

Apache Trout Restoration in Arizona

Workshop Notes

January 14, 2010

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

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

Relative to additional agencies or organizations that should be present at such workshops, the following was mentioned. *Community leaders* to help understand public education needs and opportunities. *Tribal representatives* to help understand needs and opportunities on tribal lands. *Engineers/hydrologists* to help understand issues relative to fish barriers.

Question 2 – List of potential projects for collaboration?

1. Stream temperature and flow monitoring. In general, there is a lack of good, long-term stream temperature and flow data available in Apache trout waters. Widespread and longer-term data are needed to better understand drought, floods, and other changes in stream conditions that may be attributable to climate change or land use change. There is an on-going grad student project at University of Arizona that might be worth investigating relative to help in understanding temperature and flow monitoring needs.
2. Barrier issues. There are a number of issues involving barriers including:
 - a) having sufficient NEPA completed to facilitate fast repair of damaged barriers,
 - b) sufficient monitoring to know when barriers are failing or have been breached,
 - c) sufficient engineering and hydrologic expertise to adequately advise biologists about barrier conditions and needs, and d) need to fix specific barriers such as the lower barrier on Bear Wallow Creek. Monitoring and repair of barriers are chronic problems that plague recovery efforts for Apache trout.
3. Metapopulation development on tribal lands. This would be a long-term project, but opportunities exist on Little Bonito Creek, Big Bonito Creek, and East Fork White River. While East Fork White River might be ideal from fish perspective, it might also be problematic because waters flow through towns. Opportunities for multi-species conservation efforts here, including species such as loach minnow.
4. West Fork Black River. Numerous issues in this system around both maintaining current populations and reconnecting populations to increase habitat and establish metapopulation. Issues include: a) barrier repairs and upgrades, b) land exchange, c) use of riparian area as emergency livestock grazing area (should

prevent this; detrimental practice during drought), d) temperature/riparian condition issues, e) need for elk enclosure, f) brook trout in headwater area, and g) crayfish.

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

1. Public education. There is a considerable lack of understanding among the local community concerning Apache trout restoration, and in particular, impacts of renovation efforts on sport fishing opportunities. Common beliefs are that Apache trout are small fish and may not be of interest to angler; and that Apache trout restoration may be totally eliminating fishing opportunities for brown and rainbow trout. We need large wild Apache trout for fishing. In the meantime, it might be good to talk to local community leaders or somehow engage broader community in restoration efforts (perhaps through newspaper, websites, etc.) to increase public understanding of restoration efforts, values of Apache trout, and what restoration means for sport fish opportunities.
2. Fish and stream monitoring. Angler groups could assist agencies by providing more timely data on presence of non-native fishes such as brown and rainbow trout within Apache trout streams. Might be possible to coordinate work weekend around this need or simply have some sort of regular effort. This might provide some earlier detection capability, which would assist in control efforts. “Streamkeeper” concept also was mentioned briefly. This might provide a specific person or group that would “adopt” a particular stream or drainage and regularly monitor conditions on that stream.

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

Virtually all projects will need some level of funding. Until projects are chosen and formal project plans developed, no specific funding needs can be determined.

Question 6 – What other suggestions should be considered?

1. Other miscellaneous issues include the need for: a) more elk enclosures, b) riparian studies, c) control of feral horses on tribal lands, d) poor livestock practices along East Fork Little Colorado River that need correcting, and e) willow restoration at several locations.
2. There are likely to be many shared issues and opportunities between Apache trout and Gila trout restoration. Can we somehow take advantage of this and not repeat mistakes?