

Gila Trout Restoration in Arizona

Workshop Notes

January 14, 2010

As part of addressing the list of questions developed for workshop review, the Gila Trout Work Group discussed the following:

Question 1 – What agencies and organizations should be involved in recovery?

In general, there's a good partnership framework available because of previous work on Apache trout. The Apache partnership includes most of the major federal, state, tribal and private conservation organizations in AZ and would be a good starting point for developing Gila trout partners. In addition to a general partnership framework, specific local partners will need to be developed for each of the potential projects listed below.

Question 2 – List of potential projects for collaboration?

Existing and potential Gila projects were listed and briefly discussed.

Dude Creek – A restoration project from late 1990's – Likely extirpated due to wildfire. Stream is small with limited habitat and there are no further plans to try to revive this project.

Raspberry Creek – Also a restoration project from the late 1990's – A small population still exists in this limited habitat. There's some thought to using the stream as a refuge to hold the Spruce Creek lineage of Gila trout which is the most threatened lineage of the four genetic lineages needed for recovery. Hatchery cultivation of Spruce Creek fish has so far failed and there is a need to establish fish beyond their home waters of Spruce Creek in NM. Project status is uncertain.

Frye Creek – First major project to restore Gila trout to NM in many years - Five miles of water in Pinalenos Mountains was stocked in November, 2009. Additional fish will be stocked in 2010 and population will be monitored over time.

Grapevine Creek – Small project in Aqua Fria drainage stocked at same time as Frye Creek - One mile of water.

Chitty Creek – Creek was slated for reintroduction in 2009, but watershed was severely damaged by wildfire. This is a future possibility for reintroductions when the watershed recovers.

Ash Creek – One of three Pinalenos Mountain watersheds slated for restoration (Frye and Marijilda Creek are the others). Reintroduction could occur in 2010-2011. This is a sizeable stream with good restoration potential. NEPA complete and funding is in place. Jason Kline of AZGF will connect with TU for volunteer help on the project.

Marijilda Creek – The best of the three Pinalenos Mountain watersheds slated for restoration. Reintroduction will occur in 2010-2011. This stream has two major branches that allow for fish migration. While not a major metapopulation project, it's moving in right direction. NEPA complete and funding is in place. Jason Kline of AZGF will connect with TU for volunteer help on the project.

West Fork of Oak Creek – ongoing ten year effort on largest potential Gila water in AZ. Latest target dates are NEPA completion in 2010 and beginning of project implementation in 2011 with barrier construction.

Haigler Creek - This small stream on the Mogollon Rim is remote, has a good fish barrier potential via private landowner water structure, and potential to test strategies to control non-native fish crayfish in concert with native fish reintroduction. No NEPA started yet.

Blue River Region streams – A large remote watershed with multiple streams with Gila Trout potential. Some stream temperature monitoring is already conducted by AZGF and TU.

Question 3 – How can partners help the formal Gila Trout Recovery Plan move forward?

The Recovery Plan has a number of criteria that need to be met to enable delisting of the species under the Endangered Species Act. Gila trout are currently listed as “threatened.” Two of the delisting criteria that are priorities include:

Criteria #2 – Replication of the Spruce Creek genetic lineage. The Recovery Plan calls for protection of genetic diversity of the species. There are 4 different genetic lineages that comprise the full range of Gila trout diversity. The Spruce Creek lineage in NM is a small population contained in a single small stream. The objective is to replicate this population in at least two other streams (one in AZ and one in NM). This is currently the highest priority for the Recovery Team.

Criteria #3 – Replicate at least four populations of San Francisco-Gila River mixed lineage in at least 25 miles of streams. Developing AZ populations are particularly important for meeting this delisting criterion.

Questions 4 and 5 – What projects need funding? From where could funding come?

There are two projects in the Pinalenos Mountains that are ready for implementation – Ash Creek and Marijilda Creek. Along with the recent re-introduction on Frye Creek, these projects represent the first major effort to reintroduce Gila trout to the state of Arizona since the species was listed. All of these projects are fully funded. Another major restoration effort for Oak Creek is currently in the planning phase, but the remaining potential projects on the restoration list should be considered as preliminary possibilities. Until projects are chosen and formal project plans developed, no specific funding needs can be determined.

Question 6 – What other suggestions should be considered?

The number one priority for moving restoration projects forward is the completion of National Environmental Policy Act (NEPA) planning. The National Environmental Policy Act (NEPA) requires federal agencies to integrate environmental values into their decision making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions. To meet NEPA requirements agencies must prepare a detailed statement about their proposed projects which assures that its own actions comply with NEPA. Since virtually all Gila projects are on National Forest lands, the U.S. Forest Service must develop NEPA plans. There is a major backlog for all types of NEPA planning, so trying to develop a separate NEPA plan for each restoration project will be laborious and time consuming. The workshop group discussed the following alternatives that might accelerate the process while complying with NEPA regulations:

1. Developing broad programmatic NEPA plans that include one or both of these approaches: a) multiple projects on a single forest; and/or b) types of tools or activities essential for native fish restoration such as piscicide use or barrier construction can be reviewed and approved.
2. Creating a state/federal NEPA position to focus on coordinating and developing NEPA plans.
3. Ensuring adequate funding for NEPA planning by encouraging native fish funders such as the National Fish Habitat Action Plan (NFHAP) or the National Fish and Wildlife Foundation to allow some of their grant funds to be used for assessment and planning activities.
4. Implementing pro-active strategies such as public seminars on native fish project plans (including issues such as piscicide use and barrier construction) at the start of NEPA plan development rather than waiting for completed NEPA plans to be released for formal public review.

Further investigations on the above alternatives are already underway by various native fish interests. Items 1 and 2 involving programmatic NEPAs and a potential NEPA coordinator position are being considered by AZGF and the Forest Service. TU national will investigate item #3 on funding. Item #4 involving public seminars on native fish restoration has been tested by NM TU. The American Fisheries Society has developed a public website on the use of rotenone <http://www.fisheries.org/units/rotenone/working> and Turner Enterprises Inc is developing a review paper on all types of piscicides that could be used in future public education efforts.