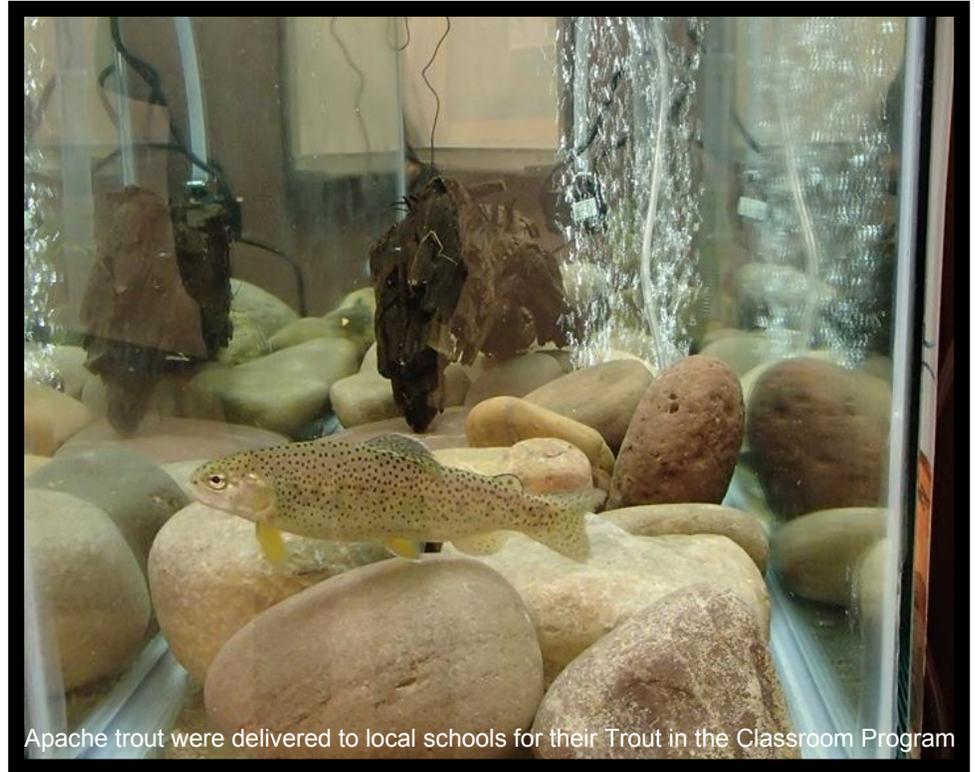




# Arizona Fish and Wildlife Conservation Office

## Accomplishment Report

January 2015



Apache trout were delivered to local schools for their Trout in the Classroom Program

### **AZFWCO Staff**

#### ***Flagstaff***

Jess Newton, Project Leader  
Kirk Young, Project Coordinator  
Randy Van Haverbeke, Senior Fish Biologist  
Dennis Stone, Fish Biologist  
Mike Pillow, Fish Biologist  
Jim Walters, Biological Technician  
Rick Deshler, Biological Technician

#### ***Pinetop***

Vacant, Assistant Project Leader  
Jeremy Voeltz, Project Coordinator  
Dominic Barrett, Partners for Fish and Wildlife Biologist  
Jennifer Johnson, Fish Biologist  
Kayla Barrett, Fish and Wildlife Biologist  
Vacant, Administrative Officer  
Vacant, Office Assistant

#### ***Parker***

Mitch Thorson, Fish Biologist  
Tammy Knecht, Fish Biologist  
John Naugle, Biological Technician



**AZFWCO Mission: Working with others to conserve, protect, and enhance fish and other aquatic organisms and their habitat in Arizona and the Southwest.**

## Aquatic Species Conservation and Management

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Kirk Young and Jess Newton attended the annual Colorado River Aquatic Biologists meeting in Laughlin, NV. The meeting included fish and aquatic biologists, managers, researchers, and students working on conservation issues in the Colorado River Basin from the Mexican border through Lake Powell. Kirk gave a presentation on humpback chub PIT tag performance at the meeting.

Jeremy Voeltz coordinated with staff from the Arizona Ecological Services Field Office and Regional Office to continue compiling information for the Species Status Assessment for roundtail and headwater chubs. Jeremy completed a draft section for the SSA on the complex taxonomy history of roundtail chub and headwater chub.

Jeremy Voeltz worked on his presentation for the 2015 Arizona/New Mexico Chapter of the American Fisheries Society meeting coming up in February. The talk, "Evaluation of Long-Term Mechanical Removal of Brown Trout from Apache Trout Recovery Streams (2003-2014)" summarizes much of the work completed by the Apache trout field crews over the last 10 years. Reports summarizing this work have been drafted by Jennifer Johnson and will be finalized in the next few months.

Dennis Stone and Kirk Young assisted AZGFD staff with their study examining how well a published taxonomy key works at differentiating among three chub species: headwater, roundtail, and Gila chub.

Randy Van Haverbeke submitted the AZFWCO Flagstaff draft annual report to the Grand Canyon Monitoring and Research Center (GCMRC) entitled "Mark-Recapture and Fish Monitoring

Activities in the Little Colorado River in Grand Canyon from 2000 to 2014." The report includes long term (2000-2014) population estimation of humpback chub using the robust design in Program MARK. The report will now be reviewed by GCMRC before final submission.

Randy Van Haverbeke and Kirk Young participated in the 35th Annual Upper Basin Biology Conference in Moab, Utah. Randy gave a presentation that summarized AZFWCO's work from 2000-2014 in the Little Colorado River (LCR), and highlighted methods and assumptions involved with estimating abundances of fish populations, including comparative use of closed population estimators (Chapman Petersen) and Program MARK robust design models. The talk was well received and appeared to generate interest among other biologists involved in estimating population size.

Randy Van Haverbeke continued to work toward developing a manuscript concerning estimating long term abundances of age 0 and age 1 humpback chub in the LCR. This potential manuscript could be of great value to managers and to other researchers, but has been hampered by inadequate data (it often takes many years of data to generate a manuscript such as this).

Kirk Young presented data on the LCR Chute Falls translocation and served as a session moderator at the annual Glen Canyon Dam Adaptive Management Program Technical Work Group meeting in Phoenix. Chute Falls continues as a successful conservation action with up to 16% of translocated fish obtaining adulthood at one year of

age and 96% by year two (compared to 3-5 years in the lower LCR). Mike Pillow worked with Kirk and Randy Van Haverbeke to develop two poster presentations for the meeting. The posters are titled: Pilot Study: Use of Submersible PIT Tag Antennas to Supplement Hoop and Trammel Net Survey's in Grand Canyon and Humpback Chub Status and Trends in the Little Colorado River, Arizona: Mark-recapture population estimates 2001 – 2014. The first discusses the results of the submersible antenna study in the Grand Canyon, while the second gives an updated summary of the methods and results of our humpback chub monitoring efforts in the Little Colorado River.

Randy Van Haverbeke, Jess Newton, and Kirk Young attended a conference call on the Glen Canyon Dam Long-Term Experimental and Management Plan (LTEMP) Environmental Impact Statement (EIS). The EIS process has produced a new hybrid alternative that is undergoing resource metric modeling (chub, trout, sand, power, etc.). Completion of the modeling is expected in February and a draft EIS release to cooperating agencies in March.

Randy Van Haverbeke, Kirk Young, Shaula Headwall, and Bill Austin met with Grand Canyon National Park staff to provide information and guidance concerning consultation on helicopter fire-fighting operations. Primarily, they needed to know where in the Colorado River they can dip water and avoid aggregations of humpback chub, thus minimizing any impact on the species.

## Aquatic Species Conservation and Management *continued*

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Dennis Stone continues work on a Chute Falls manuscript and will be submitting it for peer-review journal publication by April.

Kirk Young and Mitch Thorson surveyed Three-mile Lake near Topock Marsh to assess its viability as a grow-out water for razorback sucker. The survey was a cooperative effort with Arizona

Game and Fish Department (AGFD) and included trammel nets and electrofishing. The ~40 acre lake contained largemouth bass, sunfish, common carp and yellow bullhead. Larger sized razorback (>200 mm) would have to be targeted if the lake were to be used for grow out of razorback suckers.

Mike Pillow reviewed Dennis

Stone's latest draft of the Humpback Chub Translocation manuscript and Randy Van Haverbeke's annual Little Colorado River humpback chub monitoring activities report for USGS Grand Canyon Monitoring and Research Center.

## Aquatic Habitat Conservation and Management

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Kayla Barrett submitted the National Fish Habitat Partnership (NFHP)/FWS funding allocation reports for Fish Habitat Partnerships on 5 January for FY15 funding. Reports included the Desert Fish Habitat Partnership (DFHP) project and activity summaries and plans for 2011-2017, performance measure summaries for projects, project completion status and narratives, habitat assessment summaries, project monitoring and evaluation methods, FWS trust resources and

priority species, DFHP priority species and areas, FWS climate change objectives, leverage of FWS project funds, work plan, strategic implementation of projects, and conservation actions and project outcomes.

Kayla Barrett worked with Trout Unlimited on revisions of their proposal that was submitted to DFHP for FY15 funding.

Kayla Barrett submitted a DFHP funded project for a FWS Fisheries

and Aquatic Conservation accomplishments report that was submitted to the Congressional House Committee on Natural Resources in Washington D.C.

Kayla Barrett and DFHP co-chairs participated in a teleconference with the Natural Resources Conservation Service (NRCS) steering committee rep for DFHP to discuss how DFHP and NRCS can work together for the benefit of native desert fish.

## Partnerships and Accountability

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Kirk Young and Randy Van Haverbeke met with USGS and AGFD to work out scheduling conflicts for 2015 work in the Little Colorado River. The AGFD lower 1200 meter project was eliminated and AGFD biologists will instead assist USFWS with our long-term population monitoring project. The inclusion of AGFD will decrease our reliance on volunteers to accomplish this work, but has complicated planning logistics for this and mainstem Grand Canyon work. During the meeting we were able to work out functional dates for sampling.

Kirk Young met with members of

trout and conservation groups (T. Roosevelt Conservation Partnership, Trout Unlimited, Federation of Flyfishers) and AGFD to review a trout management plan proposed by the group. The group intends to submit a trout management plan (tiers to the NPS Comprehensive Fisheries Management Plan approved in 2013) to LTEMP EIS process and Glen Canyon Dam Adaptive Management Plan process for consideration in future management actions. The group's objective is to: establish and maintain a high-quality sustainable recreational trout fishery in the Glen Canyon National Recreation Area

(GCNRA), while minimizing emigration of non-native fishes, and to operate Glen Canyon Dam to achieve the greatest benefit to the trout fishery in GCNRA without causing excessive detriment to other resources. The plan will be submitted to agencies for formal review in the near future.

Kayla Barrett coordinated and facilitated the Desert Fish Habitat Partnership bimonthly teleconference. Agenda topics included upcoming meetings and DFHP participation, outreach updates, FY15 funding allocation updates, summary of updates to our Strategic Plan, endorsing

## Partnerships and Accountability *continued*

conservation areas, and a presentation on the fish passage work that the Cochiti Pueblo Tribe has accomplished. Kayla provided notes from the call to DFHP members.

Kayla Barrett coordinated with Southeast Aquatic Resources Partnership (SARP) co-chair and DFHP members on hosting a Fish

Habitat Partnership symposium at national American Fisheries Society (AFS) meeting in August.

Darren Benjamin, Congressional staffer to the House Appropriations Committee, visited Phoenix and requested briefings from FWS on issues of concern to the Committee. Topics included quagga and zebra mussel containment projects,

Willow Beach National Fish Hatchery (WBNFH) trout stocking program, border issues (security & ESA concerns), and Mexican wolf recovery efforts. Stewart Jacks (ARD), Mark Olsen (WBNFH), and Jess Newton (AZFWCO) gave briefings on the aquatic topics.

## Cooperation with Native Americans

Jess Newton attended a public meeting between Southwest Tribal representatives and the USFWS, including our Regional Director. The purpose of the meeting was to provide a forum for local Tribes to

comment on the working draft of the Service's revised Native American Policy.

AZFWCO staff participated in the monthly Fishery Coordination

meeting among AZFWCO, A-WC NFH (Alchesay-Williams Creek National Fish Hatchery), & WMAT-WORD (White Mountain Apache Tribe-Wildlife & Outdoor Recreation Division).

## Public Use and Outreach

Jennifer Johnson delivered Apache trout to the White Mountain Montessori School and Alchesay High School for their Trout in the Classroom Program. Trout in the Classroom is an environmental education program in which students raise trout, monitor tank water quality, engage in stream habitat studies, learn to understand ecosystems, learn to appreciate water resources, and begin to foster a conservation ethic. Through classroom experience of raising trout and coordinated activities, students experience first-hand the value of aquatic environments, the balance that must be met to

maintain and preserve Arizona's fisheries and aquatic habitats, and how their personal actions affect these valuable resources.

Kayla Barrett worked with a graphic designer and DFHP's outreach committee to design a professional brochure for DFHP.

Did you know AZFWCO had a Facebook page? We post information on our staff, upcoming projects, educational events, and volunteer opportunities across the state. We currently have 507 "likes" from 20 countries. Check us out at [www.facebook.com/AZFWCO](http://www.facebook.com/AZFWCO).

The Desert Fish Habitat Partnership has launched #DesertFishFriday on their Facebook page! Learn about a different native desert fish every Friday (there are 179 species that DFHP works to conserve). We also post information on projects, request for proposals, pictures, steering committee news, and much more. Check it out at <http://www.facebook.com/pages/Desert-Fish-Habitat-Partnership/193053497376208>

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## Leadership in Science and Technology

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Kirk Young gave a presentation at the annual Colorado River Aquatic Biologists meeting on humpback chub PIT tag performance. Kirk's study assessed the minimum length at which juvenile humpback chub can safely be PIT tagged. The study was a cooperative effort by AZFWCO, USGS and SNARRC. A manuscript on this work was submitted and accepted for

publication in the North American Journal of Fisheries Management.

Kirk gave a presentation at the Upper Basin Biology Conference on a pilot study using portable submersible PIT tag antennas to increase sample efficiency of traditional gears. Use of the antennas in July and September 2014 in Grand Canyon increased

total survey contacts by up to 12% and humpback chub contacts by 27%. The antennas appear to be an effective tool to increase fish contacts and corresponding assessments of individual fish presence, survival, and movement. AZFWCO plans to expand their use in LCR and Grand Canyon as budgets allow.

## Workforce Management

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Dominic Barrett completed a work detail as the Deputy Regional Coordinator for the Region 6 Partners for Fish and Wildlife Program.

Mike Pillow submitted materials required for the 2015 Navajo Nation Department of Fish and Wildlife and AGFD scientific collecting permit renewal.

Mike Pillow assembled the Little Colorado River humpback chub monitoring crew rosters for the 2015 field season.

Jennifer Johnson and Jeremy Voeltz worked on the pre-recruitment package for the 2015 Apache trout seasonal crew.

Jess Newton worked on filling key vacancies within the Arizona Fish and Wildlife Conservation Office. A selection was made for our Administrative Officer position. Stay tuned for details in our upcoming monthly reports.

Kayla Barrett completed the AZFWCO Accomplishment Report for December.

Staff participated in the January AZFWCO statewide staff conference call.

### Upcoming Events:

Arizona-New Mexico Chapter American Fisheries Society Annual Meeting: February 5-7

Annual Lake Havasu Native Fish Roundup: February 9-13

Region 2 Admin Workshop: February 9-13

Annual Lake Mohave Native Fish Roundup: March 16-20

