



United States Department of the Interior



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Memorandum

To: Wayne Pullan, Regional Director, Upper Colorado Basin, Bureau of Reclamation  
Jacklynn Gould, Regional Director, Lower Colorado Basin, Bureau of Reclamation  
Genevieve Johnson, Project Manager, Bureau of Reclamation

From: Kate Hammond, Regional Director, Interior Regions 6,7,8, National Park Service  
Randy Lavasseur, Acting Regional Director, Interior Regions 8, 9, 10,12, National Park Service

Subject: National Park Service Comments on the October 2023 Public Draft of the “Near-term Colorado River Operations Revised Draft Supplemental Environmental Impact Statement”

The National Park Service (NPS) appreciates the opportunity to comment on the Bureau of Reclamation’s (Reclamation) October 2023 Public Draft of the “Near-term Colorado River Operations Revised Draft Supplemental Environmental Impact Statement (SEIS)” distributed on September 11, 2023. NPS comments on this Draft SEIS include the following:

- NPS supports this timely process – NPS managers strongly support this SEIS process and the Post 2026 planning process to better balance inflow and outflows of Colorado River reservoirs and improve reservoir level stabilization. It is critical to act quickly to protect water supply, power production, water quality, socioeconomic benefits from recreation, and maintain river dynamics and variability for native riverine resources in the National Park units along the Colorado river. The Colorado River water supply serves over 40 million people and is critical to the protection of NPS managed resources. For NPS units along the Colorado River, the river is critical for at least one life phase of approximately 80% of the wildlife species found in this arid western landscape (Chaney et al 1990, Deban and Schmidt 2004, Hubbard 1977). It is important to stabilize supply and demand in this system to avoid a collapse of the system.
- NPS supports the movement toward proactive conservation to rebuild storage in the proposed action alternative – This proposed alternative in the SEIS is ground-breaking and a positive base on which to build long-term solutions in the Post 2026 process. It is encouraging to see the states come together and begin the process of building a proactive approach to conserve water rather than continue with a reactive approach. The volumes of water conserved to rebuild storage remain too low to avert the risks of system collapse, and additional work in the Post-2026 process will be needed. In the context of low storage elevations in lakes Powell and Mead, just two extreme low

inflow years in a row could pose a major risk of the reservoirs dropping below powerpool and toward deadpool. Climate change is lowering the average inflows and increasing variability of inflows, which will mean “lower lows” could happen within this decade that are outside of what we have experienced historically. The situation we are facing is a climate trend (aridification) rather than a temporary drought; it is projected to continue and is expected to result in increases in temperature, evaporation, and soil drying, and to create even greater variability in the system while also lowering the average water availability (Bedri and Piechota 2022, Salehabadi et al 2022, Pokharel et al 2022, McCoy et al 2022, Whitney et al 2022). The NPS asserts that proactive conservation to rebuild reservoir levels will be the only way to reduce the risk of system collapse and to balance supply and demand at sustainable reservoir levels for the long term.

- No Action puts NPS unit resources and regional economics at risk - This draft analysis shows that the consequences of No Action would have major impacts on resources and recreation at several iconic national park units including Grand Canyon National Park (GCNP), Glen Canyon National Recreation Area (GCNRA), Lake Mead National Recreation Area (LMNRA), Rainbow Bridge National Monument, and Canyonlands National Park. These park units make up over 4,282,416 acres, seven times larger than the acreage of the state of Rhode Island. These park units are visited by over 18 million visitors annually and a large proportion of that visitation could be negatively impacted by No Action. In years with very low inflow into Lake Powell and overall poor hydrology, there may be lower releases from Glen Canyon Dam that may negatively impact river rafting recreation in GCNP. In LMNRA and GCNRA, allowing reservoir levels to continue to decline would make boat ramps and marina services partially or completely unavailable. As shown in Table A-1 below, the combined visitor spending at these three large park units was over \$1.4 billion in 2021, and the regional economic output was over \$1.8 billion. The loss of recreation would have a significant effect on the revenues of GCNRA and LMNRA due to declines in entry and camping fees, as well as concessions and commercial use fees. The economies of surrounding communities would also be significantly impacted from loss of visitor spending.

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

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

Under No Action, NPS managers could also be at greater risk of major challenges to many resource protection issues including increases in highly predatory non-native fish and non-native vegetation, increases in dust events, poor water quality, and increases in exposure of archeological and paleontological sites. These resource impacts on the NPS units will have larger regional implications and effects, as water quality is of major importance for drinking water along with human and wildlife health. Dust issues can impact air quality regionally and impact the albedo of snowpack influencing water availability. Changes to the status of endangered fish can impact future operations and development through the basin. These resources along the river are the foundation of the water system. The action alternative that includes proactive conservation and lower releases from Glen Canyon Dam will allow for balancing supply and demand more consistently; in turn, this will help to reduce risk of losing this important regional economic contribution for the states and communities surrounding these park units from recreation.

- NPS supports the proposed action in combination with the simultaneous planning effort by Reclamation on the Long Term Experimental and Management Plan (LTEMP) SEIS to protect federally listed fish populations. The proactive conservation of 3.0 million acre feet (maf) over 3 years and allowing for lower releases out of GCD (6.0 maf) may allow for better balancing of inflows and outflows to maintain Lake Powell levels. Maintaining Lake Powell and Lake Mead levels higher through proactive conservation is likely to help protect both the federally threatened humpback chub (HBC) in Grand Canyon and the federally endangered razorback sucker in the Grand Canyon and Lake Mead. Over 92% of the known adult HBC population exists in the Grand Canyon and though their reproduction appears to be showing increases currently correlated with the warmer river temperatures, the warmer water appears to be providing the habitat conditions for a rapid invasion by smallmouth bass, which was identified as the biggest potential threat to the species in a 2018 USFWS species status assessment. If smallmouth bass get established, they may dramatically decrease numbers of HBC larvae and young of year through predation. The sub-annual flows proposed under this related process to address smallmouth bass will be influenced by the annual flows analyzed in the SEIS. Annual volumes and the low elevation of Lake Powell have increased smallmouth bass and other warm water non-native passage through the dam, and increased river temperatures allowing breeding to occur downstream of the dam. These warmwater non-natives pose a major threat to the federally listed HBC and razorback sucker and the other native fish populations in the Grand Canyon, which have been thriving up until now in a stretch of river with low numbers of predators. Under the obligation of the Grand Canyon Protection Act (Public Law 102-575), this situation should be mitigated and NPS supports the Reclamation plan to initiate the LTEMP SEIS planning effort with a timeline of completion by May or June of 2023 to prevent establishment of these warmwater predators before they impact the native fish and federally listed species. Conservation of 3 maf over 3 years and adjustments to operations that can increase reservoir elevations and better balance inflows and outflows will help protect the endangered razorback sucker population in Lake Mead. Though this razorback sucker population is a small percentage of the total population of this species, as was stated in the 2018 USFWS species status assessment for razorback sucker, this is the only subpopulation of razorback sucker currently completing its lifecycle, without active management efforts. Conservation efforts that maintain Lake Mead levels and better balance inflow and outflow may help protect spawning habitat and water quality important to razorback sucker in Lake Mead.

Thank you for the opportunity to comment on this draft SEIS. We understand the challenges of this expedited and expansive planning process for Reclamation staff and your contractor, and we genuinely appreciate your efforts. NPS staff looks forward to continued work with Reclamation as you move toward a final version of the SEIS in July of 2023. Please contact Rob Billerbeck, NPS Colorado River Program Coordinator, at (303) 987-6789 or [rob\\_p\\_billerbeck@nps.gov](mailto:rob_p_billerbeck@nps.gov) if you have any questions on these comments or wish to discuss them further.

Sincerely,

**KATHARINE HAMMOND** Digitally signed by KATHARINE  
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Kate Hammond  
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