

November 3, 2023

*via e-mail LTEMPSEIS@usbr.gov only*

LTEMP SEIS Project Manager  
Bureau of Reclamation  
125 South State Street, Room 800  
Salt Lake City, Utah 84138

**Re: Comments on the Notice of Intent to Prepare a Supplemental Environmental Impact Statement for the December 2016 Record of Decision Entitled Glen Canyon Dam Long-Term Experimental and Management Plan**

Dear LTEMP SEIS Project Manager:

The Colorado River Basin States' representatives (Basin States' Representatives) provide the following comments in response to the Bureau of Reclamation's (Reclamation) October 4, 2023 Federal Register Notice announcing plans to prepare a Supplemental Environmental Impact Statement (SEIS) for the December 2016 Record of Decision entitled "Glen Canyon Dam Long-Term Experimental and Management Plan" (LTEMP). 88 Fed. Reg. 68667.

Prior to announcing the present Supplemental NEPA process for LTEMP, Reclamation solicited stakeholder input on an Environmental Assessment to examine the impacts of several proposed flow regimes at Glen Canyon Dam to prevent the establishment of smallmouth bass below the dam. In response, on December 15, 2022, the Colorado River Lower Basin states, and the Colorado River Basin Upper Division states with the Upper Colorado River Commission submitted two separate stakeholder comment letters to Reclamation. Furthermore, on March 10, 2023, the Basin States' Representatives submitted comments on the Draft Glen Canyon Dam/Smallmouth Bass Flow Options Environmental Assessment (Smallmouth Bass EA).

**Support for Flow Options Identified in the NOI to Prevent the Establishment of Warmwater Invasive Fish:** The Basin States' Representatives support Reclamation's analysis of the proposed bypass flow options and non-bypass flow option. If other options are identified during the process that may better achieve the purpose and need, Reclamation should fully analyze and consider those alternatives. In addition to the currently identified flow options, the Basin States' Representatives reiterate support for the document produced by the Glen Canyon Dam Adaptive Management Program (GCDAMP) Smallmouth Bass Ad Hoc Work Group, "Invasive Fish Species Below Glen Canyon Dam: A Strategic Plan to Prevent, Detect, and Respond", which was recommended by consensus to the Secretary of the Interior at the February 16, 2023 Adaptive Management Work Group (AMWG) meeting.

**Purpose and Need:** Reclamation proposes to prepare the LTEMP SEIS for the dual purpose of analyzing flow options at Glen Canyon Dam in response to invasive smallmouth bass and other warmwater invasive fish and to consider adjusting the sediment accounting periods and implementation windows of the High-Flow Experiment (HFE) protocol. The Basin States' Representatives generally support the proposed purpose and need statement, and offer the following order pertaining to the Basin States' Representatives' priorities:

1. Facilitate flow experiments to help prevent smallmouth bass establishment.
2. Facilitate flow experiments to help prevent establishment of other warmwater invasive species.
3. Increase the opportunity for HFEs.

The most urgent need is to reduce the threat of invasive fish on humpback chub, an Endangered Species Act listed species. Amending the HFE protocol is an important need but of lesser urgency than addressing invasive fish threats, particularly smallmouth bass. If during the development of the LTEMP SEIS, it is clear that resource constraints will prevent a decision from being made before the spring/summer of 2024, Reclamation should focus exclusively on the need to address the threat of smallmouth bass.

Reclamation should maintain the focus of the LTEMP SEIS purpose on addressing smallmouth bass as they have proven to have significant impacts on humpback chub populations in the Upper Basin tributaries. As conditions change over time other species may also need to be addressed. However, given current conditions and science, the purpose and need appropriately focuses on the known and immediate threat of smallmouth bass.

Existing alternatives or potential new alternatives that may also impact other invasive species of concern could be analyzed and considered if appropriate and they do not interfere with the completion of the compliance process for smallmouth bass actions by the spring/summer of 2024. It is appropriate, however, to note any potential benefits of the flow options towards preventing other invasive fish establishment.

**Proposed Action and Alternatives to be Considered:** The Basin States' Representatives support analyzing the four bypass flow options initially included in the Smallmouth Bass EA and one non-bypass flow option. If other options are identified during the process that may better achieve the purpose and need, Reclamation should fully analyze and consider those alternatives. The inclusion of the non-bypass flow option is an important addition to the alternatives considered in the Smallmouth Bass EA and will allow stakeholders to better understand the tradeoffs between bypass and non-bypass options.

We also support and recommend the analysis and hard look at the impacts associated with amending the HFE sediment accounting periods and implementation window.

**Timeframe and Duration for the Analysis:** More detail is needed in the description of alternatives regarding how or when a contemplated alternative might be triggered for implementation, might be off-ramped, might interact with implementation of an existing LTEMP experiment, and might be altered when a fish exclusion technology has been installed. At minimum, Reclamation should identify criteria for moving between flow options and off-ramping flow experiments.

Importantly, Reclamation should continue to explicitly treat bypass flow actions as experiments. Furthermore, Reclamation should clearly state that the consultation and communication provisions of the LTEMP Record of Decision are a component of any LTEMP SEIS alternative.

The alternatives should clearly describe the specific revisions to the HFE protocol that are to be included. We support the consideration and analysis of an expanded sediment accounting period from July 1 to June 30, rolling over unused sediment from one or more prior sediment accounting periods, and an expanded Spring HFE implementation window to include May and June. For additional context, please refer to the "Proposal to Amend the High-Flow Experiment Protocol and Other Considerations" document that was recommended to the Secretary of the Interior by the AMWG at the August 17, 2023 meeting.

**Analyses and Resource Impacts:** The proposed action for the LTEMP SEIS consists of several experimental elements that may interact with each other and with many existing experimental elements. Accordingly, the LTEMP SEIS must carefully analyze the proposed action to adequately disclose impacts. To guide this effort, we recommend the following:

- Reclamation should analyze the impacts of implementing both Spring HFEs and flow options to prevent invasive fish establishment, in the same water year.
- Comprehensive hydropower impact analyses should be considered. Reclamation should coordinate with the Western Area Power Administration, Colorado River Energy Distributors Association, and Grand Canyon Monitoring and Research Center to obtain the most comprehensive analysis possible.
- Reclamation should isolate the impacts of the different HFE options separately from the fish flow options, and disclose individual and combined impacts.
- An updated scientific understanding of trout recruitment impacts from Spring HFE implementation should also be included and any impacts from not implementing Trout Management Flows as described in the LTEMP should be disclosed.
- The LTEMP SEIS should include reasonable assumptions of low inflow and low reservoir conditions and analyze the feasibility and effectiveness of implementing the proposed actions under these conditions.

- The water temperature prediction tool has been very useful to understand potential future conditions resulting from low inflows and a low reservoir, but modeled predictions have not always matched observations. Reclamation should prioritize improvement of the temperature prediction tool as it is of critical importance when considering whether this and other future flow options might be triggered.
- Impacts to the western Grand Canyon population of the humpback chub should be analyzed.
- Analysis of the potential for bypass tube impacts resulting from cavitation, using the observations from the Spring 2023 HFE as a guide, is necessary to ensure future experiments are protective of critical infrastructure.

There may be some resource impacts that are disproportionately large. Reclamation should examine the magnitude of these impacts closely and consider adopting mitigation measures into the proposed action.

**Schedule:** The Basin States' Representatives support the completion of the LTEMP SEIS and Record of Decision so that flow options are available for implementation in the spring/summer of 2024. As indicated elsewhere in this letter, the availability of flow options to prevent the establishment of smallmouth bass below Glen Canyon Dam is the most urgent element of the proposed action. Reclamation should ensure that the LTEMP SEIS is complete when needed to optimally prevent the establishment of invasive fish.

**Additional Actions Needing Execution:** In order to address the emergency posed by warmwater invasive species, the Basin States' Representatives urge Reclamation, the National Park Service, and other appropriate Department of the Interior agencies to quickly take the following actions in addition to the SEIS:

1. Deploy fish exclusion technologies to prevent further invasive fish entrainment through Glen Canyon Dam.
2. Work cooperatively to fund and implement all phases of the Glen Canyon -12-mile slough modification work proposal found in the document entitled "Glen Canyon Dam Sloughs: Proposed Modifications" that was provided to the AMWG on August 10, 2023.
3. Fully fund adequate early detection and rapid response.

The flow actions being considered in this SEIS are unlikely to be successful in the absence of timely implementation of these additional actions. Time is of the essence for these and other actions to be effective in the long term at preventing the establishment of smallmouth bass and other warmwater invasive fish.

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**Reservation of Rights:** These comments are intended to highlight overarching issues that will require acknowledgment, specification, or clarification as the LTEMP SEIS process continues to progress. The Basin States' Representatives' failure to provide specific comments regarding details of the LTEMP SEIS 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 Basin States' Representatives reserve the right to comment further on LTEMP SEIS documentation as Reclamation proceeds with subsequent phases of the LTEMP SEIS process.


### **Conclusion**

We appreciate the opportunity to comment on the scope of the LTEMP SEIS. Should there be any questions or concerns regarding this letter or any other aspect of our interests regarding the LTEMP SEIS, please contact us at your earliest convenience.

[Signatures on next page]


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Sincerely,



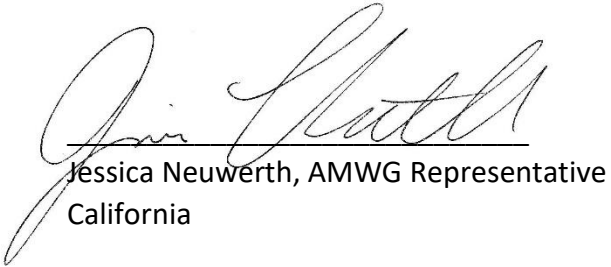
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Clint Chandler, AMWG Representative  
Arizona



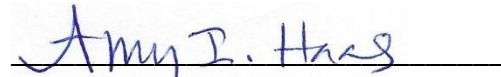
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Ali Effati, AMWG Representative  
New Mexico




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Jessica Neuwerth, AMWG Representative  
California



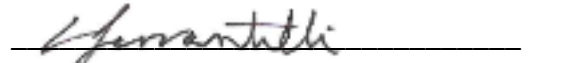
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Amy Haas, AMWG Representative  
Utah




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Michelle Garrison, AMWG Representative  
Colorado



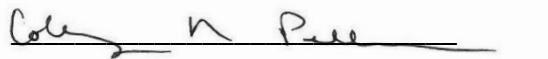
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Charlie Ferrantelli, AMWG Representative  
Wyoming



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Sara Price, AMWG Representative  
Nevada



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Colby Pellegrino, Deputy GM - Resources  
Southern Nevada Water Authority