SIERRA CLUB COLORADO RIVER TASK FORCE

Ms. Dedina Williams and
Ms. Marcie Bainson
Reclamation 2007 Interim Guidelines SEIS Project Manager
Bureau of Reclamation
Upper Colorado Basin Region
125 South State Street, Suite 8100
Salt Lake City, Utah 84138

BY EMAIL ONLY TO: CRinterimops@usbr.gov

Re: Reclamation 2007 Interim Guidelines SEIS

Dear Ms. Williams and Ms. Bainson:

The Sierra Club Colorado River Task Force ("Task Force") submits the following scoping comments in response to your "Notice of Intent to Prepare a Supplemental Environmental Impact Statement for December 2007 Record of Decision Entitled Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead" ("SEIS"; "the SEIS") (87 CFR 69042-69045, November 17, 2022).

The Sierra Club Colorado River Task Force is composed of twenty-four participants including volunteers, Chapter members, and several Sierra Club Chapter staff in the Colorado River Basin. A major function of the Task Force is the coordination of its members with Chapters in the Colorado River Basin and the National Sierra Club staff to present a unified Sierra Club position on interstate Colorado River issues. The Task Force is a sub-entity of the Western Water Sub-team, which in turn is a sub-entity of the National Water Sentinels Grassroots Network Team.

Conservation and Stabilization

A *sine qua non* of the SEIS is the need to give conservation preference in protecting the water

supply of the Colorado River and the management of its dams and reservoirs. Prior established conservation parameters should not be removed as part of this process; to the contrary, it should incorporate new and innovative conservation techniques that are needed even more given reduced river flows and water in storage because of ever-increasing demand and climate change and its effects on the Colorado River Basin ("Basin"; "the Basin").

The Natural Environment

A second *sine qua non* of the SEIS is the need to prioritize the natural environment over certain other demands on the Colorado River, such as storage, hydropower production, and motorized recreation. In addition, the needs of native species need to be prioritized over those of invasive, exotic, or introduced species. The Colorado River is the only home for many of these native species, while the invasive, exotic, and introduced species have generally much more widespread distribution beyond the Colorado River. The native species are in greater need of protection, as evidenced by the number of Threatened or Endangered native species designated within the Colorado River Basin by the Endangered Species Act, including Ridgway's Rail, Southwestern Willow Flycatcher, Yellow-billed Cuckoo, Northern Mexican Garter Snake, Colorado Pikeminnow, Razorback Sucker, Humpback Chub, and Bonytail.

"As the Colorado Basin's water resources were developed, instream uses – water for fish and wildlife, recreation, water quality, and scenic beauty – were not legally protected. In the basin, as in many parts of the West, environmental protection laws were developed after much of the infrastructure was in place and the water allocated." (Szeptycki et al. 2018; see also Stern and Sheikh 2021, 11). Even after the passage of federal and state environmental protection laws, effects of construction and water management on the natural environment and its ecosystems have often been ignored or given low priority in federal, state, and local actions affecting the Colorado River (Getches and Meyers 1986: 59). All one need do to understand this is observe the Colorado where it has been reduced to a dry channel below Morelos Dam, just downstream of Yuma.

The SEIS needs to fully analyze impacts to natural resources, including biodiversity and ecosystems, not just at Hoover Dam and Glen Canyon Dam but rather all areas that are directly part of the Colorado River Basin or which indirectly receive its water, including the river mainstem (which includes Grand Canyon) and the mainstem's tributaries, Salton Sea and Imperial/Coachella Valleys, the Colorado River delta, and the Gulf of California. This analysis needs to include, as can best be known, modeled, or predicted, the effects of ongoing and likely strengthening climate change on the future hydrology of the Colorado River and needs to be applied to all alternatives.

Adverse impacts on the Colorado River natural environment need to be avoided in the proposed alternatives in the SEIS. If they cannot be avoided, they need to be fully mitigated simultaneously with the selected action and not be postponed until some later date after the rest of the selected action has been implemented.

In order to restore the Colorado River ecosystem and its biodiversity, the SEIS needs to include analysis of the restoration of natural flows to the river. How much water is actually available? How much water is needed to support the riparian and fluvial ecosystems? How frequently is it

needed? The environmental flows intended to restore the Grand Canyon ecosystem were one of the first programs to be suspended by Bureau as a response to low reservoir levels. This is unacceptable and environmental flows should be prioritized during the drought more than ever. In addition, environmental flows should not be limited to the Grand Canyon, but rather expanded to the whole Colorado River Basin wherever dams have been built.

Native fish species are threatened by the recently discovered presence of bass below Lee's Ferry. This is a result of both low reservoir levels but also dam operations. This needs to be analyzed in the SEIS and solutions to non-native fish invasions of the Lower Colorado River need to be found.

The Sierra Club Grand Canyon (Arizona) Chapter is submitting to you a separate comment letter which addresses in more detail the Grand Canyon. The Sierra Club Colorado River Task Force hereby incorporates that letter, by this reference, and endorses its content.

Environmental Justice

The Bureau of Reclamation ("Bureau" and "Reclamation") 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.

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 as between sovereign 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.

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 conduct workshops and hearings at the outset with interpretation at hours and in locations that are very accessible.

The Bureau must strive for a just, equitable, and inclusive process and outcome of the SEIS. There are 30 Federally recognized Tribes in the Colorado River basin. Historically, the original inhabitants of the Colorado River Basin have been left out of water negotiations despite the U.S. government's trust responsibility to Tribal nations and the deep interest that Tribal members have in water protection.

Recognizing mistakes of the past, the current process can be greatly improved. In 2007, Tribal outreach focused on government-to-government consultation. Letters went out in 2005, to a subset of Tribes, primarily those with settled water rights. Several remaining Tribes were not contacted until 2007, presumably after two years of negotiations had already occurred. Tribal members who were not part of Tribal government, including elders, medicine people, and other

concerned individuals, were not invited into or made aware of the process at all.

The U.S. government must strive to reconcile historical inequities that allow thousands of people to remain without a reliable water source. We support the requests made by twenty basin Tribes in their November 15, 2021 letter to Secretary of the Interior Deb Haaland:

> …Reclamation needs to account for Basin Tribes' current and future water use as well as Basin Tribes use of water that is not yet quantified in developing the Next Framework. The Next Framework MUST also recognize and include support for Tribal access to clean water, Tribal water rights settlements, Tribal sovereignty, federal accountability to Tribal trust responsibilities, and providing operationally functional and flexible tools that will aid Basin Tribes in the full utilization of their water rights. (Colorado River Basin Tribal Coalition 2021)

We also ask that Reclamation address the Guiding Principles in the Colorado River Basin Tribal Coalition's letter and work collaboratively in partnership with Tribes rather than simply meeting the mandatory minimum requirements for government-to-government consultation. The U.S. government must fulfill its trust responsibility to Tribes and resolve water rights for the twelve Tribes whose water rights remain unsettled and must assist Tribes in finding ways to provide safe water to all Tribal members. The current drought should not be used as an excuse to further delay these processes; quite the opposite, the need to provide every person with safe clean drinking water is now more urgent than ever. The COVID-19 crisis, which disproportionately affected Tribal members in the southwest because of their lack of access to adequate water supplies, tragically reinforced the need for everybody to have access to water. Where the U.S. government is benefitting from the use of unallocated water to Tribes, those Tribes should be compensated so they can work toward achieving equitable water supplies for all their members.

The Bureau should hold listening sessions with Tribes and Tribal members to learn their needs and hear their ideas. These listening sessions should occur on reservations throughout the basin. Recognize that the internet may not be available and language translation may be needed. Listening sessions should be advertised through flyers at community meeting spaces and other frequented locations such as markets and gas stations. Alternative ways to comment should be provided aside from email, such as drop boxes or recorded hearings. Cooperatively work to provide for the needs and values of Tribes and Tribal members, including what are commonly referred to as non-use values: flowing water, ecosystems, and springs may hold importance for Tribal members that the Bureau is unaware of.

Evaporation

The Sierra Club Colorado River Task Force supports and encourages the efforts of Bureau to develop ". . . methodologies to support assessments for evaporation, seepage and other system losses in the Colorado River Basin in future years." (U.S. Bureau of Reclamation 2022, 12). We join the Arizona Municipal Water Users Association (Tenney 2022) in principle in calling for Colorado River water users to bear a proportional reduction for water loss that can be attributed to evaporation, seepage, and other losses before, during, and after water delivery to a water user.

At the same time, seepage sometimes plays an important role in supporting habitat for native

plant and animal species. If seepage is reduced through techniques such as ditch and canal lining, the loss of habitat needs to be mitigated. Consequently, we also encourage the Bureau to develop methodologies to mitigate for loss of habitat when seepage is reduced, as part of the same process as determining methodologies to reduce system water loss.

Modeling

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 CO_2, 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 (e.g., Wheeler et al. 2019, 2-3; Wheeler et al. 2021, 24-25) 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.

Alternatives to Be Analyzed

Even near-term planning horizons of one to five years now involve 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 farm workers 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.

The strategies and environmental review should include a range of alternatives beyond the three listed in the *Federal Register* notice, including the following:

- A conservation-only alternative that will determine how the dams can be managed for sustainability under conservation alone
- A worst-case scenario alternative that analyzes the worst-case prediction for future river flows
- A one-dam alternative with the use of sub-alternatives that 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

Conclusion

The Colorado River is a critical part of the lives and health of 40 million people from nine states in two countries, including the Colorado River delta, Salton Sea, desert canyons and valleys of the Lower Colorado, Grand Canyon, Glen Canyon, the mesas and canyonlands of southern Utah and Colorado, and the mountain forests of Utah, Colorado, and Wyoming. The lands that the river waters were once all Tribal and are now both Tribal and non-Tribal. The health of the river affects people's livelihoods, their ability to have recreation (both on the river and off); the species that inhabit much of the southwestern states, both endemic and non-endemic, and the areas in which they live, be it a tributary or the mainstem; the ability to transport river water, including leakage, evaporation and temperature of the water both in place and as it moves to be distributed; and how to best distribute the actual amount of water that is held in the river, Lake Powell, Lake Mead, and other system reservoirs.

The Colorado River Compact is now 100 years old and has not been updated or amended in all that time. It may be that the SEIS will recommend amending the Compact, if nothing else, to reflect the reality of how much water is really present now and that it will be variable. If amending this Compact is part of the recommended action in the SEIS, it needs to consider the needs and conditions listed above and the need to analyze the recommendations (including Alternative Actions) made in this letter.

Moving forward, considering the health of the river in future decisions is imperative. This includes the amount of actual water (not using guesstimates or previous allocations that are not accurate), intentionally created surplus and withdrawals whether there is a drought condition or not. Although throughout the history of the world the climate has continually changed, the rate and degree of change we are now experiencing is unprecedented, maybe even more so than the Pleistocene-Holocene transition. There are hard but necessary changes that need to be made.

We recognize that the process will not be easy, but there is not 16.5 million acre-feet of water (plus 1.5 million acre-feet of evaporation) in the river, even as an average. We must adjust to that

reality, and to the reality that there are yet unfulfilled rights to the river by Native Americans, not just to water, but as an integral part of their lives and existence. Beyond that are the needs of the animals and plants that depend on the river to sustain them.

Thank you for the opportunity to comment during this 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 supporting its too often forgotten Native American and biological communities, who historically have been seen as an afterthought in these processes.

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

REFERENCES

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