



ARP Fisheries Program 2011 Annual Report



**Arapaho & Roosevelt National Forest
and Pawnee National Grassland**

2150 Centre Avenue, Building E
Fort Collins, CO 80526
970-295-6600

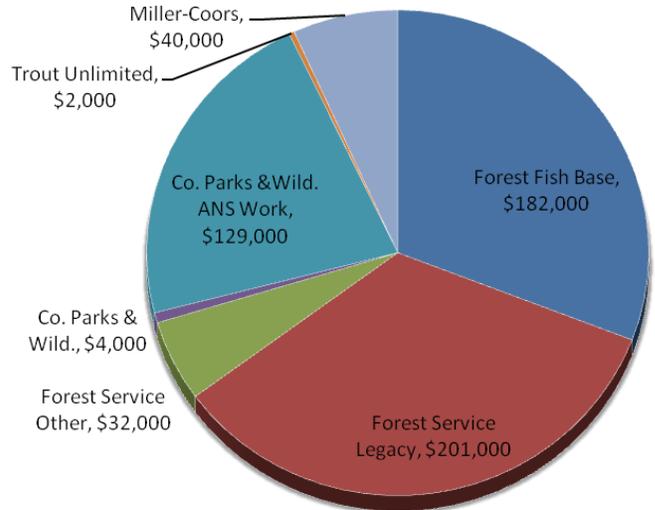
ARP Fisheries Program

Protect, restore, recover, enhance

Healthy aquatic ecosystems contribute significantly to meeting the social, economic and cultural needs of the American public. On the Arapaho and Roosevelt National Forest and Pawnee National Grassland (ARP), we employ a science-based approach to meeting these needs, relying on collaboration and cooperation with our network of partners and volunteers.

In addition to supporting other forest programs, the ARP Fisheries Program seeks to **protect** aquatic ecosystems; **restore** degraded aquatic ecosystems; **recover** threatened, endangered or sensitive aquatic species; and **enhance** recreational opportunities for those using aquatic resources by increasing system productivity, improving user access and providing environmental education and interpretation.

To help us achieve these goals, we rely on the continued support of our partners and volunteers who have helped us improve our fisheries, fish habitat and outreach programs. We look forward to opportunities to work with you in the future and to gain the support of new partners and volunteers. If you have interests in our programs or ideas about new projects, please contact us at 970-295-6600.



Glenn Casamassa
ARP Forest Supervisor

Matt Fairchild
Forest Fish Biologist

Kelly Larkin-McKim
Fish Biologist

Chris Carroll
Fish Biologist Trainee

With thanks to our partners:



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State of the fish

Native Cutthroat

A great deal of scientific uncertainty exists regarding the native cutthroat trout that live in National Forest streams and what biologists should call them. For years biologists and savvy anglers have called east slope cutthroat, “greenies” or “greenback” and west slope cutthroat trout, “Colorado River cutthroat trout.” However, recent genetics have thrown our understanding into the blender. What we do know is that cutthroat trout were native to both the east and west slopes of the National Forest and that our existing populations will continue to be important in the conservation of cutthroat trout.



Stream banks and riparian vegetation were in good condition in George Creek, but brook trout are the dominant species.

Other Residents

Biologists from the U.S. Forest Service and Colorado Parks and Wildlife assessed the health of fish populations in four watersheds (South Fork Poudre, Laramie, St. Vrain and Fraser) in 2011. A preliminary glance into our data suggests that brown trout populations are stable and may be expanding their local distributions into higher elevations. Eastern brook trout populations are stable and widespread. Rainbow trout occurred only in patches in the South Fork Poudre. Colorado River cutthroat trout were persisting, at low to moderate densities, in some Fraser tributaries with the exception of Middle Fork Ranch Creek, which has seen an increase since 2005.



Biologist Boyd Wright stands atop the breached gabion barrier on Pennock Creek, South Fork Cache la Poudre River.

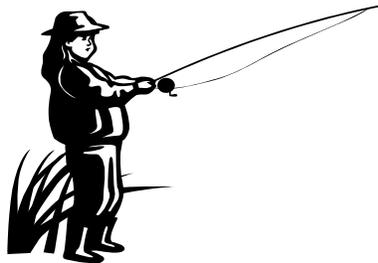
Status of Greenbacks

Although the genetics are in question, recent survey efforts within the Poudre River Basin revealed that populations once considered critical to the recovery of the greenback cutthroat trout have either completely collapsed or are at risk due to non-native fish species, habitat fragmentation and low productivity habitats. Surveys by Colorado Parks and Wildlife and the U.S. Forest Service found robust numbers of non-native fish in Pennock Creek and George Creek this past year. It appears that the management barrier on Pennock Creek had been compromised by a flood in recent years. Not a single cutthroat was captured by biologists. During surveys to evaluate grazing effects on George Creek, riparian conditions were determined to be in excellent shape; however, brook trout were observed as the dominant species along a 2 mile stretch of streams where cutthroat once thrived. Other greenback populations, such as those in Roaring, Como, Williams Gulch and Sheep Creeks, are stable and robust.

Important Partnerships



West Denver Trout Unlimited members collect bugs and water quality samples in Mad Creek for the River Watch Program in September.



Big Thompson Fishing Area

Dedicated volunteers led by Dallas Mauer worked diligently for just over a year to restore the Big Thompson fishing area. Time and high use had taken a toll on the pier and the volunteers meticulously repaired and replaced portions of the pier. The ramp and stairs now allow access to the Big Thompson River for everyone.

Volunteers spent more than 800 hours improving the pier. The Estes Valley Sunrise Rotary has “adopted” the pier and will help maintain the work the volunteers have done.

Mad Creek

This marked the fifth year of partnership-based restoration in the Clear Creek watershed. Miller-Coors Brewery and the U.S. Forest Service have worked together in the Clear Creek watershed under a National Forest Foundation partnership effort since 2006. Each year, the Miller-Coors Brewery provides generous financial contributions and a significant commitment of volunteer labor to restoration projects on the Clear Creek Ranger District that benefit improved watershed health, water quality and fisheries. Past efforts have closed eroding roads, replaced undersized culverts, enhanced fish habitat and restored riparian vegetation. This year, a force of nearly 30 volunteers from both Miller-Coors and the West Denver Chapter of Trout Unlimited descended upon Mad Creek, near the town of Empire, to restore damaged meadows and correct stream flows. Illegal off highway vehicle use had damaged the meadow and caused flow from Mad Creek to be redirected down the road. Tributary streams were re-routed, rebuilt and revegetated. Stream banks at old stream-crossings were reshaped, stabilized and revegetated. Buck and rail fencing was constructed to keep off-highway vehicles out of the meadow and from crossing the stream.



Forest Hydrologist Carl Chambers and volunteers spread seed along the banks of a newly restored tributary of Mad Creek.

Habitat Reconnections

5.5 miles
of fish habitat
reconnected in 2011



Willow Creek

After a considerable amount of planning and design work, fish passage was restored at two major stream crossings on Willow Creek in the northern portion of the Sulphur Ranger District. Reconnecting fragmented sections of aquatic habitat is a critical step for not only improving local fish populations, but also for improving resilience and recovery of fish and other aquatic animals in the wake of natural disturbances such as wildfire and floods. These sites were chosen over other locations because these crossings had altered sediment transport and fragmented aquatic habitat. These projects benefit aquatic life, including trout, native sculpin and wood frogs, which can now use the stream corridor to access an additional 4 miles of habitat. It took more than two years of planning, designing and garnering funds (\$280,000) to get contracts implemented on the ground. Today, two fish barrier culverts remain on Willow Creek. With continued support from our partners, we hope to reconnect more than 15 miles of continuous fish habitat on Willow Creek.



Cutthroat Trout passage at Winter Park

Little Vasquez Creek is home to Colorado's native cutthroat trout. In 2011, Sulphur Ranger District replaced a culvert that Forest Service fish biologists determined restricted movement to these native fish. Although a genuine effort to remedy the issue was made in 1990s, the solution still did not provide the habitat and flow conditions needed for a seamless connection of 1.5 miles of habitat in Little Vasquez Creek. This project was successfully completed in October 2011 and satisfied conditions set forth by the U.S. Fish and Wildlife Service for the Winter Park vegetation management project in response to mountain pine beetle. We would like to issue special thanks to the contractor Frontier Environmental Services who performed well and accommodated changes.

Aquatic Nuisance Species



Boat inspections on Lake Granby. (Photo courtesy Colorado Parks and Wildlife)

Boat Inspections & Cleaning

Sulphur Ranger District and the Arapaho National Recreation Area have been cooperating with the Colorado Parks and Wildlife for the past three years to prevent Aquatic Nuisance Species (ANS) from being spread or introduced into Lake Granby and Shadow Mountain Reservoir. This cooperative effort has helped educate the public on the threats and consequences ANS pose to the water bodies where they recreate. This year, CPW completed more than 15,000 inspections and disinfected more than 1,300 boats at the inspection stations. For the third year in a row, surveys to detect the presence of quagga and zebra mussels in these lakes came up negative. This cooperative effort will continue in 2012. We issue a special thank you to the Highlands, Beacon Landing and Grand Elk Marinas in the Arapaho National Recreation Area for their continued cooperation in these joint efforts.

Education and Outreach

Our fisheries program is seeking to educate the recreating public in other waters on the threats of aquatic nuisance species by posting signs at developed recreation sites. With the help of district recreation personnel, signs were posted at river and lake access points on the Canyon Lakes and Boulder Ranger Districts. We plan to continue this effort in 2012 and hope to get signs up in more locations and to deliver information on aquatic nuisance species to all folks recreating on the water. Boats, fishing gear, dogs, and anything that holds moisture are all vectors for transferring aquatic pathogens and invasive species that can severely damage our streams, rivers, and lakes. Please help us to get the word out.



Canyon Lakes Ranger District installed this sign at the Eggers Recreation Site on the Cache la Poudre River.

Non-native fish removal

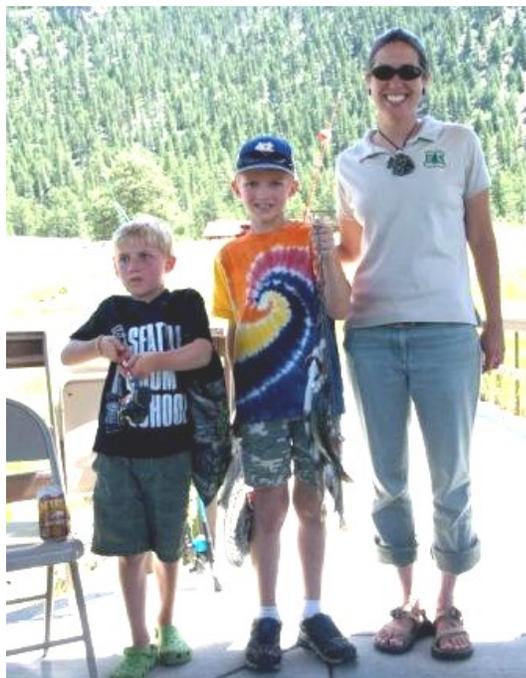
Bobtail Creek and Steelman Creek

Biologists Kevin Rogers and Jon Ewert from Colorado Parks and Wildlife pooled efforts with the U.S. Forest Service in September to remove invading eastern brook trout, a species introduced to Colorado in the late 1800s, from Bobtail and Steelman Creeks in the Williams Fork River basin on the Sulphur Ranger District. These streams are home to a unique strain of cutthroat trout, the greenback lineage. Approximately 700 brook trout were removed to help maintain the native cutthroat populations.



An interagency fish crew collects brook trout for removal from Steelman Creek.

Clear Creek Kids Fishing Day



Fish biologist Kelly Larkin-McKim works with kids on a free fishing day in Empire, Colo.

Clear Creek Ranger District hosted its annual Free Kid's Fishing Event at the Rocky Mountain Easter Seals Camp in Empire, Colo. Approximately 40 kids between 2 and 14 years of age, from in and around the Clear Creek County area participated with their parents on August 13, 2011. Kids learned the basics of fishing and fish handling while having the opportunity to fish alongside their parents for nearly five hours. An added bonus to this year's event was a picnic lunch provided by the West Denver Trout Unlimited Chapter.

This event was made possible with support and help from the Rocky Mountain Easter Seals Camp, West Denver Trout Unlimited Chapter, and the Clear Creek Ranger District recreation personnel. The prize and food donations in addition to volunteer support provided by West Denver Trout Unlimited Chapter went above and beyond the call of duty; they made the event a complete success.

A look back



1. Corral Creek is slated to be restored as part of the Long Draw Decision. 2. A tiger salamander collected from Swamp Creek. 3. Isaac Fairchild, 4, holds a rainbow trout harvested from West Lake. 4. Forest Supervisor Glenn Casamassa and Fish Biologist Matt Fairchild identify and examine fish in a meadow on Laramie River. 5. The 2011 forest watershed crew at Stub Creek near the Laramie River. 6. The brook trout removal crew prepares for a day on meadow sections of Steelman and Bobtail creeks. 7. Fish biologist Kelly Larkin-McKim holds a lake trout caught during interagency sampling with CPW on the ANRA. 8. A brown trout is measured during sampling on Laramie River.