

Brown Trout at Lees Ferry

Jim Strogon

Many fly fishers, their clubs and TU Chapters have been involved in efforts to influence the controversial plan by the National Park Service (NPS) to mechanically remove brown trout through intensive, repeated electroshocking in the Blue Ribbon Rainbow Trout Fishery at Lees Ferry. That plan, the *Expanded Non-Native Aquatic Species Management Plan in Glen Canyon National Recreation Area and Grand Canyon National Park below Glen Canyon Dam - An Environmental Assessment* (NPS-EA) is scheduled for the last round of public review and comment in mid August, 2018. The NPS plans to roll out their decision document in Fall, 2018. They are currently refining alternatives to their plan based on the first round of input (largely from the angling and guiding community) and information from the Brown Trout Report (*Brown Trout in the Lees Ferry Reach of the Colorado River-Evaluation of Causal Hypotheses and Potential Interventions* <https://doi.org/10.3133/ofr20181069> . Your continued attention to this issue is important. This mid August, 2018 comment period may be short and be your last opportunity to influence the decision.

As anglers, we are certainly interested in that fishery, and we also support decisions based on sound scientific research to guide actions for the river and all of its inhabitants. The brown trout workshop in September 2017, and the resultant Brown Trout Report (BTR) came about in part from suggestions for the workshop by your fishing representatives on the Adaptive Management Work Group (AMWG) and the Technical Work Group (TWG) as stakeholders in the careful management of the discharges from Glen Canyon Dam and the impact on the Colorado River below the dam. The brown trout workshop and subsequent report was an attempt to bring science into the NPS-EA that seemed to be lacking a scientific rationale for the proposed actions in that plan. I have read the BTR and encourage you to do the same if you would like to learn more about the most likely potential causes for the recent increase in brown trout in Lees Ferry and possible interventions to address this potential problem. It is an 83 page technical report, so some highlights may be in order.

First, the study was limited in scope to only the Lees Ferry reach of the Colorado River. There have been brown trout in Grand Canyon tributaries since they were introduced beginning in 1923. When the dam was completed in the mid 1960s and the river remained cold enough for trout to survive year round, brown trout were free to move throughout the river and have resided there ever since. There have been historical rises and falls in both the trout and the native species populations during that time. The most recent blip in brown trout from 2014-2016 in the Lees Ferry reach caused concern with the National Park Service and prompted their Environmental Assessment that includes targeted removal of brown trout in Lees Ferry.

The BTR attempts to seek likely causes of the increase and offers potential solutions to remediate the increase. In contrast, the NPS-EA is a reactive document to the problem and makes no attempt to address root causes, but rather only symptoms of that problem. From an NPS perspective, any brown trout in the system are invasive species that should not be there and could cause harm to the humpback chub population 60+ river miles downstream at the Little Colorado River confluence. From an AZGFD and recreational anglers' perspective, there are few brown trout (approximately 3% of the trout in Lees Ferry) and there is not evidence that they are moving downstream in significant numbers to cause harm to the humpback chub population.

The BTR suggests that warmer discharges from the dam which might favor brown trout more than rainbow trout, high flow events in the fall which might positively impact brown trout spawning success, and the decline in rainbow trout in the Lees Ferry reach are among some likely possibilities for the recent increase in brown trout at Lees Ferry. The BTR also suggests exploring solutions to the problem such as the suspension of the high flow events in the fall, more frequent spring high flow events that might disrupt brown trout redds and actually

increase rainbow trout production, and an incentivized angler take program targeting brown trout in addition to the primary option initially proposed by the NPS of intensive, sustained electroshocking in Lees Ferry.

The BTR authors acknowledge that this is a complex problem and that there is limited data to make any definitive suggestions for solutions. They encourage more study of the likely root causes and note that there are a variety of stakeholders that could provide assistance in working on this problem and may be impacted by any actions taken.

Inclusion of ideas like suspension of the Fall High Flow Events, increase in the number of Spring High Flow Events, temperature control of the water coming out of the dam, study of movement of trout from Lees Ferry and other reaches of the river to the Little Colorado River confluence area are outside the scope of their EA even though one or more of those actions may have a profound impact on unlocking the root cause of the recent brown trout increase and provide a long term solution to the problem.

If you are interested in learning more about the brown trout increase in Lees Ferry and the National Park Service plan to eradicate brown trout and potentially adversely impact the blue ribbon rainbow trout fishery at Lees Ferry in the process, please be sure to read the BTR and express your views to the National Park Service during their final public comment period. Thoughtful advice offered by the angling community has had a positive influence on the stance that the National Park Service has taken in recent meetings on the subject. You will continue to get updates in the newsletter. Please continue to stay informed and involved as you share your valuable angler perspective.