

March 23, 2024

Kathleen Callister
Bill Stewart
LTEMP SEIS Project Managers
125 South State Street
Suite 800
Salt Lake City, UT 84138

Dear Ms. Callister and Mr. Stewart,

We, as the GCDAMP Recreational Fishing Representatives, appreciate the opportunity to provide comments on the Glen Canyon Dam Long Term Experimental and Management Plan Supplemental Environmental Impact Statement (SEIS). We are grateful that the Bureau of Reclamation has expedited the timeline for this SEIS as the threat posed to the system by smallmouth bass and other warm water species demands immediate action.

Our GCDAMP members have been very involved in the smallmouth bass ad hoc meetings, Technical Work Group, and Adaptive Management Work Group meetings where we have provided feedback throughout the process on the options presented to address the threat to the protected native fish, as well as to the blue ribbon rainbow trout fishery below Glen Canyon Dam. We appreciate the detailed descriptions of the five options proposed in the SEIS, and understand that they represent the best thinking from experts on strategies to utilize flow and water temperature to address the risk posed to the system by these warm water predators. We also value the hard work done by staff to research and assess the potential impact to all of the identified resources resulting from each of the proposed actions in this SEIS.

The devastating effect of smallmouth bass and other warm water species on the native fish populations in the Upper Basin is a tremendous historical example inspiring urgency and underscores the importance of meaningful actions to protect the river from this threat below Glen Canyon Dam. It is clear that you have taken those lessons to heart in the creation of this SEIS.

There seems a clear understanding that mitigation to reduce or eliminate the threat of smallmouth bass and other warm water species below Glen Canyon Dam is critical, and will require the implementation of the most effective strategies identified in the SEIS as well as a set of other strategies outside the scope of this document. As such, the no action alternative is in our judgment an unacceptable alternative.

We understand that as the SEIS document is written, it is designed to provide managers with the greatest degree of flexibility in addressing this warm water threat. While we absolutely agree with that logic and understand that lake levels, dam operations, and conditions on the river are difficult to predict, we feel that some of the alternatives are better suited for smallmouth bass suppression and pose less adverse impacts on the resources in and along the river.

In seeking the ability to utilize multiple alternatives as part of the SEIS, that assumes the responsibility and ability to effectively determine the impact of any chosen action to reduce or eliminate smallmouth bass and other warm water species. How that is to be measured and accomplished is not described in this document, and must be included in order to effectively choose the best option.

For example, during the short term actions being undertaken by the National Park Service while the SEIS is under review, all smallmouth bass and other warm water species are being removed from the river. Besides being an unsustainable, impractical method for controlling these species, electrofishing as currently being practiced during these actions, does not provide managers with an effective tool to measure the population of these fish to know with greater certainty how many of the targeted species are

present in the river system, or their estimated numbers in certain key hot spots in the river. For effective management, it is crucial to know the age distribution, numbers in each year-class, and the origin of any particular year-class of fish to know if they are entrained fish, or if they were born in specific locations in the river.

This information is critical in determining the effectiveness of any of the options chosen, and essential to inform managers if the current strategies are not effective, and additional strategies should be considered. There must be funding, personnel, and resources in place to assure the ability to collect systemwide data and quickly analyze that data to determine if the chosen action is effective or if refinements are needed to the management plan.

With that being said, of the action alternatives in the SEIS, we believe that the cool mix alternative and the cool mix with flow spike are the strategies that will have the greatest impact on smallmouth bass and other warm water species. It also provides rainbow trout, an important LTEMP resource, some relief during these high temperature and low dissolved oxygen conditions that are currently facing the river.

What sets the river system below Glen Canyon Dam apart from the Upper Basin, where warm water species have devastated the native fish populations, is the longstanding cold water buffer that releases from Glen Canyon Dam have provided until recently. While the cool mix strategies would be our first choice, in keeping with the importance of cold water as a deterrent to warm water fish predatory species, the cold shock and cold shock with flow spike are our next preferred alternatives.

We are opposed to the non-bypass alternative and do not believe that it has nearly as much potential for success in mitigation, and are very concerned about its impact to other resources in the system downstream. The tremendous weekly drastic fluctuation from 2,000 cfs to 27,300 cfs, with what amounts to essentially warm water releases, will adversely impact the rainbow trout fishery, pose a hardship to recreational users of the river, and destabilize the sandbars and banks more than any other alternative.

Another aspect of the SEIS that is of great importance to the health of the river ecology, the maintenance of beaches for recreational use, and cultural resource protection is the high flow experiment (HFE) protocol. GCDAMP recreational fishing representatives, along with other stakeholders advocating for a healthier river system, have long sought a change to the sediment accounting window and hope to increase the possibility of more spring HFEs than have occurred under the present accounting window system. We strongly support changes to the sediment accounting window and the resultant possible inclusion of more spring HFEs to benefit the river system. While we understand that there are limited water resources, the purpose of HFEs and flows designed to help control smallmouth bass are both important to river health. The timing for flows to benefit sediment transport and build beaches, and flows that will best inhibit smallmouth bass may very well be at different times. It is important that managers plan for water deliveries to meet those two very different demands.

Besides the flow options proposed in the SEIS, it is critical that managers continue to address conditions in Lake Powell and in the river to implement actions outside the scope of the SEIS as they are needed to deal with this threat. As an example of such a strategy, we are pleased to see that plans are underway to begin channelization of the upper and lower slough that is currently a haven for smallmouth bass and other warm water species that could threaten native fish downstream.

Actions and funding to develop and install devices to reduce entrainment of warm water fish through Glen Canyon Dam from Lake Powell is a critical step in this battle and must continue as quickly as practical. In addition, we support efforts to provide the ability to deliver cold water more effectively to the river whether that involves means to develop power generating capabilities on the existing bypass tubes, or creating new, deeper bypasses to minimize the dead pool in Lake Powell and prolong the release of

cold water during potentially warmer climate times well into the future. In the development of these new designs, if there are ways to address the increasing concerns about poor nutrient and dissolved oxygen levels to the river, that would certainly be worthwhile.

A deep and colder Lake Powell benefits native fish by providing cold water releases into the river that results in a cold water buffer that impedes warm water predatory species. It also benefits the rainbow trout fishery at Lees Ferry. Actions by the Basin states to come to terms with realistic water allocations to a river system that currently does not satisfy all of their water demands is essential. Greater water conservation effort by citizens of all Basin states will put any snowpack gains to the system to best use.

To highlight our concerns and recommendations:

1. There must be funding, personnel, and resources in place to assure the ability to collect systemwide data and quickly analyze that data to determine if the chosen action is effective or if refinements are needed to the management plan.
2. We oppose the no action alternative and the non-bypass alternative.
3. We believe that the cool mix and the cool mix with flow spike are the likely most effective alternatives. We would also support the cold shock and cold shock with flow spike alternatives as means of delivering colder water to the system. Colder water below Glen Canyon Dam has proven effective in deterring warm water fish predators, and would provide benefits to the rainbow trout fishery currently under stress from warmer, low dissolved oxygen conditions during the likely months of implementation.
4. We are in full support of changes proposed to the sediment accounting window to allow for the possibility of more spring HFEs in the future. Implementation of HFEs provides for another critical need of the river system and must remain separate from smallmouth bass control flows.
5. Additional funding and actions to address the smallmouth bass and other warm water fish predator threat are critical. They include but are not limited to: channelization of the upper and lower slough to increase cold water flow through this warm water habitat, devices to mitigate for warm water fish entrainment through Glen Canyon Dam from Lake Powell, strategies to increase cold water delivery capabilities to the river such as: adding power capability to the bypass tubes to allow them to be utilized outside of experimental windows, lowering water release points from Lake Powell to reduce the dead pool and prolong cold water delivery to the river, and if possible address low dissolved oxygen and poor nutrient delivery in the process.
6. Basin states must come to terms with realistic water allocations in a river system that is delivering less water. In addition, more robust water conservation efforts need to be enacted in the Basin states.

We are grateful for the speed with which this SEIS document was created, while providing pertinent details of each alternative and the likely impacts to resources. The work of your team will allow managers the ability to apply the best of these alternatives to address this threat as quickly as possible.

Sincerely,

Jim Strogon, Recreational Fishing AMWG Representative

Rod Buchanan, Recreational Fishing AMWG Alternate Representative

Bill Persons, Recreational Fishing TWG Representative

Bill Davis, Recreational Fishing TWG Alternate Representative