canyon Dam that could enhance its operational capacity and ensure that water can safely pass through the dam at low elevations.

B. Address the existing imbalance between available water supplies and demands in the Colorado River Basin.

The overallocation of water supplies has combined with the multi-decadal drought and other effects of climate change to drastically reduce storage in Lake Powell and Lake Mead. In the Upper Basin, variable hydrology impacts water availability each year on a source-by-source basis. Despite voluntary actions involving significant financial investments to reduce demands over the

last twenty years, the Lower Basin is now implementing significant mandatory supply reductions. The Post-2026 EIS must identify the necessary actions to balance the available water supplies and the uses that rely on the Colorado River. While we have collaborated on past interim measures that appeared bold in their time, we are now called upon to ensure that we use no more than is available to ensure that the Colorado River can continue to serve our needs long into the future.

C. Develop storage and conservation programs that maximize voluntary reductions in water use throughout the Basin, including a framework for potential augmentation of Colorado River water supplies.

The Post-2026 EIS should evaluate mechanisms, such as ICS, for voluntary conservation and storage to provide individual contractors and entitlement holders with water supply flexibility and the ability to manage annual demand variability, as well as to protect the system as a whole. While we have voluntarily conserved water through the development of ICS, we must broadly re-evaluate all parameters of the program to ensure that it properly incentivizes conservation while avoiding negative impacts to other water users. Additionally, we have had success with voluntary conservation efforts for the benefit of the system, including the historical volumes proposed in the Lower Basin Plan. We must identify programs that can incentivize voluntary conservation and maximize water efficiencies and technologies across all sectors throughout the Basin. To the extent that financial incentives are included, we must identify a durable funding source. Similarly, the Post-2026 EIS should evaluate various voluntary conservation activities and conserved water volumes within the Upper Division States, together with storage of such water in Lake Powell and recovery when appropriate.

We have long known that in an overallocated system, the surest way to balance limited water supplies with demands is to increase the available supplies. The Post-2026 operations should include a framework with incentives for augmenting Colorado River supplies and implementing exchanges to distribute those augmented supplies efficiently through the system, particularly within the Lower Basin. Augmentation could be developed through binational programs like desalination or through regional programs within the United States. These ideas will not come to fruition without the necessary framework for implementation on the Colorado River.

D. Enhance predictability of mandatory reductions.

Without question, Colorado River users will face mandatory reductions to their water supplies in light of the long-term drought, other effects of climate change, and reservoir elevations. The Post-2026 EIS should define mandatory reductions and evaluate ways to reduce risk associated with those mandatory reductions under variable hydrology. All water users will benefit from additional certainty regarding when reductions will be determined and how those reductions will be distributed, including developing the criteria for operations necessary to protect critical elevations while allowing water users sufficient time to plan for and manage reductions.

E. Surplus Criteria

Although the likelihood of surplus conditions in the Lower Basin is minimal in the future, the Post-2026 EIS should consider alternatives that include criteria for distributing surplus in the Lower Basin.

III. Additional Issues Regarding Alternatives

As mentioned previously, the Basin States intend to develop a consensus alternative for consideration, as we did during the development of the 2007 Guidelines. However, there are outstanding questions as to what will constitute the "No Action Alternative" for purposes of the Post-2026 EIS. In particular, certain provisions of the 2007 Guidelines and DCP related to ICS extend beyond 2026 and should be included in the No Action Alternative. We request that you consult the Basin States for input on the development of the No Action Alternative.

Additionally, alternatives analyzed during the pending NEPA process regarding Near-Term Colorado River Operations should not inform the Post-2026 EIS alternatives. Rather, alternative operational plans for Post-2026 should be informed by the current scoping process and other input from stakeholders during the public process, as well as operating experience under the 2007 Guidelines and the DCP. The Basin States intend to develop an alternative for consideration in the Post-2026 EIS, and will seek to gain consensus support from Tribes in the Colorado River Basin and other stakeholders, as well.

IV. Term

The Post-2026 EIS must evaluate a term that is sufficient to enable investments in new technologies and augmentation programs. However, the term must also be limited to allow water managers to evaluate and respond to climate change, the operational experience gained from implementation of new operations and programs, and other changing circumstances.

V. Engagement

As we have stated before, the unprecedented challenges we face require greater inclusivity and collaboration to achieve lasting solutions. The Lower Division States understand that the success of future operations of the Colorado River system depends on working with water users and others invested in the outcomes of effective Post-2026 operations.

We look forward to continued collaboration with Colorado River Basin Tribes. Successful management of the Colorado River will depend on the support and participation of the Tribes.

Collaboration with Mexico is critical to charting the course of Colorado River through Post-2026 operations. While we recognize that any actions involving deliveries to Mexico will be determined through a separate process involving the International Boundary and Water Commission (IBWC), we expect that process to occur simultaneously and the Post-2026 EIS should consider and evaluate potential future actions to ensure environmental compliance. Additionally, the active and direct participation of the Basin States' representatives in formal meetings with Mexico has also been essential to the development and implementation of Minute Nos. 317, 318, 319, and 323. The direct engagement between the States, the U.S. (including both Interior and the IBWC) and Mexico has consistently demonstrated the path to success.

The Lower Division States also understand the importance of engagement with other stakeholders, including NGOs, interested in the Colorado River. Collaboration and cooperation

among all water users and stakeholders will be essential to achieve success, particularly if Congressional authorization is required.

VI. Reservation of Rights

By providing these comments, 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 guideline. Any failure by the undersigned to address specific aspects of the NOI, 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 NEPA process.

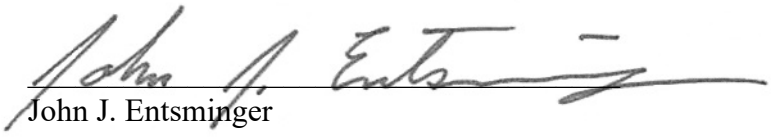
VII. Conclusion

Finally, we reiterate the unique role that the Basin States play in management of the Colorado River. We look forward to continuing our work with Reclamation and Interior, the Tribes, Mexico, the Upper Division States and other stakeholders as we seek to protect the Colorado River system now and in the future.

Respectfully,

Thomas Buschatzke
Governor's Representative
State of Arizona

J.B. Hamby
Governor's Representative
State of California



John J. Entsminger
Governor's Representative
State of Nevada

cc: U.S. Bureau of Reclamation via Electronic Mail – crbpost2026@usbr.gov

LAKE HAVASU CITY Office of Mayor Cal Sheehy

August 15, 2023

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

via Email: crbpost2026@usbr.gov

Re: Comments to Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead

The purpose of this letter is to provide the U.S. Bureau of Reclamation with comments from Lake Havasu City, Arizona, associated with Notice of Intent to Prepare an Environmental Impact Statement and Notice to Solicit Comments on the Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead.

As discovered with the declaration of shortages, the laws and regulations governing the Colorado River are not practical or effective. The new guidelines should establish realistic water supplies and provide opportunities for custom solutions for different users. Operation and management of the Colorado River should minimize the likelihood and severity of future shortages. The post-2026 strategies should highlight supporting conservation efforts for all users. Lastly, an analysis of the current priority of uses of Colorado River water is necessary to provide a clear direction into the future.

Establishing a Realistic Normal Water Supply

The 2007 Interim Guidelines indicate (page 5 of the Record of Decision) through its associated Final Environmental Impact Statement that a "Normal Condition" exists when the Secretary determines that sufficient mainstream water is available to satisfy 7.5 million acre-feet (maf) of annual consumptive use in the Lower Basin Division states (Arizona, California, and Nevada) and a "Shortage Condition" exists when the Secretary determines that insufficient mainstream water is available to satisfy 7.5 maf of annual consumptive use in the Lower Basin Division states.

It is understood that this volume is taken from the 1922 Compact; however, as experienced over the last 24 years of drought, this volume is not accurate. The realized "structural deficit" of water supply over this period warrants a new, more realistic foundation for normal water supply conditions in the 2026 Operational Guidelines. The new volume should be based on 100 plus years of recorded river hydrology, growth (realized and future) in both population served and agricultural uses, and influences such as the current drought.

Minimize the Likelihood and Severity of Future Shortages

Arizona Priority 4 contracts and Nevada have already been impacted by the first two tiers of shortage declarations and the "law of the river," they will do so as shortage declarations continue. These reductions should not lead to the complete collapse of affected interests. An alternative is needed to limit water reductions to contracts that completely reduce Priority 4 contracts to no water deliveries.

A cooperative effort between federal, state, and local users could be made to calculate the tolerance of all contract holders and affected customers to take deep reductions but not eliminate water delivery. It is recommended to conduct models at state and the federal levels to include results of the tolerance limit volumes to determine reaction of the river system hydrology and reservoir capacities. The outcomes of the modeling can help define required reductions with contract priority in mind. For example, the lower priority contracts can be reduced to their tolerance limit and then apply shortages to progressively higher priorities in some equivalent manner impacting all basin states.

The priority system would remain intact, but operationally differ in its interpretation to reduce the severity of water loss to as many water users as possible. Although the 2007 Record of Decision (page 4) refers to the intentionally created surplus, something like the comments above are needed to truly "minimize the likelihood and severity of potential future shortages."

Conservation Opportunities and Incentives for All

To capture all possible water conservation savings in the Lower Colorado River system, the 2026 Operational Guidelines could include various incentives to water contracts to reduce uses, regardless of entitlement size. Currently, there are many local water conservation projects among financially challenged, small entitlement holders that could help reduce diversions from the river. These water saving volumes are relatively small compared to much larger entitlement proposed projects and are rejected from federal funding opportunities. The inclusion of alternative incentives, such as facilitating emergency water leasing agreements between contract holders during severe shortage reductions or to pay for recovery of stored water credits, might allow for those smaller projects to be completed, collectively resulting in a significant water savings.

Shortage sharing should not be burdened on one priority group that could lead to its elimination, but spread among all users. All users of the Colorado River contributed in some way to conserve water and improve water use efficiency. In addition, many cooperative efforts among water contract holders over the past several decades have been developed and implemented to accomplish conservation efforts.

Increased conservation measures can be implemented throughout the system with federal support focused on conservation methods. Federal support would be helpful to assist system users in infrastructure and technology. A multi-pronged approach is needed that includes municipal users, agricultural users, industrial users, and others.

Meaningful Prioritization of Use

The US Department of the Interior should reprioritize the uses of water. The 1928 Boulder Canyon Project Act lists the top four priorities for the purpose of Hoover Dam: flood control, Colorado River navigation improvement, water regulation, and power production. It is unclear why navigation was second priority as commercial navigable trade has not been obtainable with subsequent dam constructions. Renewable energy production in the United States is very important, water regulation, through this legislation, supersedes power generation and as long as water can flow through the dams, this fundamental resource should not be inhibited in the 2026 Operational Guidelines even for the sake of power generation.

We look forward to working collaboratively with you to improve the management and future of the Colorado River. Thank you for your review of our comments. Please feel free to contact my office, 928-453-4141, if you have any questions or require additional information.

Sincerely,

Cal Sheehy
Mayor, Lake Havasu City

MOHAVE COUNTY WATER AUTHORITY

1355 Ramar Road, Suite 6, Bullhead City, AZ 86442
Telephone No. (480) 415-5283

August 15, 2023

Bureau of Reclamation
Department of the Interior
CRB-info@usbr.gov

Re: Response to Notice of Intent to Prepare an Environmental Impact Statement and Notice to Solicit Comments and Hold Public Scoping Meetings on the Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead (FR Doc. 2023-12923)

The Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead were adopted to provide for the coordinated operations of Lake Powell and Lake Mead during low reservoir conditions for an interim period ending in 2026. Valuable operating experience has been acquired during that interim period. System vulnerabilities have also been revealed, which should be analyzed and addressed in the next set of interim guidelines. Modifications to the interim guidelines should be done in as equitable a manner as possible to all parties reliant upon the Colorado River system, while respecting the Law of the River, to the greatest extent possible.

Mohave County Water Authority ("MCWA") is a membership organization of governmental entities located along the mainstem of the Colorado River. Five of its seven members hold an entitlement contract for the use of Colorado River water. These five members are located on or near the accounting surface. MCWA appreciates the opportunity to provide input on the development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead. MCWA offers the following comments for consideration by the Bureau of Reclamation ("BOR") in preparing the Environmental Impact Statement ("EIS") evaluating alternatives for operational guidelines and strategies for the post 2026 ("post-2026") operations.

The 2007 Guidelines, through tier elevations, established conditions when the Secretary would release 7.5-million-acre feet (normal) or less than 7.5-million-acre feet (shortage) to the Lower Basin States. These tiers were modified by the Lower Basin Drought Contingency Plan to adjust the timing and quantity of reductions. The adjusted schedule for reductions was beneficial since it allowed users to absorb shortages in stages. The elevation at which shortages commence should be evaluated as a part of this

EIS process. Adjusting the tier levels upward may be appropriate to ensure sufficient storage for protection of the system to avoid future demands for the creation of exceptionally large quantities of stored water in a short period of time. Water Users should not have to live under a constant specter of draconian cuts down to zero.

The system has not produced sufficient supplies to support delivery of 7.5-million-acre feet of water without delivering stored supplies. A quantity of water greater than 7.5-million-acre feet is necessary in order to deliver that amount feet due to evaporation and other losses in transmission. The impact of assessing delivered water its proportionate share of these types of losses without regard to priority or type of use should be analyzed. A proportionate assessment across all sectors receiving deliveries of water yields an equitable result as all water used is subject to the same system losses. Evaporative and other system losses attributable to deliveries of Mexican Treaty waters should be analyzed as apportioned between both basins, as both basins have an obligation to deliver a portion of the Treaty water.

The possibility of setting minimum deliveries to ensure the health, safety, and general welfare of municipal populations in times of deeper shortages should be evaluated. To the extent possible, Health and Safety Deliveries should respect the current priority system but may not be able to do so in times of deep shortages. This potential issue was considered by the Supreme Court in its 1963 opinion when it expressly declined to address the issues of shortage so as to leave discretion in the Secretary to act. (See Arizona v. California, 373 U.S. 546, 592 (1963) While it is certainly within the Secretary's purview to decline to exercise discretionary powers to address this issue in the Post 2026 Guidelines, an exercise of that discretion to establish Health and Safety Deliveries would provide certainty to Lower Basin residents. While minimum municipal deliveries for health and safety should not be large enough to sustain lush swaths of non-functional turf, verdant vegetation, or other water wasteful activities, it should be of a sufficient quantity to assure the general welfare of the citizens, with that number being something greater than a minimum number to sustain life.

The impact of defining beneficial use should be analyzed, especially as it pertains to permitted uses in times of shortage, to stretch supplies. Underground storage in times of shortage should not be permitted. Users who lack the opportunity for underground storage should not be required to cut water delivered to their population or farm fields to allow another user to store water for future use.

The impact of efficiency standards established as a part of a definition of

"Beneficial Use" should be analyzed across all sectors and priority of user to extend supplies. Arizona's Yuma Agriculture sets the standard for efficiency in the agricultural sector having consistently achieved efficiencies in the range of 75-80%. Southern Nevada Water Authority sets the standard for efficiency in the municipal sector. Increased efficiencies will stretch existing supplies. However, care should be taken to ensure water users that have achieved efficiencies prior to the adoption of the Post-2026 Guidelines are not penalized for their early stewardship. Along those lines, the "Use It or Lose It" rule is a disincentive to conservation and improving efficiencies and should be eliminated.

Whether included as a part of a definition of Beneficial Use or otherwise imposed, opportunities for conservation across all sectors- without regard to priority- should be evaluated in this EIS process. Incentivized temporary conservation has played a significant role in the current shortage crisis by averting more draconian reductions in delivery. The role of temporary incentivized conservation moving forward will depend upon funding made available, in particular by the federal government. More sustainable savings from increased efficiencies should be emphasized over repeated temporary conservation measures.

As a conservation tool, Intentionally Created Surplus ("ICS") has proven beneficial. It has encouraged qualifying water users to conserve (store) water in Lake Mead to prop up levels to avoid shortages and helped avoid deeper shortages than otherwise might have occurred. The usefulness of the tool needs to be further analyzed by exploring the impact of delivery of ICS on the lake level, especially in times of shortage when requests for delivery are likely. Should ICS be deliverable Post 2026 if delivery shifts the lake to a lower elevation tier resulting in a shortage declaration? Additionally, clarity should be provided on the priority of ICS. Does it retain its original priority? Does it have a super-priority as conserved water because it was intentionally created? Is it protected from delivery to higher priority users in times of shortage? Without protection from delivery to other users, no incentive exists to create ICS. The lower priority water user would be better served to consume the water or store it underground affording no benefit to the system.

Not all users of Colorado River water are similarly situated. On-river Municipal users have no ability to create conserved volumes of water due to their location on the Colorado River accounting surface as well as the very nature of their use, which precludes the ability to create any type of ICS contemplated by the 2007 Interim Guidelines. These On-river Municipal users are economically disadvantaged

communities, often qualifying as environmental justice communities, who lack the economic resources to build resiliency in their portfolios through augmentation of supplies. These communities need the ability to use effluent to create conserved water through deemed conservation or deemed importation of recovered water (effluent lost to evaporation) or to meet shorted volumes. The ability to use effluent returned to the river to create a new type of conserved water or to satisfy shortage volumes should be analyzed. Some On-river Municipal users have converted or plan to convert city parks to artificial turf reducing the need for effluent for outdoor irrigation. This proposed effluent conserved water would benefit both the user creating it as well as the system as a whole by increasing stored supplies. The users that would benefit from conserved water created from effluent are primarily mainstream municipalities, mostly priority 4, who have no other source of water and no ability to store water economically.

Decisions on actions to protect Lake Powell's level should not be based solely upon elevations of Lower Basin reservoirs. Storage in Upper Basin Reservoirs should be taken into account when making decisions to protect elevations in Lake Powell. It is difficult to imagine Upper Basin storage has no impact on the level of Lake Powell. We understand and acknowledge the Upper Basin has governing documents for its operation, which must be respected. However, we believe Upper Basin storage should be considered when making decisions on Lower Basin operations to protect Lake Powell.

In summary, MCWA believes the Post 2026 Guidelines should incorporate provisions to: i) assess system losses across all water users without regard to priority; ii) establish Health and Safety Deliveries to assure delivery of a minimum supply to municipal users primarily dependent upon Colorado River water as a water supply during shortage; iii) define Beneficial Uses and impose efficiency standards to extend supplies; iv) allow On-river communities to use effluent to create a new type of conserved water; and v) consider storage in Upper Basin reservoirs when making decisions to protect the elevation of Lake Powell.

Very truly yours,

Mohave County Water Authority

Jamie Kelley
General Counsel

United States Department of the Interior
NATIONAL PARK SERVICE
Interior Regions 6, 7 & 8
12795 West Alameda Parkway
Lakewood, CO 80228

IN REPLY REFER TO:
IMDO-RSS-EQ (1248)

Memorandum

To: Amanda Erath, Colorado River Post-2026 Program Coordinator, Bureau of Reclamation (crbpost2026@usbr.gov)

From: Kate Hammond, Regional Director, National Park Service, Interior Regions 6, 7, & 8 (kate_hammond@nps.gov)
Billy Shott, Acting Regional Director, National Park Service, Interior Regions 8, 9, & 10 (pwr_regional_director@nps.gov)

Subject: NPS Comments in response to June 2023 Federal Register Notice for Development of Post-2026 Colorado River Reservoir Operational Strategies for Lake Powell and Lake Mead Under Historically Low Conditions

Date: August 14, 2023

The National Park Service (NPS) appreciates the opportunity to comment on the Bureau of Reclamation's (Reclamation) Notice of Intent (NOI) to develop Post-2026 Colorado River Reservoir Operational Strategies for Lake Powell and Lake Mead (88 FR 39455, June 16, 2023). This is an important and timely set of operational strategies that must address the many challenges related to the management and future use of the Colorado River to prevent collapse of the system. The following comments represent the views of the National Park Service (NPS). We coordinated closely with the US Fish and Wildlife Service (USFWS) at the staff level in preparing these comments.

Our comments are based on the following elements that are foundational concepts of the NPS for how the Colorado River and its reservoirs should be managed:

1. **Balance Supply and Demand** – Long-term average consumptive uses and losses should not exceed the average natural water supply. Therefore, consumptive use and loss of water in both the upper and lower basins must be balanced by inflow to the system reservoirs on an annual or multi-year basis to retain sufficient storage and avoid significant system impacts.
2. **Rebuild Reservoir Storage Proactively** – The system should be operated, particularly in the first few years of this Post 2026 plan, such that the reservoir storage is recovered sufficiently by using a percentage of inflow during all water year types (both drier and wetter years). The system must have enough storage to tolerate periods of extreme low inflow without reservoir elevations falling below thresholds related to dam safety, water supply, power production and significant environmental issues, recreational, and regional economic impacts.
3. **Consider Worst Case Scenarios** – Modeling must incorporate a wider range of future hydrological variations and factors beyond the historic conditions, including multiple low runoff years that are substantially drier than in the recent past due to climate change, to ensure operational rules for the system will be sufficiently adaptive for those extremes.
4. **Consider All Major Environmental, Cultural and Recreational Issues –** The NPS is legislatively mandated to protect resources in an unimpaired state and to continue to provide visitor enjoyment for future generations; these issues will be affected by the alternatives considered in this planning process. Environmental and ecosystem considerations related to natural and cultural resources, and visitor

experience in accordance with the Grand Canyon Protection Act, the Endangered Species Act, National Historic Preservation Act, and other environmental laws, must be analyzed and disclosed for all impacted river segments and should be integral to developing operational rules, strategies, and mitigations. The issues of most concern to the NPS are the potentially significant impacts to recreational boating access and regional economy related to Lake Powell, Lake Mead and rafting in the Grand Canyon; water quality effects in these two reservoirs; and effects to flows, water temperature, and threatened fish populations in the Grand Canyon from some alternatives in this process.

NPS Involvement in the EIS Process

NPS requests to be closely involved in development of alternatives. These resources include, but are not limited to, fish and wildlife, water quality, vegetation, wildlife habitat, geological features, geomorphic processes, cultural, paleontological, visitor experience, recreational and ethnographic resources in the affected national park units. Threatened and endangered fish and wildlife species are further protected under the Endangered Species Act and will require focused attention.

As mandated by the Organic Act of 1916, the NPS manages and protects resources in nine parks that collectively contain almost one thousand miles of river and river-related resources that may be impacted by project alternatives. These park units are Dinosaur National Monument (NM), Curecanti National Recreation Area (NRA), Black Canyon of the Gunnison National Park (NP), Canyonlands NP, Arches NP, Glen Canyon NRA, Rainbow Bridge NM, Grand Canyon NP, and Lake Mead NRA. The project will also potentially impact Traditional Cultural Properties (TCPs) and other sites of significance to Tribal Nations, Hoover Dam National Historic Landmark and the Old Spanish National Historic Trail. For these reasons, NPS affirmatively accepted the Bureau of Reclamation's invitation to be a cooperating agency in this planning process in a separate letter on July 26, 2023, pursuant to the National Environmental Policy Act (NEPA) 40 CFR 1501.8, and consulting party status pursuant to Section 106 and 110 of the National Historic Preservation Act (NHPA).

The NPS notes the need for interagency coordination in developing operational strategies, given the effects throughout the system to a large number of government agencies, tribal nations, and stakeholders. In addition to participating as a cooperating agency pursuant to NEPA, the NPS is prepared to participate in consultations because of the cultural and ethnographic resources that may be impacted. NPS urges close government-to-government consultation with Tribes, guided by the President's Memorandum on Uniform Standards for Tribal Consultation (11/30/22). We also encourage coordination with the many environmental organizations and academics that are strategizing and publishing on how the Post-2026 Colorado River system could be protected. We believe an inclusive approach from the start will lead to more creative solutions and a more optimal outcome.

NPS Crucial Concerns Related to Reclamation's Evaluation of Post-2026

<u>Climate Change and Aridification</u>

"Water is life" in the arid southwest for both humans and wildlife. The Colorado River is important for 40 million people in 7 states and 30 Tribes. It is also critical for at least one life phase of approximately 80% of the wildlife species present along the Colorado River corridor (Chaney et al 1990, Debano and Schmidt 2004, Hubbard 1977). The resources in national parks are the 'canary in the coal mine' for the system. Managing the river to protect the parks in the context of climate change will also protect the water system for the entire Southwest.

NPS suggests the term 'aridification' rather than 'drought' would be more accurate when discussing climate change in the Colorado River basin. The best available science illustrates that the western United States is experiencing a trend of increasing temperatures, evaporation, and soil drying. The Colorado River basin is experiencing a shift in system variability characterized by fewer years of high inflows, reduced average flows, and more frequent years with extreme low flows (Bedri and Piechota 2022, Salehabadi et al 2022, Pokharel et al 2022, McCoy et al 2022, Whitney et al 2022). It is important to use accurate terms that convey to the public, basin states, Tribes, and other government agencies that aridification is a rapidly developing and likely permanent change (at least through the 21st Century) toward a more arid climate in the southwestern United States. The current climate regime is not a temporary situation likely to return soon to the wetter conditions of the past century.

Complicated interrelated dynamics and feedback loops suggest that Reclamation should consider and evaluate probable effects of 'worst case scenarios' because current Reclamation models may underestimate some of these interactions. For example, the best available science indicates that there are complex interactions between increased temperature and evaporation combined with proposed fallowing of more agricultural land that may dry soils to greater depths, reduce surface runoff, and increase erosion potential. Drier soils and increased erosion may exacerbate dust deposition on the annual snowpack, causing snow to melt sooner and faster than in the past and exposing more soil to drying (Warren et al. 1980, Painter et al. 2012). Wildfire ash has similar impacts as dust and is increasing with climate change and can modify and reduce runoff. Also, summer "heat dome" dynamics appear to be changing, with potential to drive increased water demand by municipal users and agriculture (Albano et al 2022) and evaporation (Bass et al, 2023).

We recognize the excellent work that Reclamation's Boulder Climate Science staff is doing, and we encourage Reclamation to extend this research and modeling to consider and analyze issues like increased dust from drier-and-fallowed lands (Kandakji et al 2020, Joshi 2021) and from the very large potential exposed shorelines around Lake Powell and Lake Mead if they are allowed to drop down to deadpool. Reclamation should evaluate the potential of this dust to contribute to rapid snowmelt, as well as other new climate dynamics and feedback loops that have been initiated by aridification, especially those that accelerate the process. If those dynamics cannot be explicitly modeled, then Reclamation should use a worst case that goes further than current climate models to account for these dynamics. We should be planning for drier climatic conditions and more hydrologic variability around the low end of past hydrologies in the Colorado River Basin and not just hope for a wetter and less variable future. The NPS believes this is the critical time to make the changes necessary for stability of operations in this increasingly dry environment and to prevent collapse of the water system for the Southwest.

Threatened and Endangered Fish Species

Federal agencies have a legal obligation to protect environmental and other resource interests on the Colorado River through the Grand Canyon pursuant to the NPS Organic Act, the Endangered Species Act (ESA) and the 1992 Grand Canyon Protection Act (GCPA).

An issue of extreme importance to the NPS is predation on native endangered and threatened native fish species caused by increasing populations of invasive, warmwater, non-native fish species passing through Glen Canyon Dam (GCD) as a result of low-and-declining water levels in Lake Powell. Post-2026 operations will have direct impacts on this situation, with critical differences between alternatives. Of these warmwater non-native species, smallmouth bass is a particularly voracious predator that has significantly reduced populations of native and federally-listed fish species in the Upper Basin. If smallmouth bass and other high-risk, warmwater, non-native predators, such as green sunfish, establish permanent populations in sufficient numbers below GCD, this is very likely to seriously reduce populations of humpback chub and other native fish communities. Low water elevations in recent years have resulted in release of water through GCD at substantially higher temperatures than in the past. Observation and modeling have shown that both passthrough and reproduction increase in the river downstream of GCD when Lake Powell water levels are lower, particularly when levels fall below 3525' (though exact elevation will vary with the conditions of the year). These high temperatures are creating suitable habitat for accelerated reproduction of these high-risk, warmwater non-natives below GCD. In 2022 invasive species, including smallmouth bass, produced many offspring below GCD compelling the NPS and partners to initiate rapid response operations to lower their numbers.

Over 90% of the humpback chub adult population in the world currently exists in the Grand Canyon and invasive predator species present a clear and present threat to the status of this federally-listed species (USFWS 2018; Van Haverbeke et al. 2022, 2023). The NPS recommends specific modeling to evaluate the range of risks to humpback chub populations, including minimum and maximum population size over time, effects of variations of flow, water temperature, water quality (e.g., dissolved oxygen and other characteristics), and habitat modeling. Modeling should consider the potential establishment of invasive species in Grand Canyon and in Glen Canyon below GCD. Modeling could also evaluate the effectiveness of potential mitigations, such as the bypass cooling and flow spikes that were developed under the GCD Smallmouth Bass Operations EIS. Modeling would allow robust comparison

between alternatives and would be important for understanding and communicating the risk to humpback chub populations over time.

NPS also requests that Reclamation analyze impacts of the proposed alternatives on the federally endangered razorback sucker population in Lake Mead. Lower water levels may have positive or negative effects on this population depending on the interactions between warmer water, reduced habitat, changing water depth, dissolved oxygen concentration, non-native invasive fish species, and quagga mussels.

Endangered and threatened fish in other segments of the river may need to be considered. If the Drought Response Operations Agreement (DROA) or similar flows are considered out of Flaming Gorge Dam or Aspinall Dam, then NPS will urge Reclamation to harmonize those flows with experimental fish flows including the razorback sucker Larval Trigger Study Plan, smallmouth bass flow spikes, and pikeminnow base flows, while analyzing multi-year impacts on the vegetation, channel complexity and fish habitat diversity. Maintaining more interannual flow variability on the Green and Gunnison Rivers may be needed to prevent vegetation encroachment, channel simplification (Graf 1978, Andrews 1986, Lyons et al 1992, Allred and Schmidt 1999, Grams and Schmidt 2002, Walker et al 2020), and loss of fish spawning and nursery habitats including cobble bars, backwaters, and wetlands (USBR 2006, Grippo et al. 2017).

Reclamation should also consider at what reservoir levels barriers are formed or removed that may restrict movement of native and non-native fish. For instance, at Pearce Ferry, rapids have formed with Lake Mead being at a lower level that may be preventing invasive fish from moving up into the Grand Canyon and preying on natives and changing water levels may increase or decrease that barrier. Barriers may appear or disappear at different levels in other locations including in Cataract Canyon at the top end of Lake Powell or in the San Juan arm of Lake Powell that may have effects to fish movement (Bruckerhoff et al. 2022). Flow changes will also impact threatened and endangered fish below the Hoover dam. Other endangered and threatened species including birds and plants may be impacted by the changes to riparian habitat and NPS will be sharing some of that as a cooperating agency and in close coordination with USFWS.

River-Related Resource Concerns

Lower water levels in Lake Powell have led to reduced numbers of High Flow Experiments (HFE) through Grand Canyon. HFEs are very effective tools to manage river channel structure, geomorphology, and sediment dynamics. HFEs also represent the only system-wide tool to rebuild sandbars, beaches, and near-shore habitat in the canyon, thus they are critical for the protection of cultural resources and providing high-quality recreational access along the river. HFEs would not be available close to or below powerpool elevation at Lake Powell and will impact river rafting by reducing the area of or eliminating some camping beaches in the long-term. Also, when Powell is below powerpool, a lower and slower river through the Grand Canyon will slow trips down, leading to more human impacts in certain areas. Lower flow levels will also increase navigation challenges through the canyons' many rapids and may limit the use of larger motorized craft. The Hualapai Tribe has expressed significant concern to the NPS regarding sand buildup in Grand Canyon West, which is negatively impacting recreation on the river and negatively impacting the Tribe's commercial recreation interests. While some aspects of this problem are related (to?) the level of Lake Mead, GCMRC is studying whether HFEs could help with this problem by distributing sand onto beaches and sandbars rather than settling into the channel.

Scenarios where Lake Powell drops below powerpool would preclude any future HFEs and create a less dynamic range of flows through Grand Canyon. This would likely increase the density of non-native riparian vegetation, promote non-native riparian monocultures, decrease diversity of native vegetation species, promote channel narrowing, and negatively impact riverine ecosystem functions. Less-frequent HFEs will result in less riverbank deposition of silt and sand and less wind transport of sediment (especially as riverbank vegetation increases in density), increasing the likelihood of exposing archeological sites and other cultural resources to erosion and vandalism. For this reason, there is an increased risk of loss of integrity in these known archeological sites. There may also be many more of these resources that have never been exposed or formally documented that could be lost as they are exposed. Less frequent HFEs may also negatively impact campable areas impacting river recreation in the Grand Canyon.

Reduced flow variability is a concern upstream in the Upper Basin as well. If DROA or DROA-like flows continue, NPS urges analysis of resource effects on the Green River in Dinosaur and Canyonlands, and on the Gunnison River in Black Canyon / Curecanti. Dam operations under DROA can have the effect of dampening interannual variation between wet and dry years, with increased storage in wet years and larger releases in dry years both resulting in dam releases that mimic a moderate hydrologic classification. The effects of reduced interannual variability under multiple years of such flows should be carefully analyzed with the intent of avoiding undesirable impacts to riparian vegetation and channel geomorphology. Deleterious impacts of extended flow homogeneity include invasive vegetation establishment, streambank armoring, channel simplification and narrowing, and loss of habitat complexity (Graf 1978, Andrews 1986, Lyons et al 1992, Allred and Schmidt 1999, Grams and Schmidt 2002, Walker et al 2020, USBR 2006, Grippo et al. 2017).

Balancing Consumptive Uses and Losses with Available Water Supply

During the period from 2000 to 2023, natural flow at Lees Ferry has decreased 13% compared to observed Lees Ferry flows between 1930 and 1999 (Schmidt et al. 2023). Flows may decrease by a similar amount or more by 2050, based on the work of various researchers (e.g., Udall and Overpeck 2017). However, the average consumptive water uses and losses have averaged approximately 14 maf annually from 2000-2020 (Schmidt et al. 2023). This clearly explains how storage in both Lakes Powell and Mead dropped from 95% of capacity in 2000 to ~25% in 2022. It also strongly suggests the need to couple water usage across the basin with accurate estimates of future water availability, based on the aridification trend. Reclamation's most robust operational strategies will emerge when the worst-case scenarios are contemplated and modeled, with lower water supplies and higher water demands than the Colorado system has faced in the past.

Declining water availability caused by climate change, aridification, and low water levels in Lakes Powell and Mead make it imperative to responsibly manage consumption and system losses (demand) relative to annual inflows (supply). First stabilizing and then increasing water reservoir levels by balancing supply and demand will help maintain river dynamics below the dams and retain inter-annual and seasonal flow variability for a wide variety of riverine resources in the parks while also helping prevent system collapse of the water supply for 40 million people in southwestern United States. Responsible management should be characterized as an "in-perpetuity" adaptive challenge, requiring group effort and changes in behavior to ensure that water is available in the future. Given the risk of system collapse presented by a sequence of very low flow years, stabilizing water levels in Lakes Powell and Mead is critical to the NPS. Furthermore, when wetter hydrologic conditions occur, reservoir water levels should be increased by stabilizing or reducing consumptive uses to ensure the reservoirs have sufficient storage to buffer the low hydrology years that will inevitably occur. Stabilization of reservoirs at higher levels will also protect over $1.8 billion annually in regional economic output from national park recreation and visitation important to communities in Utah, Arizona, Nevada, and California. These issues are critical for Reclamation to consider when writing the purpose and need for this process and when designing alternatives.

Reservoir-Related Resource and Recreation Concerns

Visitation and recreation at Grand Canyon, Glen Canyon, and Lake Mead result in a combined visitor spending of over $1.4 billion per year, and a regional economic output of over $1.8 billion (Table A-1). These numbers will be even larger because of impacts to upper basin park units if the scope of this EIS includes the reoperation of upper basin dams to continue DROA. These economic outputs are important portions of Arizona, Utah and Nevada state revenues and are critical to sustaining each park's gateway communities. The NPS recommends the potential impacts of each alternative operational strategy be evaluated and presented in the EIS because a substantial portion of this economic activity will be impacted negatively if reservoir water levels in either reservoir remain critically low or decline further.

Table A-1. NPS visits, spending, and economic contributions to local economies – 2021.

Park Unit	Total Recreation Visits	Total Visitor Spending $2021	Jobs	Labor Income $2021	Value Added $2021	Economic Output $2021
Glen Canyon NRA	3,144,318	$332,150,000	3,839	$139,418,000	$234,458,000	$409,546,000
Grand Canyon NP	4,532,677	$710,256,000	9,390	$324,318,000	$539,433,000	$944,693,000
Lake Mead NRA	7,603,474	$373,668,000	4,054	$167,550,000	$281,033,000	$457,279,000

Impacts to parks' infrastructure and recreational access resulting from very low water levels have occurred in recent years and water levels may continue to decrease if action is not taken to balance supply and demand in the system. In 2021 Glen Canyon went from having eleven maintained boat ramps on Lake Powell to two boat ramps and the park has made major financial investments to simply maintain the two remaining boat ramps. Similarly, over the past 10 years Lake Mead has gone from having eight boat ramps to just one and is planning for major infrastructure investments to keep even minimal lake access viable. In some locations at Lake Mead, such as campgrounds and marinas, it is increasingly difficult to provide visitors with access to drinking water or water to respond to structural fires. At both parks, reduced lake surface area has led to changes in wakeless areas, boat traffic congestion, safety concerns and increased boater travel times and gas expenditures. Launching large boats and traveling through narrower channels have become more time consuming and complicated. Smaller watercraft traffic has increased in some areas, and this presents challenges for safe navigation in tight channels when combined with larger boats.

The fluctuating water levels and increasing amount of exposed shoreline in Lakes Powell and Mead over the past two decades have heightened NPS concerns about sites of cultural and historic significance to indigenous communities, as well as cultural resources that document the early history of the parks and more modern objects such as a WWII-era B-29 bomber. As lake levels have dropped, cultural resources are exposed to looting, other forms of vandalism, and damage from environmental conditions. Much of the once fully inundated areas that are now exposed were minimally surveyed prior to filling of the reservoirs. The NPS has a responsibility under NHPA and the Archeological Resources Protection Act (ARPA) to inventory and document cultural resources located on these lands as they re-emerge and to monitor, mitigate, and manage these resources for their protection. Effects of declining water levels on NPS natural resources, ranging from exposure of paleontological features to increased abundance of invasive plant species require additional inventory, documentation, management, and protection. Lake Mead has documented damage to significant cultural sites in the park due to off-road vehicle use. These additional acreages of exposed shorelines have also experienced increased soil erosion and increasing dust and air quality concerns. The dropping water tables have impacted water wells and are altering vegetation that may impact authorized grazing and unwanted access of livestock to closed areas.

Water Quality Concerns

Water quality related to human contact/immersion and drinking water is also a concern at Lakes Powell and Mead. The NPS manages water-based recreation in both reservoirs and is concerned about harmful algal blooms, elevated bacterial levels, and the potential for increasing populations and varieties of harmful parasites and pathogens, including thermophilic amoeba (*naegleria* spp.), as water levels decrease. For example, several strains of *E. coli* have been shown to increase with increased water temperatures (Phillipsborn et al. 2016). The NPS recommends that Reclamation model and analyze potential changes in water quality that are expected to occur from various proposed alternatives. In another example, in 2022 the low water level in Lake Powell was linked to a plume of low dissolved oxygen concentration in Lake Mead. This suggests that the water quality in Lake Mead can be affected by conditions in Lake Powell and modeling and evaluation should acknowledge that linkage. We suggest that Reclamation meet with USGS/GCMRC researchers (Deemer, Mihalevich, Yackulic), Southern Nevada Water Authority staff, and NPS staff on this issue. At Lake Mead, NPS requests that Reclamation analyze the impacts of alternatives, particularly those that result in lower reservoir levels, on the potable water availability at major infrastructure areas including Callville Bay and Echo Bay. Lower water levels at Powell resulted in impacts to drinking water wells at several developed areas. All of these resource, recreation, water quality, and operational issues will be affected by Post-2026 operations. Accurate modeling of future water levels and water quality, socio-economic impacts from declining water, and impacts to tourism will be critical will be critical towards reducing/minimizing significant impacts to NPs resources listed above.

Analysis and Modeling of Resource Impacts

Reservoir operation alternatives will likely encompass annual release patterns that have potential to affect many river- and reservoir-dependent park resources. Effects of annual volumes on resources were addressed in the cumulative impacts section of the LTEMP EIS and were articulated in recent publications (Schmidt et al. 2023). We anticipate needing models to evaluate specific issues related to alternatives developed in the EIS, including (1) water quality, including temperature and dissolved oxygen, and drinking water-related parameters (2) native and federally-listed fish species populations, and non-native invasive fish species populations (including food base and habitat), (3) riparian vegetation response, including response of native and invasive species, and bank cover, (4) HFEs and other flow regime effects on river channel structure, geomorphology, and sediment dynamics, (5) effects of variable flow regimes on river recreation through Grand Canyon, and reservoir recreation in Lakes Powell and Mead, and (6) exposure of cultural and paleontological resources.

The NPS offers to work closely with Reclamation as part of a technical group focused on developing and peer reviewing relevant models to evaluate impacts to resources. Models developed cooperatively between NPS, USGS/GCMRC and Reclamation would provide clear, quantitative results that could be used to compare the probable effects of each alternative. Staff at GCMRC are particularly knowledgeable about dam impacts and should be consulted closely throughout this process – from the development of screening tools to full resource impact modeling and the analysis and writing of the impact statement. Model outputs also could be used to guide alternatives development. One of the highest modeling priorities for the NPS is to evaluate the risk to humpback chub populations and the effects on non-native fish species populations as a function of flow regime, temperature, and water quality in Lake Powell in Glen Canyon NRA and the Colorado River in the Grand Canyon NP. This modeling should allow comparison between alternatives and provide anticipated trajectories of humpback chub and non-native fish species populations over time. Modeling should also illustrate the anticipated beneficial effects of potential mitigation activities (e.g., bypass cooling, flow spikes).

Alternative Development, Considerations, and Concepts

The NPS recommends Reclamation work closely with all DOI bureaus engaged with Colorado River resources and operations to optimize the range of alternatives to meet all legal mandates, regardless of bureau. The NPS requests that the following approaches be considered in the EIS alternatives development process:

- Design alternatives that can respond to a worst-case scenario of several sequential years of very low inflows to Lake Powell. Examples of worst-case scenarios might include: three consecutive 2.5 to 3.0 million acre-feet (maf) inflow years; or a mixed 10-year scenario in which five of the years are low (in the 2.5 to 3.0 maf inflow range), four years are about average, and one year is 150% of average. All alternatives should include the reductions in demand needed to maintain adequate water storage buffers in both Lakes Powell and Mead to avoid critical thresholds (e.g., maintain water levels above power pool elevations or above key resource or recreation-based elevations).
- Include complete measurement and quantification of reservoir evaporation at Lakes Powell, Mead, Mojave, and Havasu, and evaporation from flowing river segments throughout the Lower Basin and Utah. These data will be needed for full accounting of system losses, especially as mean temperatures continue to increase in the basin. While the NPS understands these data will likely not be available as alternatives are developed, we encourage Reclamation to incorporate the data into river and reservoir management decisions as it becomes available. Consider also including robust quantification of evapotranspiration from agricultural use in the Upper Basin.
- Initiate usage cuts proactively to rebuild and maintain adequate water storage buffers in both Lakes Powell and Mead. This should rebuild a buffer sufficient for three extreme low flow years in a row and may require making cuts even in good hydrology to rebuild levels quickly.
- Design alternatives to proactively protect federally listed species, such as humpback chub, from drawing closer to extinction.
- If DROA or DROA-like options are to be considered, then at Flaming Gorge Dam (FGD) Reclamation should consider:

    - Coordinated operations of FGD and considering using DROA operations for maximum environmental benefits through large magnitude, long duration spring peak flows when possible. Include consideration of other hydrological patterns (baseflows, flow spikes, etc.) that conform to the Upper Basin Recovery Program GREAT report recommendations (LaGory et al. 2019).
    - Evaluate options to prevent or reduce non-native fish passage through FGD such as screens, barriers, nets, and bubblers to protect native and federally-listed fish species populations. Consider mitigations such as funding rapid response actions below the dam.
- At GCD:
    - Evaluate options for temperature control devices or alternative operations with options to release both warmer and cooler water from GCD to better manage river temperatures below the dam within a suitable range to benefit native and federally-listed fish species populations.
    - If HFE sediment windows and operational timing are not adjusted in another process prior to Post-2026 operations, then consider adjustments to allow for implementation of HFEs from Lake Powell at lower water levels using the specific HFE adjustments have been recommended by the GCMRC sediment scientists (Salter and Grams 2023). This would allow for smaller HFEs to be considered in June when the reservoir level is at its highest, making use of sediment accrued throughout the year, to comply with the GCPA to protect cultural resources and recreation in the Grand Canyon.
    - Mitigate lower Lake Powell elevations by using bypass flows and flow spikes from GCD to disadvantage non-native fish such as smallmouth bass and green sunfish and to lower river temperatures, by installing passthrough barrier devices or nets, and by continuing to fund rapid response efforts below the dam.
    - Consider tying annual flow volumes out of GCD to multi-year inflows into Lake Powell so there is a more accurate link between outflows and actual water availability than just reservoir elevations.
- Include the concept of combined volume management between Lakes Powell and Mead suggested by some Colorado River researchers. This option could allow for better management of environmental flows through the Grand Canyon.
- Evaluate options such as fill Lake Powell first, fill Lake Mead first, or variations on those themes, to explore and fully disclose differential impacts on all stakeholders.
- When using calculations to determine releases from both Glen Canyon and Hoover Dams, use continuous functions rather than tiers (step functions) for annual releases so there are not dramatic changes on either side of a reservoir elevation tier.

Geographic Scope of the Process

If DROA or DROA like flows are to be continued beyond 2026, then NPS would urge Reclamation to expand the geographic scope to include the affected segments of river in the Upper Basin above Lake Powell. NPS recommends analyzing the coordinated operations of Upper Basin Colorado River Storage Project (CRSP) Act reservoirs (especially Flaming Gorge Reservoir) in your analysis. This would allow for consideration of the full environmental effects of multi-year hydrologic scenarios and management actions and may reveal opportunities to optimize basin-wide effects on resources, recreation, and water delivery. We recommend that the Aspinall Unit not be included in future DROA or DROA-like flows given the lack of sufficient storage in that reservoir to play a significant role in the larger system and the negative impacts to recreation and resources on the Curecanti NRA and Black Canyon of the Gunnison NP park units from the effects of greater fluctuations in water levels there.

The Need to Rebuild Storage before Extreme Low Inflows

The NPS is concerned that the alternative ultimately selected for implementation of the 2007 Interim Guidelines Supplementary EIS (SEIS) will not provide sufficient reductions in consumptive use in the Lower Basin to protect critical water levels in Lakes Powell and Mead. While there has been slightly above average hydrology in 2023 that has resulted in an additional 6 maf of storage, NPS is concerned that this has reduced the perceived need to make large proactive cuts to consumptive use. The NPS recommends that additional proactive cuts be considered in alternatives during a first phase of the Post-2026. The combined Upper and Lower Basin consumptive uses and losses between 2000 and 2020 have been approximately 13.5 maf per year (Schmidt et al. 2023) but during that same time period there have been three years in which inflow to Lake Powell was less than 4 maf, and one of those years' inflow was 3 maf. Therefore, the additional 6 maf storage that was built in 2023 may be used quickly if the

next few years include one or more of these very low inflow years. Therefore, Post-2026 operational strategies must consider proactive ways to rebuild the volume of water stored in Lakes Powell and Mead rather than waiting to manage in a crisis. Without sufficient system storage that balances consumptive use with available supply, the system will always be at risk of collapse. Just two or three consecutive years of low to very low inflow to Lake Powell could lead to a system collapse with enormous economic, political, and societal consequences. For the Post-2026 operational strategies, it is imperative that the federal government encourage the states to not count on 'good flow years' but rather to plan for the worst and plan for it to occur very soon.

Thank you again for the opportunity to comment on this important process. We hope the Post-2026 purpose and need statement and conceptual operational strategies will soon be available for cooperating agencies to review, and there will be sufficient time for modeling/analysis of alternatives prior to a draft EIS by late 2024. We appreciate Reclamation's interest in our comments and those of other stakeholders and interested parties, and we look forward to continuing our involvement in the Post-2026 process. We understand the complex nature of this unprecedented planning process and appreciate the close coordination between Reclamation and NPS staff that has occurred over the past year. For questions or additional information, please contact Rob Billerbeck, NPS Colorado River Coordinator, (tel: (303) 987-6789, email: rob_p_billerbeck@nps.gov).

Sincerely,

_____ _____
Kate Hammond
Regional Director serving Interior Regions 6, 7, & 8

_____ _____
William Shott
Acting Regional Director serving Interior Regions 8,9 & 10

cc:
Bureau of Reclamation
Wayne Pullan, Upper Colorado Regional Director
Jacklynn Gould, Lower Colorado Regional Director
Carly Jerla, Colorado River Post-2026 Program Manager
National Park Service
Ed Keable, Chair of NPS Colorado River Steering Committee and Grand Canyon NP Superintendent
Michelle Kerns, Superintendent Glen Canyon NRA and Rainbow Bridge NM
Mike Gauthier, Acting Superintendent, Lake Mead NRA
Paul Scolari, Superintendent, Dinosaur NP
Stuart West, Superintendent, Black Canyon of the Gunnison NP, Curecanti NRA
Brendan Bray, Acting Superintendent, Southeast Utah Group (Arches, Canyonlands, Natural Bridges, Hovenweep)
Rob Billerbeck, Colorado River Coordinator

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NEBRASKA

Good Life. Great Water.

DEPT. OF NATURAL RESOURCES

Jim Pillen, Governor

14 August 2023

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

RE: State of Nebraska's Comments on "Post-2026" Colorado River Reservoir Operational Alternatives

To whom it may concern:

The State of Nebraska offers these comments in response to the Notice of Intent To Prepare an Environmental Impact Statement and Notice To Solicit Comments and Hold Public Scoping Meetings on the Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead Colorado River, 88 Fed. Reg. 39,455 (June 16, 2023). The Bureau of Reclamation has invited the public to submit comments "concerning the scope of specific operational guidelines, strategies, and any other issues that should be considered" in relation to the post-2026 operation of Lake Powell and Lake Mead. 88 Fed. Reg. at 39,455. While Nebraska does not lie within the Colorado River Basin, she derives substantial benefits from trans-basin diversions of Colorado River water. Those trans-basin diversions facilitate Colorado's compliance with the South Platte River Compact. Operational changes that compromise trans-basin diversions would adversely affect Nebraska, whose rights under the South Platte River Compact should be considered as post-2026 operational alternatives are evaluated.

By way of background, Colorado and Nebraska signed the South Platte River Compact in 1923, and Congress ratified it in 1926. The Compact requires Colorado to administer junior water rights in portions of the South Platte River Basin whenever flows at the Colorado-Nebraska state line recede below 120 cubic feet per second ("cfs"). Compact Art. IV. In addition, the Compact authorizes Nebraska to construct a canal near the state line to divert an additional 500 cfs during the non-irrigation season, as well as surplus flows. Compact Art. VI. Nebraska is currently in the process of designing and constructing this canal to fully exercise its Article VI Compact rights. Nebraska intends to complete construction and commence diversions within the next decade.

The South Platte River Compact was founded, in large part, on a premise that irrigation development inside Colorado would increase return flows to the South Platte River. These return

Thomas E. Riley, P.E., Director
Department of Natural Resources
245 Fallbrook Blvd., Suite 201 OFFICE 402-471-2363
Lincoln, Nebraska 68521 FAX 402-471-2900
dnr.nebraska.gov

flows would create a sustainable supply that would render additional restrictions on Colorado water users unnecessary and that would facilitate agricultural development in Nebraska.

Immediately after the Compact was signed, large scale groundwater pumping began and subsequently exploded in the Colorado portion of the Basin. By the late 1960s, approximately 4,000 high-capacity wells had intercepted much of the return flows on which the Compact was based. A complete discussion of the factual and legal background underlying this pumping, Colorado's efforts to address it, and its impact on Nebraska, is beyond the scope of this comment. It suffices to say that Nebraska has watched with keen interest Colorado's efforts to address the problem presented by groundwater pumping in the Basin.

A major factor alleviating the impact of large-scale groundwater pumping has been trans-basin diversions that replace natural flows Colorado users consume. Approximately 400,000 acre feet of foreign water enters the South Platte River Basin annually. The most important of these Congress authorized as the Colorado-Big Thompson ("C-BT") Project in 1938. As originally envisioned, the Project was to provide a supplemental irrigation supply to the South Platte Basin. See generally S. Bill 80, 71st Cong., 1st Sess. (1937). Portions of the Basin, including Colorado's Water Districts 1 and 64, were to receive ample portions of C-BT water, in part, to replace return flows lost to subsequent diversion. Id. at 7, Table 1. Congress approved the Bureau's plans to deliver C-BT water to these portions of the Basin and to develop additional return flows as a result.

Since C-BT diversions commenced in the late 1940s, approximately 230,000 acre-feet have been transported annually from the Colorado River Basin into the South Platte River, ultimately making its way to Nebraska in the form of return flows. Through Senate Document 80, Congress intended an "allocation of supplemental supply" to support return flows that Nebraska relies on under the South Platte River Compact. Id. Losing the benefit of this water supply would dramatically complicate Colorado's compliance with the South Platte River Compact and lead to unnecessary conflicts between the sister States.

For these reasons, Nebraska requests that the Bureau consider potential impacts of any post-2026 operational changes on the viability and vitality of continued C-BT diversions. To the extent any changes would limit the amount of water historically available to the C-BT, such changes should be evaluated in light of their impacts on Colorado's South Platte River Compact obligations and Nebraska's corresponding rights. We appreciate the opportunity to provide these comments and welcome the opportunity to participate in the development of post-2026 operational alternatives.

Sincerely,

Thomas E. Riley

Thomas E. Riley, P.E., Director
Nebraska Department of Natural Resources

August 15, 2023

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

RE: Notice of Intent to Prepare an Environmental Impact Statement and Notice to Solicit Comments and Hold Public Scoping Meetings on the Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead

To Whom it may Concern,

The Rio Blanco Water Conservancy District (RBWCD) is pleased to provide comments to the Bureau of Reclamation for the Post – 2026 Operational Guidelines and Strategies for Lake Power and Lake Mead.

The RBWCD is a statutorily created special district of the state for the purposes of developing land and water resources for the benefit of the district constituents within the White River Basin in Colorado. The district has considerable concerns with the overuse of water within the Lower Basin states not matching the hydrology, supplementing supply from storage exceeding the ability of storage within Powell and Mead to recover, and exceeding want is agreed upon with the Colorado River Compact 1922. This dependency on overuse has increased risks of water shortages and damage to the upper basins include the RBWCD.

The RWBCD being in the White River basin is dependent upon natural flows from precipitation and agricultural return flows since the White River Basin in Rio Blanco County Colorado has limited to no reservoir storage. While the RBWCD continues to advance solutions to meet a portion of our water needs, recent hydrology with the extended drought has exacerbated shortages in our basin where current water shortages have become even more detrimental. Operating with a water deficit has become the norm.

The district is concerned the post-2026 operational guides will impact our ability to develop and sustain water supplies within our district boundaries for the benefit of our constituents while

also posing a threat on our local economies and taxing districts dependent upon the ability to utilize local water supplies.

The upper basin states must also compensate for system water losses (i.e. evaporation and transit) whereas the lower basins are exempt. This is not a balanced agreement and needs to be put on equal grounds. Either both are exempt, or both must account for system water losses.

Upper basin states storage is limited in comparison to the lower basin states. The RWBCD shares that more upper basin storage would be beneficial to the Colorado River system primarily from an evaporation perspective. Evaporative losses in the lower basin far exceeds evaporative losses in the upper basin to the tune of million + acre feet of water per year that if stored in the upper basin would equate to significantly less evaporative losses while still providing benefit to the Colorado River system. The 1956 Colorado River Storage Project Act (CRSP) detailed several reservoir projects of which several have been constructed yet many have not that were outlined in the Act. The RBWCD recommends the CRSP be revisited particularly as it pertains to the storage in the upper basin states for new reservoir sights to construct and if these sights are no longer plausible then new reservoir storage sights be identified. You cannot conserve your way out of drought but you can use storage as a means to weather the storm as demonstrated by the lower basin states use of Lake Powell and Lake Mead with conservation as a tool to extend the life of a reservoir savings account. Without a reservoir safety net, the lower basin states would have been out of water. Then what?

With that said, we must also reiterate that along with our RBWCD, Basin's, State's, and the Upper Basin's efforts, there must be focused, concerted conservation in the Lower Basin, resulting in realistic and sustainable usage within the limits of its intended Compact appropriation, including evaporation, and accounting for reduced hydrology. Beyond 2026, operating principles implemented for the Colorado River System must be sustainable, fair, and equitable. And the addition of new storage in the upper basin for the greatest benefit of all Colorado River basin water users.

Sincerely,

District Manager
Rio Blanco Water Conservancy District

RIO BLANCO WATER CONSERVANCY DISTRICT

2252 East Main Street – Rangely, Colorado 81648 Phone (970) 675-5055