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February 22, 2023

Secretary of the Interior designee Wayne Pullan and the AMWG Body.

Upper Colorado River Regional Office Bureau of Reclamation (BOR) 125 South State Street, Room 8100 Salt Lake City, UT 84138

RE: Hopi Tribe comments on Framework to Prevent nonnative Fish Species Establishment Below Glen Canyon Dam Addendum.

Dear Secretary of the Interior designee Wayne Pullan and AMWG Body,

The Hopi tribe is thankful for the opportunity to provide feedback on the *Hopi Tribe* comments on Framework to Prevent Invasive Fish Species Establishment Below Glen Canyon Dam. This response expresses Hopi's interests and positions on the Framework plan. The Hopi Tribe claims cultural affiliation to earlier identifiable cultural groups throughout Arizona and Utah. The Hopi Cultural Preservation Office supports identification and avoidance of prehistoric archaeological sites, Traditional Cultural Properties, and natural resources. Therefore, we appreciate your agencies and the bodies of the AMWG and TWG for continuing solicitation of our input and your efforts to address this concern in due to the increase of small mouth bass and other nonnatives within the Colorado River ecosystem.

First, the Hopi made a covenant to be stewards of the land including the Colorado River ecosystem. It is a tenant about being Hopi. In this regard, the taking of life should not be done lightly and only with important mitigation if it cannot be avoided. If the taking of life cannot be avoided, then beneficial use for human consumption and animal use (like the eagle sanctuaries) to the Hopi is an acceptable method of mitigation.

The water levels and continued difficulties of climate change means new strategies need to be approached and that sacrifices of values on certain resources and discussion between institutions need to be made. This includes the Lake Powell side above the dam. The Colorado River is not a closed ecosystem between the dams.

The Hopi tribe prefers preventive methods foremost as they fulfill stewardship duties and prevent problems in the long term.

In this letter the options as demonstrated within the plan will be discussed from Hopi's perspective.

Mechanical removal for nonnatives: To Hopi this should not be a first response. It is important to put preventive methods to the forefront. However, if mechanical fish removal is an option then proper mitigation for unnecessary fish death need to take place. If fish are to be removed in this manner, then they are to be used for beneficial use.

Harvesting: This is acceptable if again beneficial use is applied.

However, for both these options Hopi established that it is important to treat the life taken with respect.

Barriers:

Below the Dam: Are acceptable in the right place and time.

Above the Dam: Barriers Dam side should be a priority. Cold-water bay project barrier Dam side is an example of a fish barrier that would be acceptable in preventing fish form entering the environment and from and not include the taking of life. Barriers that sperate fish and redirect them are acceptable.

Dewatering/Dredging:

This is a method Hopi wishes to avoid as an option entirely. It is destructive to the environment and harms fish and is a needless taking of life.

Sonic Guidance:

Auditory vibrations may affect the rest of the ecosystem. Vibrations in water and earth effect plants and animals and thus the variables make this seem not like a good choice.

Disrupt early stages:

Flows impact the environment. Consultation of what flow and when with tribal members needs to be discussed always beforehand as each flow is different. This option requires a lot of consultation if considered for implantation. The interrupting of life process through a process leading to death is not an acceptable method for Hopi. If something like a flow event would match a natural event in a natural time this is something that can be discussed with Hopi as an option before Hopi elders and its Cultural Advisory Task Team. Barriers though that prevent spawning are acceptable. There is a lot of variables to each of these flow options.

Chemicals:

These options Hopi finds not appropriate due to harm to other organisms and the ecosystem. There is a lot of negative variables and prevents beneficial use as migration.

Other:

Outreach: Is always a good thing, but does not equal solving this issue because of the nonnatives stocked coming through the dam.

Extended Monitoring: It's a great idea and should be part of the process.

Introduction of YY Male Brown Trout and Sun Fish: This is idea is one to be avoided and is counterintuitive to this plan's goals. The type of idea that leads to further problems as nature takes its course.

Temperature changes with a propane heater: Unknown Hopi would need to learn more.

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Removal of Incidental captures: If beneficial use is in place, then this is acceptable.

NEPA and 106 Fish monitoring: It is the law, and should be part of the practice. Mechanical Harvesting of non-native plants and Algae. This is the taking of life. Hopi see plants as living organisms. Mitigation needs to be handled with this one due to impacts in the ecosystem.

Hopi preference is for preventive measures that prevent the taking of life. Handling the Slough, creating bypass systems within the dam, ceasing to stock Lake Powell, and creating of barriers are options Hopi prefers in concern of Nonnative fish entering through the dam.

Hopi hopes you will take this response seriously in consideration of these plan options. Thank you for your continued consultation and inclusion of the Hopi tribe in this decision-making process. Should you have any questions or need additional information, please contact Stewart Koyiyumptewa Skoyiyumptewa@hopi.nsn.us. Thank you for your consideration.

Respectfully,

Stewart B. Koyiyumptewa, Program Manager Hopi Cultural Preservation Office