

**Letter #:** 20474  
**Date Received:** 8/15/2023  
**Sender Names:** 19421: Nathan White  
**Emails:** 19421: agessinc@gmail.com  
**Organizations:** Agess, Inc.  
**Subject:** Comments on Salton Sea Bureau of Reclamation Studies

Hello Bureau of Reclamation,

I would like to comment on your research and environmental analysis into the Salton Sea to share a research paper from one of the groups that we would bring to this effort for Regional Climate Hydrology Modeling - Desert Research Institute in addition to Earth Systems Solutions. Please see attachments that show the entire hydrology of the Colorado River Basin is dependent on the elevation of the Salton Sea. If the sea recedes this will mean less water in the Basin. If the sea is restored with ocean water we can guarantee 1.2 million acre feet into the basin. If we are also able to build a lake in Laguna Salada Mexico it will reduce the cost of moving water but also increase evaporation into the basin by an additional 1.2 million acre feet. This is specific to the North American Monsoon expansion from Salton Sea and Laguna Salada region. We will be working on a Salton Sea Authority application for this subject to your department through the "Funding Opportunities - U.S. Bureau of Reclamation's WaterSMART: Applied Sciences Grant" but ideally this would be great to have these assessments done internally within your agency to look at the causes and effects of current hydrology patterns and future projections along side the possibility of restoration of Laguna Salada and the Salton Sea.

Here would be some potential parameters that your agency or SSA through the "Funding Opportunities - U.S. Bureau of Reclamation's WaterSMART: Applied Sciences Grant" could look at to make an informed environmental analysis of the Colorado River Basin. Can restoration of these regions add more water to Lake Mead and Lake Powell? We believe the answer is yes but the Salton Sea needs to be included in the assessment of the whole network. The carbon impact of Salton Sea drying out and Hoover Dam and others being shut off is too severe.

Senario No. 1 - Salton sea with no water import and current field following conservation measures (and future conservation measures)

Senario No. 2 - Salton Sea with no water import

Senario No. 3 - Salton Sea with water import refilling (1.2 million acre feet annually)

Senario No. 4 - Salton Sea with water import restoration and Laguna Salada restoration (2.4 million acre feet annually)

Senario No. 5 - Salton Sea with water import restoration, Laguna Salada Restoration, seawater farming (lagoons + fields), and other seawater landscape around Laguna Salada (3.6 million acre feet annually)

These studies would use supercomputers that show the upstream / upper elevation water bank impacts in any and all scenarios. How much more or less water becomes available. I think this is a critical first step in any feasibility report since it is a holistic environmental analysis of the entire water system.

Look forward to thoughts and direction. Always open to share more or schedule a brief meeting to discuss. Keep up the great work and if you can add me to your mailing list for future notifications it would be greatly appreciated.

Best,

Nathan G. White

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August 15, 2023

Carly Jerla  
Senior Water Resources Program Manager  
Bureau of Reclamation, Interior  
Submitted via email to [crbpost2026@usbr.gov](mailto:crbpost2026@usbr.gov)

Dear Ms. Carly Jerla,

American Whitewater appreciates the opportunity to provide scoping comments for the Development of Post-2026 Colorado River Reservoir Operational Strategies for Lake Powell and Lake Mead.

American Whitewater is a national 501(c)(3) non-profit organization with a mission to protect and restore our nation's whitewater resources and enhance opportunities to enjoy them safely. With over 6,000 individual and 100 affiliate club members, American Whitewater represents the interests of over 80,000 river enthusiasts nationally. As conservation-minded whitewater recreationists, we place a high value on protecting naturally functioning river ecosystems, including their fish and wildlife, geomorphic processes, and potential to provide clean and safe drinking water.

American Whitewater is the primary advocate for the preservation and protection of whitewater rivers throughout the United States, and we have members that live, recreate, and depend on the outdoor economy of the Colorado River Basin. American Whitewater and our members are invested in ensuring that management of the Colorado River Basin is informed by science, traditional ecological knowledge, robust public participation, and that the ecological and recreational values of the Colorado River Basin are adequately included in post-2026 planning, modeling, and operations.

The Bureau of Reclamation has asked for input "on how the purpose and the elements of the 2007 Interim Guidelines should be retained, modified or eliminated to provide greater stability to water users and the public throughout the Colorado River Basin through robust and adaptive operational guidelines." The below comments address that directly and we provide additional comments on the National Environmental Policy Act (NEPA) process, including ensuring the alternatives are based on the best available science and that the public engagement process is robust.



## Comments on the Purpose and Elements of the 2007 Interim Guidelines

### 1. Purposes of 2007 Interim Guidelines:

- a. The notice of intent is clear that the development of these post-2026 operational guidelines and strategies will be interim in nature while being “sufficiently robust and adaptive and can withstand a broad range of future conditions...” Clarification about the balance between flexibility and future changes to operations will be important to include as an aspect of the purpose and need of this post-2026 process. The purposes of the 2007 interim guidelines were narrowly focused. The Review of the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead (the 2020 7D Review) explains the importance of the interim nature of those operational guidelines and how it was intended to provide the Bureau and stakeholders the opportunity to gain operating experience in a system with highly variable conditions.<sup>1</sup> The current conditions, and importantly, our emerging understanding of the range of potential future scenarios make it clear that future water supplies are going to be significantly lower than originally allocated. The interim nature of these strategies are important for providing flexibility for operations, however, goals to significantly reduce consumptive use throughout the basin cannot be an interim measure. **Reductions in use need to be baked into the central purpose of this process and carried forward to direct management well into the future.**
- b. Basinwide operations of federal dams are inextricably linked to the conditions at Hoover Dam, and especially, Glen Canyon Dam. The geographic scope of this planning process should include impacts to restored sections of river upstream of Lake Powell. Operations of upstream basin reservoirs (e.g., Blue Mesa Reservoir, Navajo Reservoir and Flaming Gorge Reservoir) have a great effect on tributaries and river reaches with important recreational values. **The scope should broaden to analyze coordinated reservoir management impacts on downstream recreation and environmental values.** Including these basinwide operations as a part of this process would help to replace the agreements made as a part of the expiring Upper Basin Drought Contingency Plan. This current process provides a valuable opportunity to look holistically at management basinwide and plan for operations that have the least potential to negatively impact environmental and recreational values of the watershed.
- c. **New and updated guidelines should include a purpose statement on the need to assess modified infrastructure at Glen Canyon Dam,** including building lower outlets to avoid deadpool and analyzing the full decommissioning of Glen Canyon Dam, Hoover Dam, or both. Dam

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<sup>1</sup>Bureau of Reclamation. (December 2020). *Review of the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead*. i-ii.  
[https://www.usbr.gov/ColoradoRiverBasin/documents/7d/7.D.Review\\_FinalReport\\_12-18-2020.pdf](https://www.usbr.gov/ColoradoRiverBasin/documents/7d/7.D.Review_FinalReport_12-18-2020.pdf)



modification or removal would be a long and extensive process that will greatly impact the ability to move water between the upper and lower basins is therefore a necessary purpose to include in updated guidelines. We include more detailed recommendations below for an element that will address this purpose and need.

2. *Elements of 2007 Interim Guidelines:*

- a. The first purpose of the 2007 interim guidelines includes that Reclamation management should consider effects on recreation and the environment, however there is no element that addresses that specifically. Without providing specific direction on measures to protect and enhance environmental and recreation values, it will be difficult to fulfill the identified purpose. **A new element should be established that addresses these values and what steps must be taken to fully assess and mitigate the effects on river recreation and the environment.**
- b. **The elements of the 2007 Guidelines should incorporate the related federal effort to modify engineering at Glen Canyon Dam.** A recent report by Utah Rivers Council, Glen Canyon Institute, and Great Basin Water Network highlighted that the archaic engineering of Glen Canyon Dam could not only curtail hydropower, but could limit or completely halt downstream water deliveries to the Lower Basin States.<sup>2</sup> In addition to the inability to meet water delivery obligations, environmental and recreation resources downstream in Grand Canyon National Park would be severely impacted. Bureau of Reclamation's effort to look at engineered modifications for hydropower and water outlets at Glen Canyon Dam will directly impact the ability to fulfill the purposes and elements of the 2007 Guidelines. Regardless if they are separate NEPA processes, there needs to be a high level of coordination and ideally the outcomes of the dam modification effort can inform the final Post-2026 Operations of Glen Canyon and Lake Mead. As part of the dam modification effort and as part of this process, an alternative to fully drain Glen Canyon Dam and restore Glen Canyon should be considered and fully analyzed. An additional component should include assessing the feasibility of maintaining lower water levels in Lake Powell in order to create a more stable environment for management of resources above Glen Canyon Dam as well as to preserve the areas of Glen Canyon that have begun to emerge at low reservoir levels.
- c. **Direction on multi-purpose opportunities of the storage and delivery of conserved water should be an additional element of these operational strategies.** It should be specific to achieving streamflows that support aquatic habitats and recreational values. This additional element could help to provide mitigation for impacts to in-channel flow. In our below comments on existing

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<sup>2</sup> Utah Rivers Council, Great Basin Water Network, and Glen Canyon Institute. (2022 August). *Antique Plumbing and Leadership Postponed*.  
<https://static1.squarespace.com/static/5a46b200bff2007bcc66fcf4/t/62e9d5e66e6ec602d2575e30/1659491822127/A+ntique+Plumbing+at+Glen+Canyon+Dam.pdf>



recreation data, we detail resources available to the Bureau that quantify flows that support river recreation opportunities in the Grand Canyon and in upstream reaches of the Colorado River Basin. That data along with the multitude of data that define flows for fish and other ecological values in the Grand Canyon should be leveraged and directly inform multi-purpose opportunities for the storage and delivery of water between reservoirs and the upper and lower basins.

- d. **Tribal water rights and Indigenous Traditional Ecological Knowledge need to be prioritized in all management decisions.** The 2007 Guidelines do not mention tribes nor their water rights in either the purpose or element sections, despite the fact that tribes have been disenfranchised from their “wet” water rights for decades. Tribes have some of the most senior water rights on the Colorado River, yet they have been left out of management decisions since those water rights were established and often lack infrastructure and means to use their water. Any proposed water allocations and reductions in post-2026 operations need to fully analyze impacts to both developed and undeveloped tribal water rights. Many of these tribes and other indigenous communities in the Colorado River Basin have spent millenia living in symbiosis with the Colorado River despite droughts, floods, and other extreme environmental conditions. Their wealth of experience passed down through generations should be sought out and prioritized in the development of NEPA alternatives. The use of Indigenous Traditional Ecological Knowledge should be used to inform federal decision making as directed by White House Memorandum dated November 15, 2021, *Indigenous Traditional Ecological Knowledge and Federal Decision Making*.<sup>3</sup> At least one element should be added to the 2007 guidelines that addresses meeting tribal water needs and incorporating Traditional Ecological Knowledge into the management regime of the Colorado River.

## Comments on the NEPA Process and Public Engagement

### 1. Leverage existing recreation data in NEPA analyses

Each alternative needs to thoroughly analyze the operational and drought effects on recreation and the environment both downstream from Glen Canyon and Hoover Dams as well as on affected river segments in the Upper Basin. Flow needs that support river recreation opportunities and sensitive environmental factors are complex, however there is robust scientific information that supports flow needs for recreation in places like the Grand Canyon and Cataract Canyon of the Colorado River, in addition to many other river segments in the Colorado River Basin. The alternatives and the environmental analysis needs to include

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<sup>3</sup> The White House. (2021, November 15). Indigenous Traditional Ecological Knowledge and Federal Decision. <https://www.whitehouse.gov/wp-content/uploads/2021/11/111521-OSTP-CEQ-ITEK-Memo.pdf>



reference to and robust analysis of science-based flow information for both river recreation and environmental factors that are affected by operations at Glen Canyon and Hoover Dams and upstream reservoirs in the basin.

In the Draft Supplemental Environmental Impact Statement (DSEIS) published in April 2023, the Bureau made wildly incorrect statements about river recreation, claiming that because flows were not anticipated to be below 5,000 cfs in the Grand Canyon that recreation would only have minor changes in use value and economic activity.<sup>4</sup> However, river recreation in the Grand Canyon is more nuanced than a singular flow minimum. This is well documented in a study completed by Shelby, et al. (1992), that characterized minimum acceptable flows as 10,000 cfs, optimal flows of 20,000 - 25,000 cfs, and a maximum acceptable flow of 45,000 cfs.<sup>5</sup> The statement in the DSEIS regarding the 5,000 cfs minimum is not backed up with evidence or given context and the findings from studies referenced above show that the aggregate minimum acceptable flow is twice that at 10,000 cfs. The USGS has also conducted multiple studies (Neher et al., 2017; Neher et al., 2019) assessing the willingness to pay of whitewater boaters in the Grand Canyon. Both studies found that whitewater boaters have a much lower willingness to pay when flows are at 5,000 cfs compared to three other higher flow scenarios assessed.<sup>6</sup> The existing data that is based in science and is peer-reviewed, demonstrates that 5,000 cfs is not the only flow threshold that is needed to describe the river recreation opportunities that are affected by operations at Glen Canyon Dam.

In addition to studies that have assessed flow needs for river recreation in the Grand Canyon, American Whitewater has conducted numerous flow-dependent recreation studies on the Colorado River and its tributaries in the Upper Basin. Stafford et al. (2016) extensively quantifies the flows that support river recreation opportunities in Cataract Canyon upstream from Glen Canyon, identifying both acceptable and optimal flow ranges and quantifying how often these flows occur across varying hydrological conditions (i.e., boatable day).<sup>7</sup> Similar studies have been completed on river segments in the Upper Basin that are downstream from federal water projects, including on the Green, Gunnison, and Dolores Rivers. American Whitewater can provide electronic or hard copies of any of the above studies.

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<sup>4</sup> Bureau of Reclamation. (April 2023). *Near-term Colorado River Operations: Draft Supplemental Environmental Impact Statement*. 3-312. <https://www.usbr.gov/ColoradoRiverBasin/documents/NearTermColoradoRiverOperations/20230400-Near-termColoradoRiverOperations-DraftEIS-508.pdf>

<sup>5</sup> Shelby, B., Brown, T., Baumgartner, R. (1992) Effects of Streamflows on River Trips on the Colorado River in Grand Canyon, Arizona. *Rivers*, 3(3), 191-201. <https://www.americanwhitewater.org/content/Document/fetch/id/518/raw>

<sup>6</sup> Ibid.

<sup>6</sup> Neher, C., Duffield, J., Bair, L., Patterson, D., & Neher, K. (2017). Testing the limits of temporal stability: willingness to pay values among grand canyon whitewater boaters across decades. *Water Resources Research*, 53. <https://doi.org/10.1002/2017WR020729>; Christopher Neher, Lucas Bair, John Duffield, David Patterson & Katherine Neher (2019) Convergent validity between willingness to pay elicitation methods: an application to Grand Canyon whitewater boaters, *Journal of Environmental Planning and Management*, 62(4), 611-625, DOI: 10.1080/09640568.2018.1435411

<sup>7</sup> Stafford, E., Fey, N., and Vaske, J. J. (2016) Quantifying Whitewater Recreation Opportunities in Cataract Canyon of the Colorado River, Utah: Aggregating Acceptable Flows and Hydrologic Data to Identify Boatable Days. *River Research and Applications*, 33. 162-169. DOI: 10.1002/rra.3049



These are just a few examples of the river recreation data that are already published and that should be integrated into the NEPA analysis for each alternative proposed for long-term operations at Glen Canyon and Hoover Dams.

## 2. *Public facing website*

American Whitewater is very supportive of the Bureau of Reclamation's plan to create a public facing web-tool that is accessible to the public and caters to users with a broad range of technical skills. With the availability and use of the web-tool, it will be even more important that comprehensive metrics for river recreation flows be incorporated into both the educational tool and the operational alternatives. The public needs to be able to understand how all of the uses and values of the river will be affected by operations, including recreation and the environment.

We strongly recommend that the web-tool is truly digestible and useful to the average layperson who does not have a background in water law, hydrology, or the complex history of water management in the Colorado River Basin. The web-tool should include the following components:

- Photos that portray the recreation and environmental values of the Colorado River
- Comprehensive recreational flow preferences that are incorporated into modeled hydrological scenarios (see our above comments that detail available recreational data)
- Use of common language (i.e., no jargon) that educate the general public about the complex history of the Colorado River, how water availability is projected to decrease in the future, and how all of the users and values of the Colorado River will be impacted by the proposed alternatives for post-2026 operations.

American Whitewater, in partnership with Lotic Hydrological, built an interactive web-tool specifically for the Taylor and Gunnison Rivers in Colorado.<sup>8</sup> The tool was built for the Upper Gunnison River Water Conservancy District as part of their watershed management planning effort.<sup>9</sup> We offer this tool as an example of a publicly available interactive web-tool that provides users with the ability to, in real time, see how changes in water management affect river recreation opportunities in the local watershed. It also provides an option for people with more technical skills to input custom hydrological scenarios and the potential impact on recreation opportunities.

We also ask that the National Park Service and the USGS be directly consulted in the development of the web-tool to ensure that the appropriate recreation data and river values within the Grand Canyon are incorporated into the tool.

The Colorado River Basin generates over \$25 billion from river related outdoor recreation and supports the quality of life of Americans across the country who travel to the Colorado River

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<sup>8</sup> <https://ugrwcd.org/boatable-days-tool/>

<sup>9</sup> <https://ugrwcd.org/watershed-mgmt/>





Basin to recreate.<sup>10</sup> River recreation needs to be a fundamental component of the NEPA analysis and river recreation stakeholders must be meaningfully engaged in the process.

Thank you for considering American Whitewater's scoping comments on the Development of Post-2026 Colorado River Reservoir Operational Strategies for Lake Powell and Lake Mead.

Sincerely,

Kestrel Kunz  
Protection Director  
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<sup>10</sup> Southwick Associates. (2012). *Economic Contributions of Outdoor Recreation on the Colorado River & Its Tributaries*. Protect the Flows.



## *Arizona Farm Bureau Federation*

325 S. Higley Rd, Suite 210  
Gilbert, AZ 85296

August 15, 2023

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

Submitted electronically via [crbpost2026@usbr.gov](mailto:crbpost2026@usbr.gov)

RE: 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

To Whom It May Concern:

The Arizona Farm Bureau Federation represents farmers and ranchers across the state who contribute \$23.3 billion to the state's economy. Water is the lifeblood of our thriving agricultural community. Although last season's snowpack helped curb some of the effects caused by the drought that has persisted across the West, we know it was not enough to alleviate the water shortages that continue to threaten one of the world's most productive and diverse agricultural economies. Since 2020, farmers in Central Arizona have been struggling through the impacts of reduced Central Arizona Project water deliveries. As water levels continue to decline in Lake Powell and Lake Mead, other farming communities throughout the state who depend on the Colorado River will begin to feel the impact. Given the vital importance of water to agriculture, we appreciate the opportunity to provide the following comments in response to the Bureau of Reclamation's Notice of Intent to prepare an Environmental Impact Statement on the development of Post-2026 operational guidelines and strategies for Lake Powell and Lake Mead.

The Arizona Farm Bureau's comments submitted in September 2022 in response to BOR's request for input (ROI) on developing the Post-2026 Colorado River Reservoir Operational Strategies for Lake Powell and Lake Mead under historically low reservoir conditions still apply to BOR's current NOI. During the planning process to develop the 2007 Interim Guidelines, agricultural stakeholders were not included in a substantive way. This was largely rectified in the development of the Lower Basin Drought Contingency Plan (LDCP). Arizona extended this stakeholder engagement by establishing the Arizona Reconsultation Committee, which has been proactive in preparing for discussion regarding post-2026 operations. Although Arizona farmers have repeatedly proven their willingness to be part of the solution for the entire system, predominantly at the sacrifice of food and fiber production, high-priority "on-

river,” agricultural users have been sidelined in these latest efforts. The priority system was respected during the development of the LDCP, which is why nearly half of central Arizona agriculture, accounting for nearly 25% of Arizona’s agricultural production, has been followed. It should be without question that this priority system be respected in Post-2026 planning through a proper balance of mitigation and voluntary system conservation with the flexibility to plan for both short- and long-term river conditions, whether in drought or surplus. BOR has an opportunity to lead in its role as water manager with a strong analysis of the importance of agricultural production and its inclusion in any planning discussions. BOR’s development of “a web-based tool that enables users with different levels of technical skill to explore, create, and compare potential operating strategies to enhance the development of alternatives” should include the value that agricultural production brings to the region and nation.

As the Post-2026 Operational Strategies are developed, those who are currently putting the water to its highest and best use in the present must be given a meaningful opportunity to participate in the decision-making process. Furthermore, any decisions about the use of the river must acknowledge the unique growing conditions of the Southwestern U.S. for year-round production and the economic significance of agriculture dependent on Colorado River water – it extends even beyond the scope of farms and rural communities to include safeguarding our domestic food security. For this reason, it is imperative that the EIS include a detailed analysis of these impacts on agriculture, and food resiliency in the United States.

We do not believe the evaluation of impacts on agriculture in BOR’s draft Supplemental Environmental Impact Statement (SEIS) for near-term Colorado River operations was complete, and the agency should make sure to expand and refine its analysis related to agriculture in the EIS it prepares for the Post-2026 Operational Guidelines. There is a consistent focus on the quantity of water agriculture uses to produce food and fiber. Yet frequently, the analysis of the impacts of water reductions and the domino effect of what that leads to is often minimal. For example, the Yuma, Arizona growing region, which relies on Colorado River water, produces 90 percent of the leafy greens consumed in the U.S. and Canada from November through April. Curtailments of water in certain areas can have significant economic impacts far beyond local and state economies. Other areas of analysis to incorporate include impacts on the infrastructure that supports local agricultural economies, as well as air quality and the repercussions associated with Environmental Protection Agency (EPA) particulate non-attainment areas.

Furthermore, elements that BOR should consider in the upcoming NEPA process include further encouragement of conservation and efficiency measures by all users, augmenting water supplies where feasible, and evaluating increased storage capacity to capture seasonal precipitation in sub-watersheds likely to be impacted by the reverberating impacts of less water in the Colorado River system. Additionally, the NEPA process needs to include specific analysis to streamline upper watershed projects intended to improve forest and rangeland health across multiple federal agencies. Each of these elements is an essential component of the overall health and resilience of the Colorado River Basin.

Water is fundamental to agricultural production, which is fundamental to our domestic food supply, which is fundamental to our way of life and national security. It is incumbent upon BOR to work with all Colorado River users and develop a more complete EIS to protect the river and the people, industries, and communities who rely on it as it begins to develop its Post-2026 Colorado River Operational Strategies.

Thank you for your consideration.

Sincerely,

*Stefanie A. Smallhouse*

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## Comments on Colorado River Post 2026 Operations Scoping Phase

Sent via email to [crbpost2026@usbr.gov](mailto:crbpost2026@usbr.gov)

Carly Jerla  
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Dear Ms. Jerla,

Thank you for the opportunity to submit scoping comments on the development of the Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead. These comments address the scope of guidelines, strategies, and related issues that should be considered in the upcoming EIS. The U.S. Bureau of Reclamation has requested input on “how the purpose and elements of the 2007 Interim Guidelines should be retained, modified, or eliminated to provide greater stability to water users and the public through more robust and adaptive operational guidelines.”<sup>1</sup> We seek to address this request in the comments that follow.

Climate change and prolonged drought have exacerbated the historical over-allocation of water in the Colorado River Basin. In recent decades, these conditions have led to the drawdown of major system reservoirs, Lake Powell and Lake Mead, to their lowest levels since being filled. This outcome occurred even as policies to reduce water deliveries and otherwise manage shortages were implemented. While a separate SEIS process has been undertaken to develop strategies to further address these conditions in the short term, several of the core policies that outline the operational guidelines for the Colorado River system expire at the end of 2026. This moment provides a critical opportunity for Reclamation to develop and implement new policies aimed at addressing both the long-standing and emergent challenges facing the Colorado River Basin. As scholars of water resource management and sustainability spanning the engineering, physical, and social sciences, we articulate three broad areas of suggestions for how the Post 2026 Guidelines process can be scoped to achieve these goals.

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<sup>1</sup> <https://www.usbr.gov/ColoradoRiverBasin/post2026/scoping/index.html>

### **Focus on Adaptive, yet Long-Term Policies**

The current guidelines for managing shortages in the Colorado River Basin, commonly referred to as the 2007 Interim Guidelines, were developed in response to rapidly declining reservoir levels at the start of the twenty-first century. At that time, the basin's hydrology quickly shifted from surplus to shortage, prompting the development of these guidelines under the Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs (LROC). Since that time, drought has become a fact of life in the Colorado River Basin: we now call the drought that started around 2000 a "megadrought" and continue to cope with it today, with only brief periods of relief. Moreover, we know that in addition to prolonged drought, the basin is aridifying due to a warming regional climate.<sup>2</sup> As a consequence of these trends, Reclamation and other entities have had to develop several additional policies and programs between 2007 and present – such as the 2014 System Conservation Pilot Program, the 2019 Drought Contingency Plan (DCP), and the current SEIS – to manage for more extreme shortage than was anticipated in 2007.

1. The previous two decades have made it obvious that the Post 2026 Guidelines must be scoped to **consider a broader range of hydrologic extremes** for future basin management. Taking this lesson seriously means that the Post 2026 Guidelines should be designed to manage the impacts of slow-moving, long-term aridification, punctuated with drought events that may be more severe or prolonged than previously predicted. It also requires using the best available climate and hydrologic science and modeling, including recent advances in understanding uncertainties around how streamflow responds to warming temperatures, extreme events such as wildfires, and other dynamic climate-induced changes to influence available water supply.<sup>3</sup>
2. The Post 2026 Guidelines should also **develop a greater diversity of response options** that can be flexibly and adaptably employed in response to variable conditions<sup>4</sup>. Managers and stakeholders have worked hard to develop, and in some cases pilot, potential response options. These range from system conservation and demand management programs, which can provide temporary relief, to collaborative partnerships that may lead to new technologies and infrastructure to support longer-term water supply sustainability. In developing the Post 2026 Guidelines, it is critical to consider the different roles these and other diverse response options may play in the basin's future, as well as ways to support the implementation of promising options as needed.
3. Creating guidelines that proactively plan for many potential hydrologies and responses can also reduce the time and resource burden on policy makers, water managers, and stakeholders who have repeatedly returned to the negotiating table over the past decade to manage increasingly severe drought. More proactive and anticipatory management

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<sup>2</sup> Overpeck, J. T., & Udall, B. (2020). "Climate Change and the Aridification of North America." *Proceedings of the national academy of sciences*, 117(22), 11856-11858.

<sup>3</sup> Whitney, K. M., et al. (2023). "Spatial Attribution of Declining Colorado River Streamflow under Future Warming." *Journal of Hydrology*, 617, 129125; Gordon, B. L. et al. (2022). "Why Does Snowmelt-driven Streamflow Response to Warming Vary? A Data-Driven Review and Predictive Framework." *Environmental Research Letters*, 17(5), 053004; Biederman, J. A., et al. (2022). "Streamflow Response to Wildfire Differs with Season and Elevation in Adjacent Headwaters of the Lower Colorado River Basin." *Water Resources Research*, 58(3), e2021WR030687; Bass, B. et al. (2023). "Aridification of Colorado River Basin's Snowpack Regions has Driven Water Losses despite Ameliorating Effects of Vegetation." *Water Resources Research*, 59(7), e2022WR033454.

<sup>4</sup> Walker, B., et al. (2023). "Response Diversity as a Sustainability Strategy." *Nature Sustainability*, 1-9.

will free up capacity for these individuals and their organizations to focus on enduring sustainability solutions for the basin, rather than managing emergencies. Thus, we suggest the Post 2026 Guidelines should **have a temporal scope of two decades or more**, following the model of the 2007 Interim Guidelines. This would also have the benefit of reducing uncertainty for water rights holders throughout the basin, effectively lowering one of the barriers for conservation investments.

### ***Expand the Scope of the Guidelines Beyond Reservoir Operations***

In addition to considering a broader range of hydrologies and response options, we suggest the Post 2026 Guidelines should be broader in scope than reservoir operations, as initially outlined in the 1970 LROC. The prolonged drought in the Colorado River Basin has illuminated several other critical vulnerabilities that intersect with reservoir operations to undermine long-term sustainability and predictability, which can be addressed to varying degrees in the development of the Post 2026 Guidelines. We mention a several below, though this list is not exhaustive.

1. The Post 2026 Guidelines process should **set a precedent of honoring the sovereign rights of the basin's Tribal communities**. Tribes have largely been excluded from past decision-making processes in the basin while also experiencing some of the most severe impacts of climate change and other crises like COVID-19. Still, several Tribes have voluntarily engaged, or signaled a desire to engage, in partnerships that can improve water availability and basin health for all people. Reducing uncertainty around Tribal water rights can also help expand predictability for other users.<sup>5</sup> Thus, fully involving the Tribes in the scope of the Post 2026 process – and supporting their efforts toward water right quantification and settlement, development and wet water use, and the ability to lease or trade water to the extent they desire – is necessary to address water scarcity for all people in more equitable and just ways.
2. The scope of the Post 2026 Guidelines should **focus on mechanisms that reduce the structural deficit and balance supply and demand** using approaches including and beyond adaptations to reservoir operations. Achieving a supply-demand balance will require the painful reduction of consumptive use in many parts of the basin, primarily in the Lower Basin. In many cases, consumptive use must be reduced *beyond* current allocations to compensate for supply overestimates that have become ingrained into our allocation system, on-going declines in streamflow due to aridification, and the need to refill our reservoirs to reduce vulnerability to future shocks. Doing this will require – but must also go beyond – developing mechanisms to both account for and reduce evaporation and transport losses in the Lower Basin.
3. The Post 2026 Guidelines should **reconsider the criteria for determining when and where policy actions are implemented**. Currently, actions designed to respond to shortage, such as tiered delivery reductions, are implemented when Lake Mead's elevation reaches pre-determined levels. However, reservoir storage and lake elevation respond fairly slowly to reduced streamflow and are not proactively adaptable to changing climatic conditions<sup>6</sup>. Instead, alternate “triggers” for policy action, such as a 5-10 year rolling average of streamflow, should be evaluated in the Post 2026 Guidelines

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<sup>5</sup> Koebele, E. and Robinson, M. (2021). “Tribal Inclusion in Colorado River Governance is a Win-Win.” <https://medium.com/3streams/tribal-inclusion-in-colorado-river-governance-is-a-win-win-138abe072735>

<sup>6</sup> Garcia, M., Ridolfi, E., and Di Baldassarre, G. (2020). “The Interplay between Reservoir Storage and Operating Rules under Evolving Conditions.” *Journal of Hydrology*. 590:125270.

process to assess their responsiveness to short-term hydrologic changes while protecting against overresponse, which could occur within a single low-flow year if the basin was managed as a “run of the river” system in the long term.<sup>7</sup>

### ***Consider the Basin as a System***

Finally, implementing many of the above recommendations requires that the Post 2026 Guidelines consider the basin as a holistic and integrated system, rather than a series of storage reservoirs that are managed separately. Our final three recommendations focus on this “basin-scale” policy making scope.

1. Conceptualizing of the Colorado River as a single basin helps bring into focus the commonalities, rather than differences, that exist among the many users and uses of water. In this vein, the Post 2026 Guidelines should, at their core, **reflect the shared goals and shared risks of the Colorado River Basin community** that have been illuminated through years of deliberative and collaborative policy making in the Basin. For example, low reservoir levels threaten critical infrastructure, which creates cascading risks for water supply and energy grid stability for various users. Similarly, steep declines in river health will ripple out to harm the community as a whole as ecosystems are stressed. Putting these shared risks – and actions to address them – at the center of the Post 2026 Guidelines can help orient individuals to think more collectively about basin management and potentially be more willing to collaborate with fellow stakeholders.<sup>8</sup>
2. Thinking about the basin more holistically may also have practical implications for the operation of reservoirs. While various campaigns have called for the decommissioning of one of the major system reservoirs, several arguments against this – including an overall reduction in water storage – exist. However, the Post 2026 Guidelines could move away from a mindset where Lakes Powell and Mead are considered the Upper Basin’s and Lower Basin’s storage “buckets,” respectively, and instead **focus on optimizing total system storage to meet more user needs** flexibly and under dynamic conditions. This reconceptualization might include evaluating the impacts of policies that focus less on “balancing” the major system reservoirs and are more akin to the Upper Basin’s Drought Response Operations Agreement, including plans for refilling all operating reservoirs.
3. Finally, the Post 2026 Guidelines process should **respect Mexico’s role as a critical partner in Colorado River management** to the extent possible. Over the last two decades, the U.S. and Mexico have worked increasingly collaboratively to address some of the most challenging issues in the Colorado River Basin.<sup>9</sup> These efforts led to the successful development and implementation of Minutes 319 and 323 to the 1944 U.S.-Mexico treaty, which outline and enact binational efforts around river health and environmental restoration in the delta region, shortage sharing across national borders, and other important aspects of transboundary river management. Critically, however,

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<sup>7</sup> Garcia, M., and Koebele, E. (2021). “No More Band-Aids: How to Make the Colorado River Sustainable for the Long Term.” *The Arizona Republic*. <https://www.azcentral.com/story/opinion/op-ed/2022/12/26/how-to-make-colorado-river-sustainable-for-long-term/69740492007/>

<sup>8</sup> Koebele, E. A. (2020). “Cross-Coalition Coordination in Collaborative Environmental Governance Processes.” *Policy Studies Journal*, 48(3), 727-753.

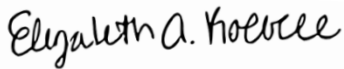
<sup>9</sup> Rivera-Torres, M., & Gerlak, A. K. (2021). “Evolving Together: Transboundary Water Governance in the Colorado River Basin. *International Environmental Agreements: Politics, Law and Economics*, 21(4), 553-574.”



Minute 323 also expires at the end of 2026. While we understand that the Post 2026 Guidelines process addresses water management only in the U.S portion of the basin, and that a “parallel process” with Mexico will occur under the purview of the International Boundary and Water Commission to presumably produce another Minute, we feel it is critical that Reclamation recognizes and builds upon these successful binational management efforts and supports continued collaboration between the U.S. and Mexico in their own process as well. This could occur through consistent and transparent coordination between the Reclamation and IBWC processes.

We thank you again for the opportunity to submit comments and hope they provide insight on defining the scope of the Post 2026 Guidelines.

Regards,

A handwritten signature in black ink that reads "Elizabeth A. Koebele". The signature is written in a cursive style with a clear, legible font.

**Elizabeth A. Koebele, Ph.D.**

A handwritten signature in brown ink that reads "Margaret Garcia". The signature is written in a cursive style with a clear, legible font.

**Margaret Garcia, Ph.D.**



August 15, 2022

*Submitted electronically*

The Honorable Debra Haaland, Secretary of the Interior  
Department of Interior  
1849 C Street NW  
Washington, DC 20240

The Honorable Tommy Beaudreau, Deputy Secretary  
Department of Interior  
1849 C Street NW  
Washington, DC 20240

The Honorable Tanya Trujillo, Assistant Secretary for Water and Science  
Department of the Interior  
1849 C Street, NW  
Washington, DC 20240

The Honorable Camille Touton, Commissioner  
Bureau of Reclamation  
1849 C Street NW  
Washington, DC 20240

Re: Notice of intent to prepare a supplemental 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

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Tom Dobbins

Scott Dewhirst  
Tacoma Water

Lindsey Rehtin  
Northern Kentucky Water  
District

Secretary Haaland, Assistant Secretary Trujillo, Deputy Secretary Beaudreau, and Commissioner Touton

August 15, 2023

Page 2 of 3

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

The Association of Metropolitan Water Agencies (AMWA) welcomes the opportunity to comment on the notice of intent to prepare a supplemental 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. AMWA is an organization representing the largest publicly owned drinking water utilities in the United States, and collectively its membership serves more than 160 million people. Members serve communities of more than 100,000 people across the country. AMWA's membership includes many of the largest drinking water suppliers reliant on the Colorado River.

Our member agencies in the Basin have been leaders in reducing water consumption, and their efforts illustrate both a willingness to address necessary conservation measures and the enactment of leading practices to do so. Many AMWA members, along with other Basin agencies, acted in November 2022 to develop a Memorandum of Understanding to reduce demands on the Colorado River<sup>1</sup> and again in May 2023<sup>2</sup> to agree to a consensus-based system of conservation.

AMWA's member agencies in the Basin have diverse needs; therefore, we encourage the Bureau of Reclamation (Reclamation) to ensure that its development of the post-2026 guidelines and related federal actions on the Colorado River will:

- Prioritize public health and safety;
- Support federal research to operations improvements of water supply forecasts; and
- Provide robust federal support for demand reduction strategies.

Robust federal support for demand reduction strategies should include adequate funding for reduction measures as well as federal research and organization of peer-to-peer information sharing. Reclamation should also consider supporting water agencies by developing criteria for managing facilities, reservoirs, and projects for human health and safety operations, ensuring that agencies have certainty and predictability even under the potential for further reservoir declines.

AMWA supports its member agencies in the region and encourages Reclamation in its efforts to ensure adequate conservation measures are taken to protect critical elevations in Lakes Mead and Powell in the long term. We appreciate the opportunity to comment and ask Reclamation to fully recognize the hydrologic realities of the Colorado River and prioritize public health and safety as it begins the process of developing the post-2026 guidelines and environmental impact statement and continues to take action in the Basin. If you have any questions about this letter, please

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<sup>1</sup>“Memorandum of Understanding by and among Colorado River Basin Municipal and Public Water Providers.” November 15, 2022. <https://www.snwa.com/assets/pdf/mou-2022.pdf>

<sup>2</sup>“Lower Basin consensus-based system conservation proposal.” May 22, 2023. <https://www.doi.gov/sites/doi.gov/files/lower-basin-plan-letter-5-22-2023.pdf>

Secretary Haaland, Assistant Secretary Trujillo, Deputy Secretary Beaudreau, and Commissioner Touton

August 15, 2023

Page 3 of 3

contact Jessica Evans, AMWA's Manager of Government Affairs and Sustainability Policy, at [evans@amwa.net](mailto:evans@amwa.net).

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas Dobbins". The signature is written in a cursive style with a large, stylized initial "T".

Thomas Dobbins  
Chief Executive Officer

cc: Amanda Erath, Colorado River Post 2026 Program Coordinator, Bureau of Reclamation  
[Crbpost2026@usbr.gov](mailto:Crbpost2026@usbr.gov)



**BlueRibbon Coalition**  
**P.O. Box 5449**  
**Pocatello, ID 83202**  
**208.237.1008**  
**[brc@sharetrails.org](mailto:brc@sharetrails.org)**

---

**Ben Burr, Executive Director**  
BlueRibbon Coalition  
P.O. Box 5449  
Pocatello, ID 83202

**August 15, 2023**

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

BlueRibbon Coalition is a national non-profit organization that promotes responsible recreation and encourages a strong ethical dialogue and individual stewardship of our natural resources. We appreciate the opportunity to submit public comment on the Development of Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead. We champion responsible use of public lands and waters by all recreationists through education of their responsibilities and the empowerment of our members to secure, protect, and expand shared outdoor recreation access. We are proud to work collaboratively with governments, natural resource managers and other recreationist groups.

We represent tens of thousands of Lake Powell and Lake Mead recreation users as well as recreation users across the entirety of the Colorado River Basin. Glen Canyon National Recreation Area is a significant national treasure as well as a spectacular producer of revenue. GCNRA averages \$250 million to \$450 million in annual revenue. It gives rise to over 5000 jobs. Its economic multiplier is 10, giving rise to somewhere between \$2 - \$4 billion in direct economic value to its surrounding and regional areas. During periods of 2021, its south end was compromised to the point that recreational utilization, and its attendant revenue, almost

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vanished. Although 2023 has been a great water year giving significant rise to all the reservoirs within the Colorado River Basin there is still more that can be done to ensure that good water years will allow for continued recreation during years of drought. Previous low levels of Lake Powell have ruined an extensive part of its infrastructure and rendered those improvements unavailable to recreationists. While we recognize the importance of water deliveries and hydroelectric power generation, it is important to recognize the economic benefits of recreation use of these waters is comparable to the economic benefits of the other uses and vitally important to the communities that rely on these benefits. The negative impacts of lost recreation access disproportionately impacts Navajo Nation tribal communities on the southern border of the GCNRA, as well as Page, Arizona and should be recognized in the deliberations involving the Drought Response Operations Plan.

### **Operating Guidelines Alternatives**

Because experimental releases are implemented to simulate flooding, it would be scientifically beneficial to also simulate droughts. Flooding and droughts occur naturally, BOR should be simulating both of these natural phases within the Grand Canyon to thoroughly study the effects. These experimental droughts could be done in periods of low water years to more accurately reflect what the natural occurrences of water availability are in those years.

BRC supports adaptive management that benefits all users. BOR needs to develop alternatives that more accurately reflect the needs of recreation users on Lake Powell and recognize this massive user group. BOR should develop recreation adaptive management strategies that allow flexibility to outflows throughout the year depending on the estimates of water levels. These adaptive management strategies would still honor BOR desired outflow commitments of Lake Powell. However, they would allow for consideration of recreation interests when determining the timing of these releases. Adaptive management would let BOR schedule the timing of the outflows for the various recreation needs based on the conditions on the ground. For example, during 2023 the Castle Rock Cut was open for a short amount of time. The Castle Rock Cut when open bring various benefits to the recreation users of the lake. It allows from broader dispersal of recreation users and impacts. It lessens fuel costs. It also increases safety by alleviating congestion in the main channel.

If BOR was able to utilize adaptive recreation management strategies, the timing of releases in 2023 could have been adjusted to allow the cut to have remained open for longer period of time. We believe this could have been done without jeopardizing energy production. BOR could have reduced outflows for a period of time to prolong the period of time the Cut would remain open, then it could have made up the difference with an experimental release once the water levels dropped below a usable level. Even an extra week or two of access to the Cut would have

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brought significant benefit to the recreation users of the lake. This would increase good will among the recreation community and bolster public opinion of BOR. As long as the releases don't affect power generation and still maintain the allocated water commitments, BOR should make adjustments to consider recreation users. Currently, BOR considers white water rafters with release and timing decisions and should also consider recreation users on the lake as it develops the new Operating Guidelines. If water levels are predicted to be within the range of 3565 and 3590 feet, it should trigger these adaptive recreation management strategies that would allow BOR to make adjustments in order to sustain access areas such as the cut and Antelope Point public launch ramp. We would always be willing to be partners with BOR in developing and implementing these adaptive recreation management strategies.

It is our view that present policy be modified to produce a minimal water level for Lake Powell that will accommodate the preservation of the needed infrastructure. Most of this infrastructure will need to be rebuilt and it should be with the intention of being permanent. There is no need for fluctuating water levels to destroy newly completed facilities. We recommend developing a recreation alternative that builds a Lake Powell operational tier that will adjust the Mid-Elevation release tier and Lower-Elevation balancing tier to be triggered when lake elevation drops below 3588. An elevation of 3588 at Lake Powell is the elevation that allows for all major recreation amenities to be maintained and open. Managing operational tiers around this level will also position the agency to have more operational flexibility when dealing with changed circumstances since the adoption of the 2007 Interim Guidelines. The agency recognizes that "Hydrologic uncertainty combined with uncertain future growth and water use compound to mean that it is impossible to assign probabilities to any given future and the basin is experiencing conditions of deep uncertainty." While our approach is focused on recreation, we also believe it provides a meaningful framework for analyzing risk and employing planning methods that account for deep uncertainty. We have attached our *Path to 3588' Plan*, as part of our formal comment, and we request the agency develop an alternative that includes the analysis and recommendations laid out in the attached plan. Our plan has received an enthusiastic response from the recreation users across the basin. We hope you will see this expression of the interests of the recreation community of users as an important voice that should be balanced with the other important voices in this discussion.

We appreciate the Bureau of Reclamation acknowledgement of water levels and resources through the Near-term Colorado River Operations SEIS with the development of Alternative 2 in which BRC supported. BRC was preparing a comment in support of this alternative before BOR pulled the SEIS. Although we support a level of 3588, the SEIS proposed 3575 which is a much better management plan than current operating guidelines with the 2007 Interim Guidelines.

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Ultimately, 3588 as a goal makes more sense with infrastructure and resources on the lake however, 3575 gets water levels far closer. BRC would like the post 2026 Operating Guidelines to function more like the near term operation proposal than the 2007 Guidelines.

As non-consumptive users, our rights will not interfere with any of the other users of Colorado River water. For 60 years Lake Powell has stood as the guardian and fulfilled its role as a management tool for adequate Basin State water allocation. It is now time to rethink those original policies and include other stakeholders in future policy considerations. For this reason, any analysis of our plan that distinguishes it as a “recreation alternative” will only be complete if the analysis also recognizes the environmental benefits of our plan along with our plan’s ability to meet the needs and demands of the law and other stakeholders.

We feel that recreationists have a right to access and use stored water. So do the states of Colorado, Utah, and Arizona. As a natural resource, water is to be used for the benefit of all of us. It is in the public interest to allow recreational use of our natural resources that leads to no adverse effect or depletion of those assets. Colorado River water belongs to us all and we encourage any move in a direction that enables the benefits of this water to be enjoyed by the greatest number of users.

We believe that the 2007 trigger for drought response at 3525’ at Lake Powell is inadequate, and doesn’t allow the necessary flexibility to BOR decision makers to adjust to lowering lake levels. That the 2007 Interim Guidelines didn’t allow for greater flexibility for the lower elevation balancing tier is a glaring flaw in the guidelines in hindsight. This oversight must be corrected in the current planning process.

The key challenge that faces future planning is that there will likely be declining water supply because of climate change in a watershed that was already over allocated to begin with. The seven states have recognized this, but the specific challenge will be to modify existing agreements to reduce water demand within the lower basin states while allowing the upper basin states to exercise their water rights so that all seven states and Mexico can sustainably use this resource while preserving other key values related to recreation and the environment.

### **2007 Interim Guidelines**

The first component of the 2007 Interim Guidelines is,

“improve Reclamation’s management of the Colorado River by considering trade-offs between the frequency and magnitude of reductions of water deliveries, and considering the effects on water storage in Lake Powell and Lake Mead, and on water supply, power production, recreation, and other environmental resources;

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The 2020 review of the 2007 plan found that the BOR was “largely effective”. BlueRibbon believes that in the case of recreation, BOR was not effective as we have seen recreational resources such as marinas and ramps closed due to water levels. There have been “experimental releases” that should not be implemented during times of drought. BRC appreciates that BOR recognizes that this process needs to be more inclusive of a wide range of stakeholders compared to the process in 2007. We have had thousands of our members and supporters engage in this planning effort, because they recognize that the 2007 Interim Guidelines didn’t adequately account for the impact to recreation that would result from low water levels.

BRC would like to be considered an interested public for this project. Information can be sent to the following address and email address:

Ben Burr  
BlueRibbon Coalition  
P.O. Box 5449  
Pocatello, ID 83202  
brmedia@sharetrails.org

Sincerely,

A handwritten signature in black ink, consisting of stylized initials 'BB' followed by a long horizontal line extending to the right.

Ben Burr  
Executive Director  
BlueRibbon Coalition

A handwritten signature in black ink, appearing to read 'Simone Griffin' in a cursive script.

Simone Griffin  
Policy Director  
BlueRibbon Coalition



August 15, 2023

Bureau of Reclamation  
Attn: Post-2026 (Mail Stop 84–55000)  
P.O. Box 25007  
Denver, CO 80225  
CRBpost2026@usbr.gov

Re: Comments to Bureau of Reclamation’s “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.”

On behalf of *Business for Water Stewardship (BWS)* and the *Bonneville Environmental Foundation (BEF)*, we thank you for the opportunity to provide input and comment on the scope of the NEPA process for the Post-2026 Operational Guidelines and Strategies for Lake Powell and Lake Mead as published in Federal Register Notice – 88 FR 39455 on June 16, 2023 (Scoping Notice).

BEF is a national leader with a focus on working with corporations and businesses to leverage private sector resources to support projects and programs that bolster water supply resilience to help meet the shared needs of business, communities, and the environment. We work hand-in-hand with many of the world’s largest corporations to guide their participation in collective action investments designed to achieve water resilience benefits that include: system conservation and water efficiency gains; groundwater conservation; river, wetland and riparian restoration; water access for underserved communities; forest resilience; and other positive water security outcomes. Through direct collaboration with private sector companies, we support dozens of projects annually in the Colorado River Basin to benefit tribes, farmers, municipalities, communities, and organizations. The lower Colorado River Basin is the region with the greatest interest, concern, and investment from BEF’s Fortune 500 corporate partners, and through our close work with companies, we have built an acute awareness of corporate perspectives related to water management in the Colorado River basin.

We seek to use this letter to outline several critical principles that BEF and corporate partners urge the Bureau of Reclamation to incorporate into the process to create Post 2026 Strategies that will guide operations on the lower Colorado River. We wish to convey our deep interest in a collaborative Colorado River community that works together to develop solutions for managing the Colorado River under hotter, drier, and increasingly unpredictable conditions. To this end, we encourage the Bureau of Reclamation to approach this work using the following principles:



1. **The Post-2026 Guidelines should plan for the River we have and not expect the River we want:** Successful operational and management strategies must plan for full range of plausible hydrologic extremes brought on by climate change. Plans must provide for and accommodate the flexibility required to deliver predictable and reliable water supplies under very diverse circumstances and scenarios.
2. **The Post-2026 Guidelines must move beyond managing from year to year—or crisis by crisis:** The long-term stability and predictability of Colorado River water supply is the goal, and the Bureau’s metrics for Colorado River water supply should prioritize managing the system to achieve reliability, predictability, and stability over the long-term.
3. **The environment is important:** Post 2026 guidelines should consider and value a broad range of environmental benefits and impacts with a goal of supporting ecosystems that contribute to water and ecological resilience in the Basin, including sensitive species and habitats in the Grand Canyon and Colorado River Delta.
4. **The post-2026 Guidelines must work in concert with parallel strategies that benefit the Basin:** The Guidelines will not be the sole answer to challenges afflicting the Colorado River Basin. Reinforcing and parallel activities will be critical to support the Basin’s overall stability. The Bureau’s post-2026 process should anticipate and reinforce parallel processes led by states, agencies, NGOs, Tribes, corporations, municipalities, and others.
5. **The post-2026 Guidelines should recognize the sovereign roles, rights, and interests of Tribal Nations as fundamental to the fabric and longevity of the Colorado River Basin.** It is imperative that Tribal Nations are afforded their rightful role in negotiations and decision-making processes that will influence and/or affect their rights, authorities, and interests.
6. **The term of the Guidelines must be adequate and flexible enough to incentivize investment and practices that will build real resilience with lasting benefits for the Basin.** Durable change in systems and practices across the basin cannot happen quickly. Timelines and signals to water users and basin partners must incentivize long-term and durable action in order to deliver the required system-level change.

The effects of drought and increasing temperatures due to climate change over the past two decades continue to impact river flows, affect storage supplies, and impose additional uncertainty for businesses and companies that operate in and rely on water from the Colorado River Basin. It has become clear to BEF, our corporate clients, and implementing communities on the ground that that we need to rethink how we manage the Colorado River so that the river can continue to provide for the 40 million people who depend on it. Hotter and drier conditions represent the new normal in the Colorado River Basin. A wet winter, along with short-term agreements to reduce water use, have kept the river from the brink of collapse. However, we cannot continue to do only enough to bridge from one crisis to the next. As such,



the post-2026 Guidelines will have to acknowledge and consider the full range of all possible future conditions and execute strategies and operations that are geared toward long-term, sustainable use of the Colorado River for people and the natural environment.

We see great urgency to develop and implement solutions as soon as possible.

Thank you for your work and the opportunity to comment.

Sincerely,

Todd Reeve  
CEO-Bonneville Environmental Foundation  
Founder-Business for Water Stewardship



# CREDA

## Colorado River Energy Distributors Association

### ARIZONA

Arizona Municipal Power Users Association

Arizona Power Authority

Arizona Power Pooling Association

Irrigation and Electrical Districts Association

Navajo Tribal Utility Authority  
(also New Mexico, Utah)

Salt River Project

### COLORADO

Colorado Springs Utilities

Holy Cross Energy

CORE Cooperative

Platte River Power Authority

Tri-State Generation & Transmission Association, Inc.  
(also Nebraska, Wyoming, New Mexico)

Yampa Valley Electric Association, Inc.

### NEBRASKA

Municipal Energy Agency of Nebraska  
(also Colorado)

### NEVADA

Colorado River Commission of Nevada

Silver State Energy Association

### NEW MEXICO

Farmington Electric Utility System

Los Alamos County

### UTAH

City of Provo

City of St. George

South Utah Valley Electric Service District

Utah Associated Municipal Power Systems

Utah Municipal Power Agency

### WYOMING

Wyoming Municipal Power Agency

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### Leslie James

Executive Director  
CREDA

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August 11, 2023

Bureau of Reclamation

Attn: Post-2026 (Mail Stop 84-55000)

P.O. Box 25007

Denver, CO 80225

[Crbpost2026@usbr.gov](mailto:Crbpost2026@usbr.gov)

The Colorado River Energy Distributors Association (CREDA) appreciates the opportunity to provide comment on 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 ("Post-2026 NOI"), as published in Fed. Reg. Vol. 88, No. 116, No. 39445 (June 16, 2023). CREDA members are all non-profit entities, and include tribes, municipalities, rural electric cooperatives, political subdivisions, and state agencies. CREDA members serve over 4.1 million consumers in the Colorado River basin states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, and represent the majority of the firm electric service customers of the Colorado River Storage Project (CRSP). As such, CREDA and its members have a unique interest and role in issues associated with Colorado River operations, specifically Post-2026 Guidelines and Strategies, drought contingency planning and Colorado River operations.

The Post-2026 NOI seeks comments concerning "the scope of specific operational guidelines, strategies, and any other issues that should be considered on or before August 15, 2023." CREDA submitted pertinent comments on these issues on April 25, 2007, April 30, 2020, August 31, 2022, September 29, 2022, and December 20, 2022 and is including those comment letters with this submittal.

### SCOPE OF OPERATIONAL GUIDELINES AND STRATEGIES

As an overarching theme, CREDA strongly urges the foundation of the Post-2026 Guidelines and Strategies be based on Commissioner Touton's April 26, 2023 testimony before Congress: "**Reclamation's projects and programs serve as the water and power infrastructure backbone of the American West...**". Throughout the Post-2026 NOI reference is made to "the system", which is comprised of both water and power infrastructure. The Purpose and Need, Scope and ultimate Operational guidelines and strategies developed for post-2026 must reflect the inextricable legal, economic and management linkage between water and power infrastructure and operations in the Colorado River Basin.

As Glen Canyon Dam is one of the two key facilities addressed in this process, it is important at the outset of this process to recognize the statutory authorities and mandates underpinning Dam operations. CRSPA Section 1 defines the purposes, which are (numbers added): In order to initiate the comprehensive

development of the water resources of the Upper Colorado River Basin, for the purposes, among others, of 1) regulating the flow of the Colorado River, 2) storing water for beneficial consumptive use, making it possible for the States of the Upper Basin to utilize, consistently with the provisions of the Colorado River Compact, the apportionments made to and among them in the Colorado River Compact and the Upper Colorado River Basin Compact, respectively, providing for the 3) reclamation of arid and semiarid land, 4) for the control of floods, and for the 5) generation of hydroelectric power, **as an incident** of the foregoing purposes.

Note the use of the word INCIDENT. It is **not INCIDENTAL**. It is **not** secondary, lesser, subservient, nonexistent, or any other descriptor. **It is RELATED TO** the foregoing purposes. Section 620 of the Act also contains another reference to hydropower, by its authorization “to construct, operate and maintain....dams, reservoirs, powerplants, transmission facilities and appurtenant works.”

The protection and clarity about hydropower is not limited to these two references. Later in the Act, section 7 requires that the GCD hydropower plants “be operated in conjunction with other Federal powerplants, present and potential, so as to produce the **greatest practicable amount of power and energy that can be sold at firm power and energy rates**”.

Ensuring that “the system” encompasses water and power infrastructure and operations will ensure legal compliance, as well as being consistent with the “widely expressed themes” (as noted at 39456):

- \*Proactive management to improve system stability;
- \*Addressing a broad range of future hydrologic and operating (including grid) conditions;
- \*Minimizing system vulnerability;
- \*Taking a holistic approach to Colorado River water and power management that focuses on sustainability for the Basin’s population (over 5 million water and power customers in significantly underserved areas of the United States) and increases system (including grid) resiliency.

The Courts have supported this “holistic approach.” In 2009, the United States District Court, through the GCT v. U.S. case, described Reclamation’s obligation in its operation of Glen Canyon Dam, calling out the importance of the hydropower purpose. Judge David Campbell’s statement is direct, unequivocal, and continues to be cited in current legal briefs in the most recent litigation (Save the Colorado et al v. U.S.).]

*“Reclamation is charged with balancing a complex set of interests in operating the dam. Those interests include not only the endangered species below the Dam, but also tribes in the region, the seven Colorado River basin states, large municipalities that depend on water and power from Glen Canyon Dam, agricultural interests, Grand Canyon National Park, and national energy needs at a time when clean energy production is becoming increasingly important.”*

The Post-2026 NOI recognizes at 39457 that the four original elements of the 2007 Guidelines “have remained intact”, despite additional agreements and actions being undertaken. One such agreement also referenced as to be addressed in post-2026 is the Drought Contingency Plan (DCP). A critical element of the DCP that reinforces the overarching theme suggested above, as well as the widely expressed themes, is on Page 1, the Background and Objectives, and is very explicit as to the importance of hydropower:

*“2. Maintain the ability to generate hydropower at Glen Canyon Dam so as to protect:*

- a. Continued operation and maintenance of the CRSPA Initial Units and participating projects authorized under the 1956 Colorado River Storage Project Act, as amended (“CRSPA”);*
- b. Continued implementation of environmental and other programs historically funded by CRSPA revenues that are beneficial to the Colorado River system;*
- c. Continued electrical service to power customers including municipalities, cooperatives, irrigation districts, federal and state agencies and Native American Tribes, and the continued functioning of the western Interconnected Bulk Electric System that extends from Mexico to Canada and from California to Kansas and Nebraska; and*
- d. Safety contingencies for nuclear power plant facilities within the Colorado River Basin. “*

In response to the Post-2026 NOI’s request for “how the purpose and the elements of the 2007 Interim Guidelines should be retained, modified or eliminated to provide greater stability to water users and the public.....” CREDA recommends that the need for stability is critical not only for water users and the public, but specifically for power users of the Colorado River system, many of whom are rural and tribal communities, and all of whom are long-term contractors for this important renewable resource that is critical to the energy security and clean energy transition taking place in the American West. The four initial elements should incorporate the hydropower resource alongside references to water storage, delivery, and use.

The Post-2026 NOI recognizes historic drought and low runoff conditions since implementation of the 2007 Guidelines. Since that implementation in 2007, the West continues to experience significant changes directed at addressing climate change. As Lakes Mead and Powell decline, there is a risk of losing two major carbon-free generating resources in the West. The importance of these renewable and readily available generation resources was not fully assessed in the 2007 Guidelines FEIS. Loss or reduction of these resources can significantly impact public health and safety; on September 6, 2022, Glen Canyon Dam was again called on to provide emergency assistance to California during extreme heat conditions, to assist in preventing major electrical blackouts. “Hydropower is a strong contributor to grid resilience and reliability.” [Hydropower Value Study: Current Status and Future Opportunities | Department of Energy](#). Glen Canyon and Hoover Dams are “critical assets for ensuring grid reliability during extreme weather events.” [https://www.pnnl.gov/main/publications/external/technical\\_reports/PNNL-30554.pdf](https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-30554.pdf) Reclamation has recognized that absent hydrologic improvement, it “may likely need to also prioritize implementation of near-term actions to stabilize the decline in reservoir storage and *prevent system collapse*.” (emphasis added - June 24, 2022 FRN). Preventing system collapse extends beyond specific water releases or operational actions, it includes ensuring the infrastructure facilities of the system are operated and maintained in a manner to ensure the statutorily authorized purposes (including the generation of hydropower) are maintained.

The scope of the SEIS must analyze and consider the cumulative effects on the System’s hydropower production, including but not limited to: Basin Fund impacts, impacts to WAPA’s contractual obligations to deliver federal hydropower, financial and societal impacts to firm electric service customers (which include 53 tribes), and impacts to transmission grid operations, which are essential to ensure viability of the Colorado River System.

## ELEMENTS OF PROCESS DESIGNED TO DATE

CREDA supports Reclamation's intent to develop vehicles for engagement and outreach. As online tools are developed and made available, CREDA will forward that information to its members, urging that the utilities make available the information to their customers. CREDA will take advantage of public webinars, and if invited, will participate in the Integrated Technical Education Workgroup.

CREDA and some of its members have participated as cooperating agencies in previous Reclamation NEPA processes, providing a unique utility and grid expertise that is important when Reclamation is considering operational changes that have the likelihood of directly impacting the over four million customers directly served by CREDA member utilities. Consistent with recommendations made during the pre-scoping period in regard to an integrated, disciplinary team, Reclamation should also consider assembling such a team to evaluate the impacts on the reliability of the electrical grid associated with reduced or bypassed water releases. The team should include a broad range of industry experts, including WAPA, reliability organizations, grid operators and power suppliers.

CREDA will continue to participate in parallel processes among Reclamation and WAPA to discuss how a long-term sustainable approach that rebalances the obligation and role of federal hydropower revenues in supporting federal priorities may lend itself to the post-2026 process. The burden of maintaining federally owned infrastructure facilities must be reconsidered to reflect conditions reflecting best available hydrologic and climatologic science. The Post-2026 scoping process should identify legislative and regulatory strategies to rebalance power obligations in a time when the hydropower contract deliveries are not reflective of the costs charged to power customers, many of whom are in the most impoverished areas of the country.

CREDA and its members support Reclamation's inclusion of the Western Area Power Administration (WAPA) as a cooperating agency and the interdisciplinary team member responsible for providing hydropower resource impact modeling and analysis. We stand ready to collaborate and assist in providing subject matter expertise in this important process.

Sincerely,

*Leslie James*

Leslie James

Executive Director

Cc: CREDA Board

Wayne Pullan- Reclamation UC Region

Tracey LeBeau – WAPA Administrator

Transmittal Attachments: CREDA Letters to Reclamation

(4/5/2007; 4/30/2020; 8/31/2022; 9/29/2022; 12/20/2022)





# CREDA

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(also New Mexico, Utah)

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April 30, 2020

Ms. Carly Jerla – LC Region  
Mr. Malcolm Wilson – UC Region  
Bureau of Reclamation  
7DReview@usbr.gov

Dear Ms. Jerla and Mr. Wilson:

The Colorado River Energy Distributors Association (CREDA) appreciates the opportunity to provide comment on Reclamation's scoping process associated with 2007 Interim Guidelines. CREDA members serve over 4.1 million consumers in the Colorado River basin states of Arizona, Colorado, Nevada, New Mexico, Utah and Wyoming, and represent the majority of the firm electric service customers of the Colorado River Storage Project (CRSP). As such, CREDA and its members have a unique interest in role in issues associated with Colorado River operations, specifically Interim Guidelines, shortage sharing, and drought contingency planning and operations.

CREDA members participated in Reclamation's webinars held March 24 and 31, 2020, and understand that the current 7.D. process is focused on developing a report containing a retrospective review of past operations and actions under the 2007 Interim Guidelines.

The webinar presentation materials state that one of the goals of this report is to review "the effectiveness of the three stated purposes of the 2007 Interim Guidelines." One of the stated e purposes is to "improve Reclamation's management of the Colorado River by considering trade-offs between the frequency and magnitude of reductions of water deliveries, and considering the effects on water storage in Lake Powell and Lake Mead, and on water supply, *power production*, recreation, and other environmental resources" (emphasis added).

In 2005, CREDA wrote to then-Interior Secretary Gale Norton expressing a multitude of concerns regarding CRSP generation, drought and Basin Fund issues. On April 25, 2007, CREDA submitted comments on the Interim Guidelines draft EIS, requesting that "Hydropower generation impacts, although addressed in detail in the DEIS, should be added as one of the 'three important considerations' in this DEIS".

As federal hydropower production is an integral part of the stated purposes of the 2007 Interim Guidelines, CREDA recommends that hydropower be added as one of the Operational Topics described in the 7.D. review. As CREDA members' CRSP firm electric service contracts are with WAPA, and as WAPA provided hydropower impacts assessments for the 2007 Interim Guidelines, the Aspinall, Flaming Gorge and Glen Canyon Dam EIS processes, CREDA suggests Reclamation engage WAPA to provide the relevant hydropower data for the 7.D. review.

CREDA looks forward to engaging with Reclamation as this and future Colorado River processes are undertaken. Please don't hesitate to call me with any questions.

Sincerely,

*Leslie James*

Leslie James  
Executive Director

Cc: Steve Johnson – WAPA  
CREDA Board



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September 29, 2022

Mr. Clarence Fullard  
US Bureau of Reclamation  
Via email only

RE: Fall 2022 LTEMP Experiments

Dear Clarence:

We appreciate the opportunity to provide comments on the presentation materials and discussion held September 27 regarding consideration of Glen Canyon Dam experiments this fall. Given the brevity of the comment request period and the timeframe within which the Leadership Team will be making a recommendation to the Secretary of the Interior, we are focusing only on hydropower-related aspects of the materials and discussion and recommend that the TWG be afforded the opportunity for more comprehensive dialogue and collaboration.

Based on the comments offered on the webinar, it appeared there are multiple concerns that would not support a recommendation for a fall HFE, including but not limited to non-native fish dispersal and hydrology/reservoir levels. CREDA agrees with those concerns, as well as not supporting an operation this fall that includes water bypassing the generators.

These comments apply to every experiment or changed operation that may be considered for CRSP generating units. In a nutshell, slide 19 should be retitled, as WAPA affirmed on the webinar, that the information displayed reflects BASIN FUND IMPACTS, not Hydropower Impacts. The Teams that consider and recommend experimental or operational actions are charged by section 1.3 of the ROD to evaluate and consider *hydropower production*, as well as WAPA's assessment of the Basin Fund. The current analysis is incomplete.

Regardless of whether there is or is not a recommendation to implement a fall 2022 HFE, we offer the following background and perspectives that we hope will be informative as discussions on Glen Canyon Dam experiments proceed.

**CRSP HYDROPOWER**

The generation of hydropower from the CRSP is one of the fundamental and primary purposes of the project.<sup>1</sup> Section 7 of the CRSP Act of 1956 requires that the "hydroelectric powerplants and transmission

lines...be operated...so as to produce the greatest practicable amount of power and energy that can be sold at firm power and energy rates...”.<sup>1</sup> Revenues from the hydropower generation produced by the Bureau of Reclamation (Reclamation) are derived through long-term firm electric service contracts administered by the Western Area Power Administration (WAPA). Those revenues are deposited into the Upper Colorado River Basin Fund (Basin Fund). The Basin Fund was authorized by the CRSP Act of 1956 and is the source of funding annual obligations of the CRSP. These obligations include repayment of principal (plus interest), operation and maintenance, irrigation assistance, among others. For example, since 1983, these revenues have funded over \$577 million of the environmental program costs of the CRSP. The Basin Fund is replenished by revenues from CRSP power customers through their long-term contracts, all of whom are not-for-profit entities, and many of whom are tribal, rural, and municipal entities residing in some of the most underserved areas of the United States.

When Colorado River management and operational decisions are considered and made, there are always likely impacts to the hydropower resource. These impacts are most often characterized as economic or financial in nature, but also directly impact the Basin Fund, which, as described above, provides benefits to multiple users in the Colorado River Basin. In 2021, WAPA instituted a new rate case (WAPA-199) for CRSP customers, which was necessitated by drought impacts and instability of the Basin Fund. The rate case increased power rates by an effective 46% and placed the risk and responsibility for replacing power not available from the CRSP generators on the customers.

When federal hydropower generation is reduced or eliminated, there are numerous impacts to CRSP customers, to the western interconnection (the “grid”), as well as potential impacts to the Basin Fund. Indeed, section 1.2 of the LTEMP ROD calls out the need for flexibility to address and consider “... hydropower-related issues, adjustments may occur to address issues such as electrical grid reliability, actual or forecasted prices for purchased power, transmission outages, and experimental releases from other Colorado River Storage Project dams.” Consideration of resource adequacy requirements and replacement resource availability are essential elements that must be addressed in any proposed experiment. Those impacts can be direct and immediate:

- Customers are responsible for repaying all capital (with interest) and operational costs associated with generation and transmission of energy at these facilities, along with environmental and non-power expenses. Decreased power generation means those costs are spread over fewer megawatt hours and results in higher rates per megawatt hour.
- Additionally, replacement power must be secured to make up for unavailable hydropower generation, an impact compounded by the current high price and reduced availability of electricity on the open market.
- Utilities are challenged to replace that hydropower with more expensive renewables to meet state RPS mandates and clean energy objectives, increasing

costs for CRSP customers.

- Glen Canyon Dam provides to the western grid ancillary services which maintain the proper flow of electricity and a reliable electricity system. This includes black start, which allows a plant to restart its own power without support from the electric grid in the event the entire grid has lost power. Reduced hydropower impacts this black start capability, and its contribution to resource adequacy requirements.
- As Colorado River reservoir levels continue to drop, customers will be paying twice: once for the ongoing operation and maintenance of a federal project without receiving the full benefit of its hydropower, and again for the costs of replacement power, which power is not carbon-free.

Even without a total loss of power production at some facilities, the reduced generation is resulting in massive and unsustainable rate increases to many customers as they are forced to cover typical power and non-power costs while replacing electricity on the open market. Impacts to the 53 CRSP tribal customers are unique: Many tribal customers receive the benefit of the federal hydropower through benefit or bill crediting. These customers can use that benefit in a manner determined by the tribe to best suit the community. When that power is not available or reduced, that credit is diminished. This means that tribes may be impacted not only from a financial standpoint, but from a quality-of-life standpoint as well. Operations and experiments that include water bypassing generators exacerbate these impacts.

We look forward to working with Reclamation and the Adaptive Management Program on these important issues.

*Leslie James*

Leslie James, CREDA  
AMWG Member

*Kevin Garlick*

Kevin Garlick, UMPA  
AMWG Member



# CREDA

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December 20, 2022

Reclamation 2007 Interim Guidelines

SEIS Project Manager

Upper Colorado Basin Region

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Salt Lake City, UT 84138

[CRinterimops@usbr.gov](mailto:CRinterimops@usbr.gov)

The Colorado River Energy Distributors Association (CREDA) appreciates the opportunity to provide comment on Reclamation's Notice of Intent to Prepare a Supplemental Environmental Impact Statement for the December 2007 Record of Decision Entitled Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead ("NOI"), as published in Fed. Reg. Vol. 87, No. 221211 (November 17, 2022). CREDA members serve over 4.1 million consumers in the Colorado River basin states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, and represent the majority of the firm electric service customers of the Colorado River Storage Project (CRSP). As such, CREDA and its members have a unique interest and role in issues associated with Colorado River operations, specifically Interim Guidelines, shortage sharing, and drought contingency planning and operations.

The NOI initiates the public-scoping process for the SEIS, specifically seeking comments "concerning the scope of the analysis, potential alternatives, and identification of relevant information, and studies on or before December 20, 2022." CREDA offers comments on the requested topics, citing to specific provisions of the NOI in response and for reference.

### SCOPE OF THE ANALYSIS

CREDA concurs with the Background text of the NOI that restates the Department's August 16, 2022, twice-repeated objective of "protect(ing) the System". However, the same section then refers to the June 24, 2022, FRN (87 FRN 37884) which described the "dire circumstances facing the Colorado River Basin" with mention only of water, agricultural and ecological resources, and no mention of a critical element of "the System" – the hydropower resource. The June 24 FRN also recognizes that Reclamation "may likely need to also prioritize implementation of near-term actions to stabilize the decline in reservoir storage and *prevent system collapse.*" (*emphasis added*). CREDA has provided comment at every opportunity on this incomplete description and included with this letter transmittal are some of the more recently filed comments on this topic (April 30, 2020; August 31, 2022, and September 29, 2022). "Protect(ing) the System" extends beyond specific water releases or operational actions, it includes ensuring the infrastructure facilities of the System are operated and maintained in a manner to ensure the statutorily authorized purposes are achieved. CREDA supports the NOI's Need Statement, which clearly recognizes that current conditions "could lead Glen Canyon Dam to decline to critically low elevations impacting both water delivery AND HYDROPOWER operations in 2023 and 2024. (*emphasis added*).

The NOI recognizes that the Department "has undertaken a number of unprecedented actions to respond ...that are being exacerbated by higher temperatures and the impacts of climate change". Further, that "analyzed alternatives and measures"

that are “prudent or necessary for safety of dams, public health and safety, other emergency situations” are lacking. With the potential loss of two major carbon-free generating resources in the Western grid, analysis and consideration should be given to operational change impacts to the Western interconnected transmission system. The importance of these renewable and readily available generation resources was not fully assessed in the 2007 Guidelines FEIS. Loss or reduction of these resources can significantly impact public health and safety; on September 6, 2022, Glen Canyon Dam was again called on to provide emergency assistance to California during extreme heat conditions, to assist in preventing major electrical blackouts. “Hydropower is a strong contributor to grid resilience and reliability”. [Hydropower Value Study: Current Status and Future Opportunities | Department of Energy](#). Glen Canyon and Hoover Dams are “critical assets for ensuring grid reliability during extreme weather events.”

[https://www.pnnl.gov/main/publications/external/technical\\_reports/PNNL-30554.pdf](https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-30554.pdf)

The scope of the SEIS must analyze and consider the cumulative effects on the System’s hydropower production, including but not limited to: Basin Fund impacts, impacts to WAPA’s contractual obligations to deliver federal hydropower, financial and societal impacts to firm electric service customers (which include 53 tribes), and impacts to transmission grid operations, which are essential to ensure viability of the Colorado River System.

#### POTENTIAL ALTERNATIVES

The NOI describes potential alternatives only as a preliminary overview of the alternatives that will be analyzed. While CREDA will not engage in discussions regarding water operations, it is imperative that Reclamation communicate how changes in water operations will affect firm electric service customers. Recognizing that SEIS analysis “will assume that additional releases pursuant to the Drought Response Operating Agreement (DROA) will be administered according to the terms approved in the DCP Act” and recognizing limited water supplies in the near-to-mid-term future, *it is imperative that no water be bypassed as part of the DROA*.

The NOI acknowledges that the SEIS “analysis may consider potential effects on wildlife, threatened and endangered species habitat, ...”. In the event the Department of the Interior decides to undertake releases for those purposes, *CREDA believes that any impacts to hydropower production and contract deliveries must be fully mitigated*. As noted below, the NOI specifically refers to section 50233 of PL 117-169. Subsection (3) thereof addresses “Ecosystem and habitat restoration projects to address issues directly caused by drought in a river basin or inland water body.” Therefore, any alternative that includes the potential for flows that bypass hydropower production must include an analysis of potential mitigation actions, including the cost of replacement energy and impacts to both the Western grid and the potential impacts of increased conventional power development to account for the lost generation.

#### IDENTIFICATION OF RELEVANT INFORMATION AND STUDIES

CREDA agrees with the NOI’s acknowledgement that near-term actions are necessary on a parallel timeline with post-2026 guideline development.

CREDA recommends one of the near-term actions be a parallel process among Reclamation, WAPA and federal power customers to discuss how the current economic paradigm regarding use of power revenues should be restructured in light of what is clearly a long-term downward trend in federal hydropower production. (See also section 3.3 of Agreement No. 19-WC-40-746).

Reference is also specifically made to the “recent Congressional prioritization of funding through 2026 for drought mitigation in western states, (PL 117-169, at 50233 (Aug. 16, 2022).” While CREDA will not at this time recommend alternatives or specific water operations, CREDA does request that Reclamation acknowledge

that one of the significantly changed circumstances existing since the 2007 ROD was issued occurred with the implementation of the WAPA-199 rate order. The NOI seeks information as to how human health and safety considerations can be “more expressly integrated into Colorado River operational decision-making.” Some CRSP customers receive a “bill credit” intended to represent the federal resource benefit. One of the impacts of WAPA-199 and drought is those entities may receive a smaller credit, or a “reverse credit”, meaning the federal benefit anticipated since 2004 may no longer be available to the tribes. That benefit is one which each tribe can decide how best to benefit its people and community.

Hydropower revenues have paid far more than a fair or proportionate share of costs associated with operation and maintenance of the infrastructure facilities comprising the Colorado River System. In most cases, those costs have been determined based on nearly 50-year-old allocations, which were developed in a manner that reflected System conditions at that time. Those conditions have been significantly altered and are not expected to return to earlier conditions in the near future, if at all. The burden of maintaining federally owned infrastructure facilities must be reconsidered to reflect conditions reflecting best available hydrologic and climatologic science.

Analyzing, considering, and mitigating direct and indirect rate and cost impacts to firm electric service customers, particularly to rural and tribal entities, should be factored into alternatives analysis.

CREDA and its members support Reclamation’s inclusion of the Western Area Power Administration (WAPA) as a cooperating agency and the interdisciplinary team member responsible for providing hydropower resource impact modeling and analysis. We stand ready to collaborate and assist in providing subject matter expertise in this important process. Secretary Haaland was right on target in her December 18, 2020, transmittal of the 7D Report:

*The Colorado River Storage Project (Glen Canyon Dam) and the Boulder Canyon Project (Hoover Dam) are great examples of the vision and ingenuity of early resource managers in the West. They are crucial parts of a broad water and power system that is quite literally sustaining life and livelihood for tens of millions of people across the vast Basin and beyond.*

Sincerely,

*Leslie James*

Leslie James  
Executive Director  
Cc: CREDA Board

Wayne Pullan- Reclamation UC Region  
Rodney Bailey – WAPA CRSP Management Center

Transmittal Attachments: CREDA Letters to Reclamation  
(4/30/2020; 8/31/2022; 9/29/2022)



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May 21, 2023

Reclamation 2007 Interim Guidelines

SEIS Project Manager

Upper Colorado Basin Region

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[CRinterimops@usbr.gov](mailto:CRinterimops@usbr.gov)

The Colorado River Energy Distributors Association (CREDA) appreciates the opportunity to provide comment on Reclamation's Draft Supplemental Environmental Impact Statement for Near-term Colorado River Operations ("SEIS"), as noticed by EPA in Fed. Reg. Vol. 88, No. 72 (April 14, 2023). CREDA members serve over 4.1 million consumers in the Colorado River basin states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, and represent the majority of the firm electric service customers of the Colorado River Storage Project (CRSP). As such, CREDA and its members have a unique interest and role in issues associated with Colorado River operations, specifically Interim Guidelines, shortage sharing, and drought contingency planning and operations.

The Notice of Intent (NOI) published on November 22, 2022 leading to the SEIS, specifically sought comments "concerning the scope of the analysis, potential alternatives, and identification of relevant information, and studies on or before December 20, 2022." CREDA incorporates by reference our December 20, 2022 comment letter responding to the NOI. CREDA supports the objective of maintaining a minimum elevation at Lake Powell of 3500'. That elevation is critical to both water and power deliveries in the Colorado River system.

CREDA offers the following comments on specific provisions of the SEIS.

**PURPOSE AND NEED:** The purpose of the SEIS is to supplement the 2007 Interim Guidelines to modify guidelines for operation of Glen Canyon Dam and Hoover Dam to address historic drought, historically low reservoirs, and low runoff conditions in the Colorado River Basin. The need for the modified operating guidelines is based on the potential that continued low runoff conditions in the Colorado River Basin could lead Lake Powell and Lake Mead to decline to critically low elevations, impacting operations through the remainder of the interim period (prior to January 1, 2027).

The following comments are provided in order of chapter topics in the SEIS.

**BACKGROUND:** The SEIS analyzes three Alternatives (including No Action). While CREDA will not engage in discussions regarding water operations, it is imperative that Reclamation analyze how changes in water operations will affect CRSP firm electric service customers. Recognizing that SEIS analysis "will assume that additional releases pursuant to the Drought Response Operating Agreement (DROA) will be administered according to the terms approved in the DCP Act" and recognizing limited water supplies in the near-to-mid-term future, *it is imperative that no water be bypassed as part of any selected or developed SEIS alternative or any DROA operations.*

**1.5 SCOPE OF THE EIS:** "The SEIS focuses on new information, changes in conditions since 2007". As described in the Background, operational changes resulting from or contemplated by the SEIS must be analyzed in the context of impacts 'on Federal hydropower, its customers and related programs, and the resiliency of the power grid.' (2019 DCP). With the potential loss of two major carbon-free generating resources in the Western



grid, analysis and consideration should be given to operational change impacts to the Western interconnected transmission system. The importance of these renewable and readily available generation resources was not fully assessed in the 2007 Guidelines FEIS. Loss or reduction of these resources can significantly impact public health and safety; on September 6, 2022, Glen Canyon Dam was again called on to provide emergency assistance to California during extreme heat conditions, to assist in preventing major electrical blackouts. “Hydropower is a strong contributor to grid resilience and reliability”. [Hydropower Value Study: Current Status and Future Opportunities | Department of Energy](#). Glen Canyon and Hoover Dams are “critical assets for ensuring grid reliability during extreme weather events.” [https://www.pnnl.gov/main/publications/external/technical\\_reports/PNNL-30554.pdf](https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-30554.pdf) Appendix A provides supplemental information regarding CRSP hydropower.

The scope of the SEIS must analyze and consider the cumulative effects on the System’s hydropower production, including but not limited to: firm electric service rate impacts, Basin Fund impacts, impacts to WAPA’s contractual obligations to deliver federal hydropower, financial and societal impacts to firm electric service customers (which include 53 tribes), and impacts to transmission grid operations, which are essential to ensure viability of the Colorado River System. The NOI for this SEIS sought information as to how human health and safety considerations can be “more expressly integrated into Colorado River operational decision-making.” The SEIS should include impacts to the federal electric service rates, including but not limited to the CRSP rate. Some CRSP customers receive a “bill credit” intended to represent the federal resource benefit. When there is a change in the CRSP rate, those entities may receive a smaller (or larger) credit, meaning the federal benefit anticipated since 2004 may be different. The bill crediting benefit is one which each tribe can decide how best to use in its community. The rate impact to benefit crediting customers should be included in the Environmental Justice section of the SEIS.

P. 2-3 refers to \$4B for drought mitigation ...”The ongoing implementation and effectiveness of these essential efforts will help determine the degree to which revised operations will be implemented”. Please clarify the meaning of this sentence and its inclusion in the SEIS.

**2.4 IMPLEMENTATION:** “The Department may select different parts of any of the alternatives to best meet purpose and need.” This statement needs to be caveated to ensure that any selected alternative, regardless of the source of its components, must fall within the impacts analysis provided or disclosed in the SEIS.

**2.5 COMMON TO ALL ALTERNATIVES:** Paragraph 3: “at any given time” should be removed from the sentence describing when Glen Canyon Dam would be operated with all available river outlet works. This operation would be considered only if Lake Powell falls below elevation 3,490.

**2.6 NO ACTION ALTERNATIVE:** Specific reference to the LTEMP ROD must be included. This SEIS is not intended to modify the ROD. It is an “existing agreement that controls operation of Glen Canyon Dam...” (p. 2-4)

**2.7.2 COORDINATED RESERVOIR OPERATIONS:** “Hourly, daily, and monthly releases from Lake Powell for coordinated operations would be IN ACCORDANCE WITH (not “consistent with”) the parameters of the ROD for the LTEMP EIS. The final sentence in the last paragraph that includes “distributed to meet the goals of LTEMP” is vague, conflicts with LTEMP, and should be removed and replaced with the text from Section B.1.2. of the ROD (Operational Flexibility, cited in *italics* below). The ROD’s Table 3 footnote should also be included for clarity: *Within a year, monthly operations may be increased or decreased based on factors referenced in Section 1.2 and 1.3.* This would ensure there is no conflict between the SEIS and the LTEMP.

*ROD Section 1.2 Reclamation retains the authority to utilize operational flexibility at Glen Canyon Dam because hydrologic conditions of the Colorado River Basin (or the operational conditions of Colorado River reservoirs) cannot be completely known in advance. Consistent with current operations, Reclamation, in consultation with WAPA, will make specific adjustments to daily and monthly release volumes during the water*

*year. Monthly release volumes may be rounded for practical implementation or for maintenance needs. In addition, when releases are actually implemented, minor variations may occur regularly for a number of operational reasons that cannot be projected in advance. Reclamation also will make specific adjustments to daily and monthly release volumes, in consultation with other entities as appropriate, for a number of reasons, including operational, resource-related, and hydropower-related issues. Examples of these adjustments may include, but are not limited to, the following: For water distribution purposes, volumes may be adjusted to allocate water between the Upper and Lower Basins consistent with the Law of the River as a result of changing hydrology; For resource-related issues that may occur uniquely in a given year, release adjustments may be made to accommodate nonnative species removal, to assist with aerial photography, or to accommodate other resource considerations separate from experimental treatments under the LTEMP; For hydropower-related issues, adjustments may occur to address issues such as electrical grid reliability, actual or forecasted prices for purchased power, transmission outages, and experimental releases from other Colorado River Storage Project dams. In addition, Reclamation may make modifications under circumstances that may include operations that are prudent or necessary for the safety of dams, public health and safety, other emergency situations, or other unanticipated or unforeseen activities arising from actual operating experience (including, in coordination with the Basin States, actions to respond to low reservoir conditions as a result of drought in the Colorado River Basin). In addition, the Emergency Exception Criteria established for Glen Canyon Dam will continue under this alternative. (See, e.g., Section 3 of the Glen Canyon Operating Criteria at 62 FR 9448, March 3, 1997.) Section 1.3 addresses adjustments to base operations for adaptive management-based experimental operations with flow components.*

**2.9 ALTERNATIVES CONSIDERED BUT ELIMINATED:** Section 2.9.1 and 2.9.2 should specifically reference the 1956 Colorado River Storage Project Act as a controlling statute (p.2-17).

**2.9.8 HYDROPOWER PRIORITIZATION ALTERNATIVE:** Please provide the source and details of the proposed alternative that would “prioritize hydropower production over all other purposes” (Section 2.9.8).

**TABLE 2-8 COMPARISON OF ALTERNATIVES:** P. 2-34 and 2-35 – The impacts table includes only capacity, energy and hydropower value. Analysis of SLCA/IP rate impacts, which affects all customers, as well as environmental justice impacts to tribal customers, must be disclosed. If any alternative or combination of alternatives includes the potential for flows that bypass hydropower production, the SEIS must include an analysis of impacts and potential mitigation actions, including the cost of replacement energy and impacts to both the Western grid and the potential impacts of increased conventional power development to account for the lost generation.

**3.5.1 GLEN CANYON DAM/SMALLMOUTH BASS FLOW OPTIONS:** This falls into the same category as noted for the Lake Powell Pipeline “too speculative at this time”....based on the SMB EA analysis, modeling uncertainty and public comment received; as well as current monitoring programs at Glen Canyon Dam. Instead, it should be “considered for analysis as part of the post-2026 EIS, as appropriate” (P. 3-10, 11). Inclusion of this information conflicts with the SEIS statement on page 1-12 “The SEIS does not include any changes to other operational agreements such as LTEMP....”.

The description of this proposal on p. 3-11 is incomplete and refers only to operational approaches to SMB prevention and control, failing to recognize the obligations of the NPS under its Non-Native Fish Control ROD Environmental Assessment and associated Finding of No Significant Impact (FONSI), and fails to recognize significant impacts to the electrical grid, among other impacts. CREDA incorporates by reference its March 10, 2023 letter commenting on the SMB EA. Reference to SMB Options throughout the SEIS in each Resource category should be removed.

**3.15 ELECTRICAL POWER RESOURCES:** P. 3-236 refers to power being purchased “with individual hydropower facilities”. This isn’t correct – CRSP is a bundled product; Glen Canyon Dam output is not sold separately. Suggest the text be changed to “from authorized federal projects”. P. 3-241 Power Funds: states there has been no change to how the Basin Fund operates. Since 2007, WAPA has implemented changes associated with Basin Fund operations, including but not limited to target balances, cost recovery charge. Suggest the text be revised to “no change to the statutory obligations that must be funded by the Basin Fund”. P. 3-244 –

need clarification as to how hydropower value is calculated. Unable to comment without specificity on “other economic indicators”. P. 3-265 describes the effects of SMB flows “the reduction in generation would be offset by the purchase of replacement power. This purchase of replacement power COULD further impact hydropower value (emphasis added).” This statement is narrow and incomplete – there is no reference to assumptions on resource availability or price, or grid reliability impacts. P. 3-266 discusses impacts to power funds but refers to impacts that ALSO impact customers (not just power funds – rate increases, surcharges, changes to allocations). P. 3-269 – remove reference to assumption that RIP/AMP/Salinity would only experience “slight impacts”. Funding should not be part of the SEIS; RIP is not reauthorized, and BOR has requested federal appropriations.

As noted in the Scope comments above, the SEIS should include analysis and impacts to the firm electric service rates for the federal projects included in the SEIS.

P. 3-337 ENVIRONMENTAL JUSTICE: CREDA suggests that the metric chosen to determine and disclose impact may not be appropriate for this SEIS. Regardless of the percentage that GCD generation is of the total regional resource, the determining metric should be the percentage of which GCD/CRSP generation is of total *Tribal resource supplies (emphasis added)*. Environmental justice is not being calculated for the western interconnection/region; thus the 2% metric is an apples to oranges comparison. WAPA’s estimate when the CRSP resource was marketed to tribes was an objective to meet 54-55% of tribal needs. Those percentages may be slightly different since 2004, but are likely in that ballpark, certainly not as low as to merit a 2% indicator. If, for instance, a federal power rate increases, the impact on a bill crediting customer depends on what percentage that resource is in the customer’s total resource mix. It has nothing to do with percentage of GCD to total regional power production. Any impacts to the CRSP rate would likely impact the bill crediting arrangement each tribe has with WAPA or its utility supplier. The SEIS should identify the CRSP rate impact in order to disclose rate impacts to all customers, as well as environmental justice impacts to tribal and underserved community customers.

Sincerely,

*Leslie James*

Leslie James  
Executive Director

Cc: CREDA Board  
Wayne Pullan- Reclamation UC Region  
Tracey LeBeau – WAPA Administrator  
Rodney Bailey – WAPA CRSP Management Center



**CREDA**  
**Colorado River Energy Distributors Association**

**ARIZONA**  
 Arizona Municipal Power Users Association

Arizona Power Authority

Arizona Power Pooling Association

Irrigation and Electrical Districts  
 Association

Navajo Tribal Utility Authority  
 (also New Mexico, Utah)

Salt River Project

**COLORADO**  
 Colorado Springs Utilities

CORE Electric Cooperative

Holy Cross Energy

Platte River Power Authority

Tri-State Generation & Transmission  
 Association, Inc.  
 (also Nebraska, Wyoming, New Mexico)

Yampa Valley Electric  
 Association, Inc.

**NEBRASKA**  
 Municipal Energy Agency of Nebraska  
 (also Colorado)

**NEVADA**  
 Colorado River Commission  
 of Nevada

Silver State Energy Association

**NEW MEXICO**  
 Farmington Electric Utility System

Los Alamos County

**UTAH**  
 City of Provo

City of St. George

Heber Light & Power

South Utah Valley Electric Service District

Utah Associated Municipal Power Systems

Utah Municipal Power Agency

**WYOMING**  
 Wyoming Municipal Power Agency

**Leslie James**  
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August 31, 2022

*Development of Post-2026 Colorado River Reservoir Operational Strategies*

Via Email: [CRB-info@usbr.gov](mailto:CRB-info@usbr.gov)

Carly Jerla  
 US Bureau of Reclamation  
 1777 Exposition Dr. Suite 113  
 421 UCB  
 Boulder, CO 80301-2628

Dear Ms. Jerla:

CREDA is a non-profit, regional organization representing 155 consumer-owned, non-profit municipal and rural electric cooperatives, political subdivisions, irrigation and electrical districts and tribal utility authorities that purchase hydropower resources from the Colorado River Storage Project (CRSP). CREDA members serve over four million electric consumers in seven western states: Arizona, Colorado, Nebraska, Nevada, New Mexico, Utah, and Wyoming. CREDA’s member utilities purchase more than 85 percent of the power produced by the CRSP.

CREDA offers the following information and recommendations in response to Reclamation’s request for input on June 24, 2022 (87 FR 37884). *CREDA is not recommending specific operational changes at this time.*

**BACKGROUND – WAPA AND RECLAMATION**

Hydropower is a critical element of Reclamation law. Not only does hydropower provide electricity to remote and underserved communities across the western United States, revenues from hydropower sales also fund a multitude of programs to include compliance with the Endangered Species Act, irrigation assistance, and salinity control, among others.

In 1977 Congress created the Department of Energy and transferred the marketing and delivery obligations to the Western Area Power Administration (“WAPA”). That division created an interdependent bond between Reclamation and WAPA. Reclamation remained responsible for generating hydropower and WAPA became responsible for marketing and delivering federal hydropower. As important, WAPA was tasked with ensuring sufficient revenues were collected to fund the program needs of both WAPA and Reclamation.

This was codified in an agreement dated March 26, 1980, which also set out the underlying intent of the division: “The Service and Western wish to operate the power system in the most efficient manner and to avoid duplication of manpower, functions and facilities”; further, “The Service and Western wish to optimize power benefits while preserving other project benefits.” As such, Reclamation must closely coordinate with WAPA on how water operations impact power production.

## **BACKGROUND – CRSP AND HYDROPOWER**

The generation of hydropower from the CRSP is one of the fundamental and primary purposes of the project.<sup>1</sup> Section 7 of the CRSP Act of 1956 requires that the “hydroelectric powerplants and transmission lines...be operated...so as to produce the greatest practicable amount of power and energy that can be sold at firm power and energy rates...”.<sup>1</sup> Revenues from the hydropower generation produced by the Bureau of Reclamation (Reclamation) are derived through long-term firm electric service contracts administered by the Western Area Power Administration (WAPA). Those revenues are deposited into the Upper Colorado River Basin Fund (Basin Fund). The Basin Fund was authorized by the CRSP Act of 1956 and is the source of funding annual obligations of the CRSP. These obligations include repayment of principal (plus interest), operation and maintenance, irrigation assistance, among others. For example, since 1983, these revenues have funded over \$577 million of the environmental program costs of the CRSP. The Basin Fund is replenished by revenues from CRSP power customers through their long-term contracts, all of whom are not-for-profit entities, and many of whom are tribal, rural, and municipal entities residing in some of the most underserved areas of the United States.

When Colorado River management and operational decisions are considered and made, there are always likely impacts to the hydropower resource. These impacts are most often characterized as economic or financial in nature, but also directly impact the Basin Fund, which, as described above, provides benefits to multiple users in the Colorado River Basin. In 2021, WAPA instituted a new rate case (WAPA-199) for CRSP customers, which was necessitated by drought impacts and instability of the Basin Fund. The rate case increased power rates by an effective 46% and placed the risk and responsibility for replacing power not available from the CRSP generators on the customers.

When federal hydropower generation is reduced or eliminated, there are numerous impacts to CRSP customers, as well as to the western interconnection (the “grid”):

- Customers are responsible for repaying all capital (with interest) and operational costs associated with generation and transmission of energy at these facilities, along with environmental and non-power expenses. Decreased power generation means those costs are spread over fewer megawatt hours and results in higher rates per megawatt hour.
- Additionally, replacement power must be secured to make up for unavailable

hydropower generation, an impact compounded by the current high price and reduced availability of electricity on the open market.

- Utilities are challenged to replace that hydropower with more expensive renewables to meet state RPS mandates and clean energy objectives, increasing costs for CRSP customers.
- Glen Canyon Dam provides to the western grid ancillary services which maintain the proper flow of electricity and a reliable electricity system. This includes black start, which allows a plant to restart its own power without support from the electric grid in the event the entire grid has lost power. Reduced hydropower impacts this black start capability.
- As Colorado River reservoir levels continue to drop, customers will be paying twice: once for the ongoing operation and maintenance of a federal project without receiving the full benefit of its hydropower, and again for the costs of replacement power, which in most cases is not carbon-free.

Even without a total loss of power production at some facilities, the reduced generation is resulting in massive and unsustainable rate increases to many customers as they are forced to cover typical power and non-power costs while replacing electricity on the open market.<sup>1</sup>

The Federal Register announcement and solicitation recognizes the federal government's commitment to tribes. That commitment can in part be met by stabilizing cost, rate, and grid stability to maintain CRSP contract commitments to 53 tribes in the Colorado River Basin. Many tribal customers receive the benefit of the federal hydropower through benefit or bill crediting. These customers can use that benefit in a manner determined by the tribe to best suit the community. When that power is not available or reduced, that credit is diminished. This means that tribes may be impacted not only from a financial standpoint, but from a quality-of-life standpoint as well.

CREDA supports and reinforces the 2019 Drought Contingency Plan (DCP) documents that *“Recognize and address the impacts of drought and Colorado River management on Federal hydropower, its customers and related programs, and the resiliency of the power grid.”*

### **BACKGROUND – PRIOR NEPA PROCESSES**

Recognizing the singular role played by hydropower and the unique expertise maintained by CREDA member utilities and WAPA, these entities have participated as cooperating agencies and subject matter experts in multiple Colorado River processes, including but not limited to:

Flaming Gorge EIS/ROD (Utah Associated Municipal Power Systems/CREDA and WAPA)

Aspinall EIS/ROD (Platte River Power Authority/CREDA and WAPA)

LTEMP EIS/ROD (Salt River Project/Utah Associated Municipal Power Systems/CREDA and WAPA)

### **RECOMMENDATIONS**

CRSP firm electric service customers, and CREDA as a representative of more than 85 percent of the power produced by the CRSP, enjoy a unique role in the issues associated with operation and management of the Colorado River. For the reasons explained above, CREDA requests it and its members be provided *meaningful participation* in all *NEPA efforts 'or other appropriate processes'* to address low-reservoir conditions, including development and consideration of *near-term actions to stabilize 'the decline in reservoir storage and (to) prevent system collapse'*.<sup>1</sup> Further, as explained above, CREDA requests that WAPA have co-lead responsibility with Reclamation in all associated processes, including being the entity that provides hydropower modeling and impacts assessment expertise, as intended and described in the 1980 Agreement and the June 7, 2019 Interagency Agreement between WAPA and Reclamation.<sup>1</sup>

As Reclamation assesses and makes decisions regarding CRSP operations in the context of extreme drought, proposed experiments and Post-2026 processes, the hydropower resource, and the tribal, rural, and municipal communities that it supports, will incur significant impacts, not just in the short-term, but over extended periods. We understand the role of hydropower within the context of CRSP authorities and wish to be clear we are not asking for a change in how Reclamation operates the system. What we are saying, however, is that considering the fundamental change in anticipated hydropower production due to both drought and operational decisions, there must be a serious discussion about changing the role of hydropower revenues in supporting CRSP programs and activities. It is very clear that we are rapidly approaching the point at which revenue from hydropower sales to tribal, rural and municipal communities will no longer be sufficient to continue providing the economic and financial support for CRSP programs as has historically occurred over the past 65 years. Any discussion about the future of the Colorado River Basin will be incomplete without addressing this reality and the related issue of identifying carbon-free power to replace the anticipated lost hydropower production.

We look forward to working with Reclamation on these important issues.

Sincerely,

*Leslie James*

Leslie James

Cc: CREDA Board

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August 15, 2023

Camile Touton  
Commissioner  
Bureau of Reclamation

**VIA EMAIL:** crbpost2026@usbr.gov

**RE: EIS SCOPING COMMENTS FOR POST-2026 COLORADO RIVER OPERATIONAL GUIDELINES**

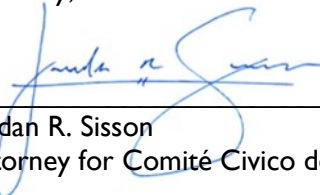
Dear Commissioner Touton:

On behalf of Comité Civico del Valle (“Comité”), thank you for the opportunity to submit these scoping comments regarding the Environmental Impact Statement (“EIS”) for post-2026 Colorado River operations. Comité shares many of the concerns raised by others during the pre-scoping comment period, such as those raised by the University of New Mexico School of Law,<sup>1</sup> Pacific Institute,<sup>2</sup> and the joint letter submitted on behalf of the Nature Conservancy and Environmental Defense fund (among others).<sup>3</sup> For sake of brevity, we wish to incorporate these comments and highlight the following key issues the Bureau’s environmental review should address:

- Ultimately, environmental impacts associated with Colorado River operations cannot be adequately mitigated unless allocations are permanently reduced **and** environmental, community, and tribal needs are prioritized above the production of animal feed.
- Disadvantaged communities have been sidelined from the decision making process and that needs to end now. If this administration truly wants to make Justice40 a reality, Reclamation must use its operations authority and funds authorized by the Inflation Reduction Act to benefit disadvantaged communities.
- The scope of the environmental review must include the full range of potential climate change impacts on Colorado River hydrology.

Comité looks forward to providing comments on the EIS and participating in any meetings and workshops the Bureau may hold to solicit input on how to manage the Colorado River on behalf of communities and a healthy environment in an era of accelerating climate change. Please provide all relevant notices to Jordan Sisson (at the above referenced address).

Sincerely,



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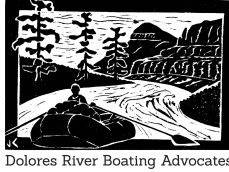
Jordan R. Sisson  
Attorney for Comité Civico del Valle

<sup>1</sup> [https://www.usbr.gov/ColoradoRiverBasin/documents/post2026/pre-scoping/PS\\_639\\_JFleck\\_UNM\\_Attachment.pdf](https://www.usbr.gov/ColoradoRiverBasin/documents/post2026/pre-scoping/PS_639_JFleck_UNM_Attachment.pdf).

<sup>2</sup> [https://www.usbr.gov/ColoradoRiverBasin/documents/post2026/pre-scoping/PS\\_692\\_PacIns.pdf](https://www.usbr.gov/ColoradoRiverBasin/documents/post2026/pre-scoping/PS_692_PacIns.pdf).

<sup>3</sup> [https://www.usbr.gov/ColoradoRiverBasin/documents/post2026/pre-scoping/PS\\_673\\_NGO.pdf](https://www.usbr.gov/ColoradoRiverBasin/documents/post2026/pre-scoping/PS_673_NGO.pdf).





August 14, 2023

Dolores River Boating Advocates  
PO Box 1173  
Dolores, Colorado 81323

Dear Amanda Erath,

I am submitting the following comments on behalf of the Dolores River Boating Advocates (DRBA) regarding Environmental Impact Statement (EIS) for the development of the Post-2026 Operational Guidelines and Strategies for the Colorado River. DRBA is a small 501(c)(3) organization based in Dolores, Colorado, whose mission is to protect and enrich the recreational and ecological values of the Dolores River through advocacy, stewardship and education. Our main focus, the Dolores River, is an Upper Basin tributary to the Colorado and therefore an integral part of the overall Colorado River system.

We have organized our comments into the sections: the first addresses procedures or stakeholder process that may best engage diverse interests, particularly in the Upper Basin states. Secondly, we lay out ideas that may help with the substantive aspects of future Colorado River Basin operations and management in the long-term. Third, we consider a few data gaps that should be filled and funding needs for programs to help implement programs and mitigate challenges.

Overall, the post-2026 Operational plan need to prioritize Tribal Nations water rights and infrastructure, increasing flexibility, understanding variability in the face of climate change, and ensure conservation and ecosystem preservation.

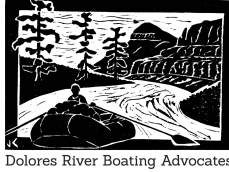
## **I. Processes & Engagement Strategies**

### **a. BoR should be involved with the Upper Basin's Five-Part Plan:**

To have the most effective and equitable outcome of reducing water use in the Colorado River Basin, all water users and interests must be consulted via localized scoping meetings. Programs that the Upper Colorado River Basin states outlined in [their five-part plan](#), such as System Conservation Pilot Program (SCPP), and Demand Management are tangible examples of where BOR should participate to provide additional resources, accountability, and consistency in implementation between states, because these programs will need to be significantly scaled up to make a difference ([UCRC 2020 Report](#).)

Putting federal resources into designing and implementing these processes and subsequent programs alongside the states and irrigators could help ensure transparency between local communities and the federal government, implement local solutions with multiple benefits, and better understand the cost of many potential programs moving forward.

For example, agriculture is by far the largest user of water in the Dolores River watershed, and the drought has been immensely challenging on many farmers



(particularly those with junior water rights,) and the river itself, who's ecosystem is dying. In this way, there may be both an economic and ecological benefit to compensated water transfers (temporary or permanent) in the sub-basin, however, any program must be developed with local leadership and input.

Demand Management, SCPP, and other programs that are voluntary, temporary and compensated have been studied at length by the federal government, academics, and NGOs, therefore BOR should ensure those lessons learned are understood before engaging in similar processes.

We recognize these meetings and processes could easily take years to come to tangible solutions, so initial scoping and fine-tuning frameworks should happen as soon as possible. Furthermore, BoR should hire additional staff to help organize, facilitate, and direct funding to these programs.

b. Prioritize engagement with Tribal nations and upholding treaty rights:

Given that the at least 30 unique Tribal Nations in the Basin that collectively hold rights to around 25% of the river, it is imperative that BoR and the Colorado River Basin states engage with Tribes consistently and incorporate their feedback into the new guidelines. Furthermore, installing infrastructure to ensure all Tribal nations have clean running water should be a priority for the federal government.

c. Address the underlying over-allocation problem:

It has been argued that the Colorado River was over-allocated as early as the 20<sup>th</sup> century ([Fleck and Castle, 2022](#).) Since the mega-drought started in 2000, the system has been clearly over-drawn and not sustainable. To this end, it is critical that the BoR considers permanent cuts to water use, particularly in the Lower Basin states.

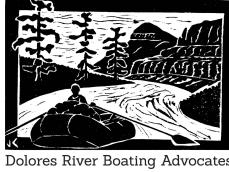
Furthermore, on state and watershed levels, it may be prudent to create frameworks that consider a percentage-based allocation system rather than static amounts based on the available amount of water. In this manner, water may be put to better uses and allow flexibility to water users. In Nevada, [the state Supreme Court has allowed a localized plan](#) that supersedes prior appropriation in regards to managing aquifers, which may set a precedent moving forward.

## II. Operational & Management Strategies

a. Maximize ecological health with tributary management:

The health of rivers and streams making up the Colorado and Green River is extremely important, and BoR should consider tributary health more explicitly in the post 2026 operational guidelines. This includes considering the health of aquatic species, riparian habitats, as well as flow management focused on natural flow regime hydrographs.

b. Increase water quantification technology:



BOR should work with the Basin States to install additional gauges and water quantification instruments on as many streams, diversions, and ditches as possible; and provide funding and labor to ensure they are maintained. This will be critical to understand where and how water is used, as well as address the stewarding problem associated with demand management.

- c. Subsidize local food production and discourage sending products overseas:  
Given how agriculture is by far the largest use of water in the Colorado River Basin, it will be important to intervene in agricultural markets and international sales of crops. Much of the crops grown in the basin are sold overseas, functionally transporting water and soil out of the Colorado River Basin.

Creating subsidies and incentives to keep food in the United States will be an important component to the sustainability of water use in the Colorado River Basin.

- d. Cap water development in the Upper Basin:  
BOR and Wheeler et al (2022) have both found that additional Upper Basin development would add continued pressure to the Colorado River System. No additional development should be allowed, unless water savings are made up for elsewhere in the same watershed. In other words, consider the current level of stored water in each state and watershed the maximum allowable amount, and if alternative storage is found to be a better use of water, than previously stored water would be sent downstream.
- e. Analyze the full bypass of Glen Canyon Dam and the re-emerging natural resources  
As both Lake Powell and Lake Mead sit below 35% full, it becomes critical to consider decommissioning Powell and storing water in Lake Mead. [Scientists at UCLA estimated](#) that from 2000 to 2021, rising temperatures led to the loss of about 32.5 million acre-feet of water in the Colorado River Basin, more than the entire storage capacity of Lake Mead, the country's largest reservoir. Given evaporation and critical natural and cultural resources within Glen Canyon, it is critical to put resources into analyzing the full bypass of Glen Canyon Dam.

### **III. Additional Data & Federal Funding Needs**

- a. Crop inventory for all Colorado River Basin states:  
BOR should work with USDA and other state and federal agencies to create reports that summarize crop type and use associated with the Colorado River.
- b. Fund farmland and riparian restoration:  
Assuming programs that fund farmers to fallow fields temporarily or permanently will be implemented in the coming years, it will be important to consider funding for restoration. If fields are to come out of production, helping farmers with costs such as seed is critical to help improve the quality of the land in an uncultivated and natural state.
- c. Tributaries – Particularly in the Upper Basin, tributaries are vital in the health of the



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overall system and contribute significant water, aquatic habitat connectivity, and support diverse rural communities. As part of the 2026 Colorado River Operational Guidelines, tributaries should be addressed.

- Ensure water quantification technology is installed on as many streams, diversions, and ditches as possible, and provide funding and labor to ensure they are maintained.
- Prioritize tributary connectivity to the mainstem Colorado and Green Rivers (both in terms barriers and sufficient streamflow.)
- Reclamation should address each major Upper Basin tributary with a federal nexus (i.e., communities that receive water from a federal project) individually. By addressing each major tributary individually, it would acknowledge their differences and quantify of shortages they are able to contribute. This would help clarify vague expectations on how individual water users and tributaries need to contribute to the 2-4 million-acre-foot cuts.
- Ensure a natural flow regime is maintained throughout tributaries & increase money for restoration
  - Provide guidance for how to manage reservoir flow regimes (e.g., consider the amount of inflow and % outflow to mimic natural variability albeit reduced proportionally for diversions)
  - Bookmark funding for leasing water for ecological purposes.