



SIERRA CLUB COLORADO RIVER TASK FORCE

September 1, 2022

Carly Jerla
Senior Water Resources Program Manager
US Department of the Interior
Bureau of Reclamation

BY EMAIL TO CRB-info@usbr.gov

Re: Post-2026 Colorado River Reservoir Operational Strategies for Lake Powell and Lake Mead under Historically Low Reservoir Conditions

Dear Carly Jerla:

The following comments are submitted on behalf of the Colorado River Task Force of the Sierra Club regarding post-2026 operational strategies for Lakes Powell and Mead. The Colorado River Task Force is part of the Western Water Sub-Team of the National Water Sentinels Grassroots Network Team of the Sierra Club and has as a goal to coordinate public comments among the nine Sierra Club Chapters in the Colorado River Basin.

Process

The Bureau of Reclamation (“Bureau”) commitment to an open and inclusive process for developing future operational strategies is very laudable. Indeed, it is those who are most vulnerable who will be the most impacted by future changes in response to ongoing and future

drought – Tribal Nations and underserved communities such as farmworkers, many of whom are Latino/a/x, and rural residents in general.

Judging from experience in the Salton Sea region, governmental outreach to such stakeholders has been too little too late. It's imperative to engage with communities and nonprofits at the outset to design a program that meets the needs of historically disenfranchised stakeholders, utilizes Latinx/a/o, Native American, and non-traditional media, and conducts workshops and hearings at the outset with interpretation at hours and in locations that are very accessible.

With regard to engaging the public, underserved and ignored communities, Tribes, and non-governmental organizations (NGOs), the 2019 Drought Contingency Plan (“DCP”) was anything but open and transparent. The water districts’ negotiations were privy only to a few insiders. To the dismay of many, including a pivotal California water district, the draft DCP legislation even attempted to waive all laws. Fortunately, Congress amended this out before passage. So, while the Bureau’s process in 2007 was to some degree open and collaborative, this was not replicated in the 2019 DCP, nor is it being followed in the current interstate meetings to arrive at a reduction of two to four million acre-feet of water use in the Colorado River Basin (“Basin”). While we applaud the Bureau’s commitment to emphasize inclusivity going forward, we note that the current two to four million acre-feet reduction process has been criticized by no less than fourteen Southwestern Native American Nations, Tribes, Communities, and Bands in a July 22, 2022, letter to the Interior Department’s Tanya Trujillo, Assistant Secretary for Water and Science.¹

Native American groups with a multi-millennial presence in the Basin should not only be included and consulted, but their proposals for Colorado River water management should be treated at least at the level of state governments. This includes not only concerns about culturally significant locations and features on- and off-reservation, such as in the reemerging Glen Canyon, but also Native American epistemological and spiritual concepts of the Colorado River and its tributaries.

Recommendations: At the earliest stage, enlist community organizations, Native American Nations, Tribes, Communities, and Bands, and NGOs to design an outreach framework that will engage historically disadvantaged stakeholders throughout the operational program development process. Notices should include using non-traditional media and outreach should be conducted in languages, in locales and at times that are easily accessible to the underserved. Meetings of any group established by the Bureau in connection with the water management process should be open to the public and media, publicly noticed, have an agenda published in advance, and follow the open meeting laws and regulations of the federal government and the

¹ “Tribes: “We're 'left in the dark' about Colorado River negotiations,” August 9, 2022, https://tucson.com/news/local/subscriber/tribes-were-left-in-the-dark-about-colorado-river-negotiations/article_8d878e86-1761-11ed-9873-772bf078ea9a.html

state where the meeting occurs. Negotiations among the states over current and post-2026 operations should at the least include public notice of location, time, and agenda and should occur in closed or executive session only under specific legal authority.

Substantive elements of post-2026 operations

As the notice acknowledges, post-2026 planning involves extreme hydrological uncertainty. The trajectory of the current drought is unlikely to substantially change for the foreseeable future and may well accelerate. Climate change will drive not only hotter average temperatures, but also will result in less snowfall, more rainfall, and earlier snowmelt. This mandates consideration of a very wide range of conditions from exceptionally low reservoir levels to intermittent extreme flooding. In order to meet ecosystem, municipal-industrial and agricultural needs, water allocation will necessarily be constrained. In the agricultural sector, curtailing water deliveries in turn will affect farmworkers directly and farm communities and counties indirectly. It will also affect the health of communities and ecosystems dependent on farming and runoff such as the Salton Sea.

Managing dams is not an isolated process, and analysis and recommended actions should reflect this. Dams are managed in specific ways for specific reasons. The most effective action that can be taken in the near-term is conservation. Conservation should be the preferred means of protecting water supply of the river and management of dams and reservoirs.

Alternatives presented and analyses should be based on a realistic view of how much water is in the system and should consider the health of the river as well as focus on wet water, not paper water, although effects on paper water rights should be included. Paper water is like paper money: if too much is issued there is inflation, and in a worst-case scenario, the money becomes worthless.

Colorado River management and decision-making should be informed by (1) an ensemble of vetted physico-hydrological-ecological models from both government and academia; (2) both current weather/climate conditions as well as climate change scenarios driven by CO₂, and (3) Native American cultural knowledge. As human change and climate change impact the boundary and initial conditions of such physico-hydrological-ecological models, models should be updated accordingly. If the Bureau plans to rely on the Colorado River Simulation System (CRSS), Colorado River Mid-Range Modeling System (CRMMS), or the RiverWare Modeling Platform, these models should be expanded and modified to include assessment of effects of different water management models on the fluvial and riparian environment, including biodiversity and threatened and endangered species. Utah State University's The Future of the Colorado River Project has issued a series of white papers since 2019 recommending changes in CRSS in this direction and we urge the Bureau to adopt the Utah State White Paper recommendations for revising the CRSS model or seek assistance from Utah State University's

Center for Colorado River Studies in runs of the model expanded to include effects on the natural environment.²

Recommendations: The strategies and environmental review should include the following elements.

- *A range of alternatives, including the following:*
 - o *A conservation-only alternative that will determine how the dams can be managed for sustainability under conservation alone*
 - o *A worst-case scenario alternative that analyzes the worst-case prediction for future river flows*
 - o *A one-dam alternative that through the use of sub-alternatives would analyze storing water in either Lake Mead or Lake Powell, with or without draining one of the reservoirs or decommissioning or removing one of the dams and which would also include structural modifications to the dams, including new low-level tunnel construction at Glen Canyon Dam which would allow water to flow unimpeded through the dam without having to remove the dam*
- *Inclusion of effects on the natural environment, including hydrology and biodiversity, in all alternatives*
- *Fully analyzing, minimizing, and mitigating for impacts to natural resources that are part of the Colorado River Basin (either directly or indirectly) including the river mainstem (which includes the Grand Canyon), Salton Sea, Colorado River delta, and Gulf of California*
- *Utilizing environmental flows with pulses of flooding to refresh ecosystems either directly or indirectly dependent on Colorado River flows, including, but not limited to the Grand Canyon*
- *Intentionally engineering to ensure that Glen Canyon Dam and Hoover Dam can release adequate flows downstream at exceptionally low water levels*
- *Prioritizing ecosystem needs over water recreation*
- *Prioritizing the needs of native species over those of invasive species, including non-native fish invading areas of native fish populations in the Grand Canyon as an effect of water management alternatives and what solutions can be found*
- *Considering not only switching to low water intensity crops, but also seasonal restrictions to avoid the water intensive summer growing season, especially in the lower basin, and the use of water-conserving irrigation methods, such as micro drip irrigation instead of flood irrigation*
- *Addressing through budgeted drought aid (or future legislation if necessary) a sustainable path forward not only for affected farmers, but also for the communities and farm laborers dependent on agriculture*

²Kevin G. Wheeler, David E. Rosenberg and John C. Schmidt, Water Resource Modeling of the Colorado River: Present and Future Strategies, The Future of the Colorado River Project Center for Colorado River Studies Quinney

Thank you for the opportunity to comment during this pre-scoping phase. We look forward to working with you to craft a plan that will not only ensure the welfare of the human occupants of the Colorado River Basin, but also ensure a healthier Colorado River and its too often forgotten biological communities, which historically have been seen as an afterthought in these processes.

Sincerely,
Cary W. Meister, Ph.D.
Coordinator
Sierra Club Colorado River Task Force

College of Natural Resources, Utah State University White Paper No. 2, 2019, pp. 2-3; Kevin Wheeler, Eric Kuhn, Lindsey Bruckerhoff et al., Alternative Management Paradigms for the Future of the Colorado and Green Rivers, The Future of the Colorado River Project Center for Colorado River Studies Quinney College of Natural Resources, Utah State University White Paper No. 6, 2021, p. 21 specifically, pp. 17-23 generally; *inter alia*