

May 8th, 2024
The Honorable Camille Touton
Commissioner
U.S. Bureau of Reclamation
1849 C Street NW
Washington, DC 20240

VIA ELECTRONIC MAIL
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Dear Commissioner Touton:

The undersigned organizations are submitting this letter for your consideration by Reclamation, in the development of Colorado River Operations after 2026. We strongly urge the consideration of modifications to Glen Canyon Dam in the Post-2026 EIS process, not only for the long term health of the Colorado River ecosystem, but for the water security and safety of the Basin and the water users who depend on the river. The dam's limited ability to release water below minimum power pool poses a serious threat to the resilience of the entire Colorado River Basin, a problem that will only become more tenuous as aridification continues to put pressure on the river. The level of Lake Powell dipped within 30 feet of minimum power pool last year and the year before, demonstrating that low reservoir scenarios once thought unimaginable are now well within the realm of possibility.

As the levels of Lake Powell have dropped in recent years, there has been growing concern about the capability of Glen Canyon Dam to adequately release enough water downstream to meet delivery obligations established under the 1922 Compact. This is a problem highlighted in a [2022 report](#) that found that the dam would be physically incapable of releasing enough water to meet compact obligations at elevation 3,430 feet above sea level. The Lower Basin states of California, Nevada, and Arizona shared this concern in a [2023 letter](#) stating Reclamation "should evaluate potential improvements at Glen Canyon Dam that could enhance its operational capacity and ensure that water can safely pass through the dam at low elevations." Another [2023 letter](#) from several Imperial Irrigation District farmers urged Reclamation to consider retrofitting the dam to allow the passage of water at low levels, and even decommissioning the dam entirely in a way that is compatible with the survival and recovery of the Grand Canyon's native and endangered fish.

The 2022 report flagging the infrastructure limitations of the dam assumed that its river outlet works (ROWs) would be fully operational, and could be operated at 100% of capacity 24 hours a day. Reclamation recently revealed that the ROW's experienced cavitation damage during the most recent High Flow Experiment (HFE). The damage occurred from air and sediment entraining in the outlet tubes, a result of using the ROWs at low reservoir levels. Reclamation proposed near-term fixes to the ROW's that will take one to two years, and will likely require one or more outlet tubes to be non-operational for long periods of time.

If low reservoir levels persist, which nearly all climatological and hydrologic data suggests they will, then it appears this type of damage will be a regular occurrence, and that one or more of the tubes being non-operational could also be a regular occurrence. It may even lead to a total failure of one of the units, similar to what occurred at Flaming Gorge Dam in 1997. This means that the likelihood and severity of the delivery problem at Glen Canyon Dam is much worse than was previously thought. It also jeopardizes environmental releases from the dam needed for HFEs or for “spike” or “cool mix” flows to stop the entrainment and spread of Small Mouth Bass in the Grand Canyon and the associated adverse modification of designated habitat for humpback chub caused by ongoing operations of the penstocks.

We recognize that Reclamation has initiated a “values study” to assess potential modifications at Glen Canyon Dam, a process that will take a decade or longer. But the proposed alternatives are focused on hydropower production, and did not directly address associated environmental implications, namely sediment accumulation in Glen Canyon, sediment depletion in the Grand Canyon, and if/how the alternatives would meet the requirements of the Grand Canyon Protection Act and the Endangered Species Act.

With the intensity of changes on the river system in recent years, our water infrastructure needs to be updated to become adaptive enough to meet the climate resiliency demands of the Basin. Given the consequences of water release limitations at Glen Canyon Dam and the fact that Lake Powell has already come within 30 feet of minimum power pool in 2022 and 2023, it would be a fatal flaw in the post-2026 EIS to exclude an alternative that entails the modification of Glen Canyon Dam. Since Reclamation has indicated that the timeline for such modifications is on the scale of years or decades to implement, they should not just address hydropower, but also water delivery and the environment, including fully bypassing Glen Canyon Dam through it's existing diversion tunnels or through construction of new tunnels, such that sediment could pass through to the Grand Canyon.

Thank you,

Eric Balken, Glen Canyon Institute
Zach Frankel, Utah Rivers Council
Kyle Roerink, Great Basin Water Network
Gary Wockner, Save the Colorado
John Weisheit, Living Rivers
Ernie Atencio, National Parks Conservation Association
Taylor Mckinnon, Center for Biological Diversity
Daniel Timmons, Wild Earth Guardians