

## **AMWG –Truths and Proposed Actions from the Secretary’s Designee:**

Our meeting for the one and one-half days has been very productive and has driven home some truths about our work now and in the future. I am highlighting eight truths below that represent my vision and position as the Secretary’s Designee. They do not necessarily represent the vision of all the AMWG members

1. The effects of aridification are upon us and its effects are emerging quickly and will require focused and decisive responses.
2. The drive for greater conservation on the river is not guaranteed to facilitate our efforts. In fact, if in the future releases from the Upper Basin to the Lower Basin are tied to inflow, we may have less water to work with than we do now.
3. With aridification water becomes more valuable and diverting it from one use to another results in greater impacts. This is true of all uses, including when water is diverted from hydropower. It is important to keep in mind the large swath of the west that is dependent on Glen Canyon power as well as the impacts of reduced power supplies on families, farms, communities, and tribes.
4. One of the impacts of aridification is lower reservoir elevations. Those lower elevations lead to increasing temperatures of water released, increasing risk of entrainment of non-native species, and the appearance of smallmouth bass in the river below Glen Canyon Dam. This issue places us at a critical juncture at which action is necessary to help ensure we do not face similar viability issues of listed species that we are seeing in the Upper Basin.
5. With respect to the threat of the non-native fish, we may have to act in two stages—taking short-term actions to mitigate the threat while we are pursuing longer term responses. For example, we may need to make operational changes to discourage establishment while we are planning for how to exclude the fish from entrainment.
6. The actions that need to be taken will exceed our previous vision, mission, and principles and it will require us to think creatively and on a larger scale. We will need to consider taking actions that we have not considered before because the conditions and resource impacts we are facing are novel. As I mentioned yesterday, we need to work together to reach compromise and consensus as consensus recommendations are much more powerful in the message they send.
7. The actions that need to be taken will likely strain our processes. Research, development, planning, deliberation, and decision-making for actions may not be able to proceed at the pace it has in the past. Our velocity must increase. We will need to act on the best available science—with the emphasis on the scientific studies and work

already available at the time we need to act. We need to ensure adaptive management is one of our primary tools in addressing the challenges we are face.

8. Future actions will also strain our human and capital resources. Some redistribution of funding may be necessary. We will likely need to hire additional staff and contract a large portion of work to others. One bright spot is the possibility that we may be able to access funding under the Bipartisan Infrastructure Law and the Inflation Reduction Act. These resources may give us access to resources to do things we considered out of reach before.

With that introduction, I would like to describe five proposed actions—two associated with low reservoir elevations/lower flows and three associated with non-native fish. The information I will provide on each is preliminary and we are seeking the input of the AMWG on each. After I introduce these, we will take some time for questions and discussion. Please understand that, given the unfolding nature of these issues, we may not have many of the answers during this meeting.

1. **Evaluation of High-flow Experiments under Low-elevations/Low-flows** – The first of the low-elevation/low flow actions is to task GCMRC with developing and presenting to the leadership team an analysis of how to optimize HFEs in the current environment. Specifically, this would include evaluating whether less-frequent/higher-flow HFEs are preferable to more-frequent/lower-flow HFEs in a low water environment. Among other issues, this evaluation may consider: What are the minimal frequency, flow, and duration that would be effective? Are there other alternatives to what we have considered for meeting the objectives of HFEs? How do we time and design HFEs to minimize the hydropower impacts? GCRMC is likely to be able to complete this analysis relatively quickly and with minimal budget impact as much of this has already been considered. If possible, we would seek this presentation before a decision needs to be made about implementing any HFE proposal that may be developed for 2022.
2. **Evaluation of Downstream Resource Impacts under Low-Elevations/Low-flows** – The second of the LE/LF actions is to task GCMRC with developing a proposed schedule and budget for evaluating the potential downstream impacts to LTEMP resources of water surface elevation at Lake Powell dropping below minimum power pool and below dead pool for any period greater than three months. We would ask that the proposed schedule and budget be completed by October 15, 2022 to seek additional funding from Reclamation. GCMRC will need to coordinate with Reclamation modelers on results that may be available to blend into coupled-modeling activities. In other words, taking the CRMMS probabilistic results and using them in GCMRC's temperature, water quality, and fish models to determine impacts for each resource under the Adaptive Management Program.
3. **Nonnative Fish Strategic Plan** – The first of the non-native fish actions is simply to ask the TWG, GCMRC, and Reclamation to continue the draft non-native fish strategic plan

and have it ready for distribution as soon as possible. This includes incorporating the next steps and prioritizing activities, equipment, and budgets for short-, mid- and long-term actions as discussed during the first day of AMWG deliberations. In turn, these will be combined into future project management plans within the GCDAMP program.

- 4. NEPA Compliance for Operational Flexibilities to Address Nonnative Fish** – The second of the non-native fish actions is to task Reclamation with developing a project management plan that includes a budget and schedule for initiating a NEPA process associated for operational alternatives /actions to disadvantage SMB and other non-native fish, which may require further refinement from GCMRC. We ask that the schedule be aimed at completing a NEPA decision document in time for possible implementation in the late spring/early summer of 2023. I encourage Reclamation to analyze the degree to which such compliance can be tiered off the LTEMP FEIS and ROD. It will be important to maintain a focused scope for this effort and to avoid inclusion of ancillary actions and issues to ensure the process can meet a possible spring/summer 2023 implementation. This NEPA analysis must not become a vehicle for addressing the range of concerns about the LTEMP FEIS and ROD, but should rather give us possible tools that we can implement in a timely manner to address the non-native fish challenges we are currently facing. I propose that the project management plan, be shared with the GCDAMP partners by October 14, 2022.
- 5. Planning to Evaluate Exclusion Projects** – The third of the non-native fish actions is to task Reclamation with initiating a planning effort to evaluate options for avoiding entrainment of non-native fish resulting in a recommendation of options to be included in a feasibility study. The intent is to select the most effective option for excluding non-native fish from establishing below Glen Canyon Dam.