

December 15, 2022

Via E-Mail to sbucklin@usbr.gov

Sarah Bucklin
Regional Environmental Coordinator
Bureau of Reclamation
125 South State Street, Room 8100
Salt Lake City, Utah 84138-1147

Re: Stakeholder Input to the National Environmental Policy Act (NEPA) Compliance for Glen Canyon Dam Operational Flexibilities in Response to Warmwater Invasive Fish.

Dear Ms. Bucklin,

The Bureau of Reclamation (Reclamation) has announced plans to prepare an Environmental Assessment (EA) to consider a proposed action to provide a comprehensive framework for implementing operational alternatives at Glen Canyon Dam consistent with the Glen Canyon Dam Long-Term Experimental and Management Plan (LTEMP), the Grand Canyon Protection Act and other provisions of applicable Federal laws to reduce the threat of warmwater invasive fish below Glen Canyon Dam. During a Virtual Information Session held on December 1, 2022, Reclamation requested stakeholder input on the EA by December 15, 2022. The following comments are submitted on behalf of the Glen Canyon Dam Adaptive Management Program (GCDAMP) Technical Work Group (TWG) representatives from the four Upper Division (UD) Colorado River Basin states (Colorado, New Mexico, Utah, and Wyoming) and the Upper Colorado River Commission (UCRC) (collectively referred to herein as the UD Basin States TWG Reps) as part of the stakeholder input process.

Interests of the UD Basin States TWG Reps

The UD Basin States TWG Reps are active and vocal participants in the GCDAMP, including the TWG and its subcommittees. Members are selected who believe in the importance of these processes for providing technical advice and recommendations to the Secretary of the Interior relative to the operation of Glen Canyon Dam. For many years, we have closely monitored the status and trends of nonnative warmwater fish species and other potentially problematic fish species below Glen Canyon Dam. This is because of their potential for threatening the progress that has been made toward recovering the Endangered Species Act protected humpback chub (*Gila cypha*) and impacting other native species. As threats to native fish populations have grown, the UD Basin States TWG reps have consistently considered potential consequences to native fish populations in their recommendations regarding potential LTEMP experiments.

December 15, 2022

Page 2 of 6

When large numbers of green sunfish (*Lepomis cyanellus*) were detected in Glen Canyon in 2015, the UD Basin States TWG Reps recommended not to implement a Fall High Flow Experiment for fear of dispersing this species downstream and promoting establishment. When brown trout detections increased during the period 2014-2016, the UD Basin States TWG Reps were among those who advised that immediate removal efforts should be implemented. Recently, projections showed that Lake Powell elevations will decline and water quality conditions would become more suitable for smallmouth bass (*Micropterus dolomieu*) establishment in 2021-2022. Once evidence of smallmouth bass recruitment was observed in 2022, the UD Basin States TWG Reps recommended the rapid deployment of response actions and recommended against implementing a Fall High Flow Experiment for fear of dispersing this species downstream and promoting establishment. These are just a few examples of how the UD Basin States TWG Reps have demonstrated their interest in diminishing threats to humpback chub in Marble and Grand canyons.

General Comments

- A) Operational Alternatives are Not a Panacea:** The Smallmouth Bass Ad Hoc Group was charged by the TWG with developing a draft strategic plan to prevent, detect, and respond to cool- and warmwater invasive fish establishment below Glen Canyon Dam. This task originated from the Secretary's Designee during the May 2022 AMWG meeting. The Smallmouth Bass Ad Hoc Group, with input from the Basin States TWG Reps, Grand Canyon Monitoring and Research Center, and other stakeholders, has been developing a comprehensive strategic plan. The strategic plan includes several important types of actions, including early detection, rapid response, fish exclusion, and possible short-term operations that could help prevent invasive fish establishment, while minimizing potential adverse effects to other resources. What is undeniably clear from these efforts is that Glen Canyon Dam operations alone are insufficient to prevent invasive fish establishment. Other actions are needed to meet these goals, including early detection and rapid response, and fish exclusion. Any use of operational alternatives to discourage or reduce establishment should be implemented in conjunction with non-operational alternatives.
- B) Fish Exclusion:** Reclamation has indicated its intent to initiate environmental compliance for the installation of a fish exclusion device in the Glen Canyon Dam forebay and/or below the dam, or consider other existing authorizations that would allow rapid deployment of a fish exclusion device (or multiple types of devices). We recommend that, at a minimum, a temporary fish exclusion device (or multiple types of devices) be installed no later than the summer of 2023, while a more permanent solution is devised.
- C) Early Detection and Rapid Response:** Reclamation should increase their financial support for expanded early detection and rapid response actions such as the actions that have occurred in the 12-mile slough and recent electrofishing actions in Glen Canyon.

December 15, 2022

Page 3 of 6

- D) Implementation of Operational Alternatives:** Reclamation indicates that operational flexibilities considered in the EA will be consistent with the LTEMP. As such, we recommend that implementation of operational alternatives follow the communication and consultation processes that have been developed according to Section 1.4 of the LTEMP Record of Decision. Moreover, the flow options analyzed in the EA may each be important to have available to implement depending on conditions. We recommend that more than a single operational alternative be available for implementation in the spring and summer of 2023. We also recommend that offramps for emergency exception criteria and futility of the operational alternative be identified in the EA.
- E) Powell Pool Elevations:** The UD Basin States TWG Reps recognize that if dry hydrologic conditions similar to recent years occur in 2023, resulting water release temperatures are almost certain to support the establishment of smallmouth bass below Glen Canyon Dam. The UD Basin States TWG Reps further recognize that any increase to Lake Powell pool elevations from current elevations will likely lead to cooler water releases and a lower likelihood of smallmouth bass establishment.

Environmental Assessment-Specific Comments

- A. Scope:** The EA should clearly state that the proposed operational alternatives are for implementation in WY 2023, and, if necessary and upon further consultation, WY 2024, consistent with the LTEMP Record of Decision.
- B. Purpose and Need Statements:** The language in these sections needs to be tightened up for clarity. The Purpose statement should be revised to say, "... an Environmental Assessment is necessary to pursue implementation of **operational alternatives (flow options)** at Glen Canyon Dam as a **temporary** means **to help prevent establishment of smallmouth bass through 2023, and, if necessary and upon further consultation, in 2024.**" Likewise, the final sentence of the Need statement should be revised to say, "Reduced water temperature, changes in velocity, **or a combination could** be used to **help** prevent SMB from successfully spawning and establishing downstream of GCD." See A) under General Comments. Reclamation should further consider whether the confluence with the LCR is too far downstream to be the appropriate terminus.
- C. Range of Alternatives:** We believe that the range of alternatives presented is insufficient because there is no alternative proposed that does not use the bypass tubes (reservoir outlet works). Reclamation could have included, for example Alternative #2 from the August 2022 Adaptive Management Working Group Meeting, "Once a week, lower flows to 2,000 cfs and increase to 25,000 cfs – the maximum range without any bypass". A design without the use of the bypass tubes could be developed to help prevent the establishment of SMB before installation of an exclusion device (see (B) under General Comments). Such a design would at the same time minimize the impacts to hydropower generation, grid-stability disadvantaged communities that are recipients of hydropower, and the Basin Fund. Creation of a non-bypass alternative would focus on flow fluctuations to impact SMB in contrast to bypass alternatives, which focus more on reducing temperature to negatively impact SMB. Inclusion of a non-bypass alternative would also strengthen the environmental compliance analysis by increasing the range of the alternatives analyzed.

D. Analysis of Impacts: The analysis of impacts needs to thoroughly address the quantitative impacts of flow options in 2023 (and, only if necessary, and upon further consultation, in 2024) to hydropower generation, grid stability, the Basin Fund, and recipients of hydropower, especially Native American Tribes and disadvantaged communities. We encourage Reclamation to work with WAPA to evaluate impacts of the proposed action under the minimum, maximum, and most probable hydrologic scenarios. We also encourage Reclamation to include a SMB specialist on the EA team.

The analysis of impacts should also include an evaluation of the potential for dispersing invasive fish downstream. High Flow and Bug Flow experiments have generated concern regarding their potential for promoting invasive species establishment by relocating invasive species further down river. The Basin States TWG Reps recommend the EA evaluate this potential risk and clarify how risks from the operational flows under consideration differ from those risks presented by experimental flows. For these reasons, any proposed action warrants a similar process that follows the communication and consultation processes that have been developed according to Section 1.4 of the LTEMP Record of Decision.

E. Drought Response Operations and Protection of Infrastructure: During calendar year 2021, Reclamation released a total of 161,000 acre-feet of water from Flaming Gorge and Blue Mesa Reservoirs under the emergency provision of the Drought Response Operations Agreement (DROA) in an effort to help protect critical elevations at Lake Powell. Pursuant to a 2022 Drought Response Operations Plan approved by the DROA Parties in May 2022, Reclamation is in the process of making additional DROA releases from Flaming Gorge to Lake Powell in the amount of 500,000 acre-feet. This release began in May 2022 and will continue through April 2023. Actions contemplated under this EA should not interfere with past, current, or future DROA releases and recovery operations intended to protect critical elevations in Lake Powell.

F. Schedule: In October 2022, Reclamation provided the Dual Charter and Project Management Plan to GCDAMP stakeholders. The Plan outlined a schedule of tasks for completing the EA by March 29, 2023. Although this is an aggressive schedule for completing the EA, the UD Basin States TWG Reps recognize Reclamation's interest in proceeding quickly with this schedule to ensure that there is the opportunity to implement operational flexibilities in 2023.

Reservation of Rights

The UD Basin States TWG Reps' comments are intended to highlight overarching issues that will require acknowledgment, specification, or clarification as the EA process continues to progress. The UD Basin States TWG Reps' failure to provide specific comments regarding details of the EA is not, and shall not be construed as, an admission with respect to any factual or legal issue or the waiver of rights for the purposes of any future legal, administrative, or other proceeding. Furthermore, the UD Basin States TWG Reps reserve the right to comment further on EA documentation as Reclamation proceeds with subsequent phases of the EA process.

December 15, 2022

Page 5 of 6

Conclusion

The UD Basin States TWG Reps thank you for the opportunity to provide these scoping comments for the EA. If you have any questions or concerns regarding this letter, or any other aspect of the UD Basin States TWG Reps interest regarding the EA process, please contact us at your earliest convenience.

Sincerely,

[Signatures on next page]

December 15, 2022

Page 6 of 6

Signatures: —



Michelle Garrison, Colorado TWG Representative



Christina Noftsker, New Mexico TWG Representative



Scott McGettigan, Utah TWG Representative



Mel Fegler, Wyoming TWG Representative



Sara Larsen, UCRC TWG Representative

Cc:

Wayne Pullan, Regional Director, Upper Colorado Regional Office, Reclamation

Kathleen Callister, Manager, Upper Colorado Regional Office, Reclamation

Bill Stewart, Upper Colorado Regional Office

Seth Shanahan, Nevada TWG Rep and TWG Chair