

# FISHSTREAMS

## Healthy streams, native fish

*Providing healthy aquatic ecosystems contributes significantly to meet the social, economic and cultural needs of Coloradoans and the American public. The ARP employs a science-based approach to meeting these needs, relying on collaboration and cooperation with its network of partners and volunteers. With more than 2,400 miles of streams and river, 15,000 acres of lakes and ponds, and Colorado's only Wild and Scenic River — the Cache la Poudre — located on the ARP, the fisheries program works to protect, restore, and enhance aquatic ecosystems from the prairies to the Colorado River headwaters.*

► In cooperation with **Colorado Parks and Wildlife (CPW)**, non-native fish were removed in an effort to facilitate the persistence of a native cutthroat trout population in the **Upper Williams Fork River** basin in Grand County on the Sulphur Ranger District (SRD). Fish biologists removed **485 brook trout** from a 3-mile section of Bobtail Creek, and **320 brook trout** were removed from a 3-mile section of Steelman Creek.

► Biologists cooperated with CPW and the U.S. Forest Service's national ground water program to continue **studies of native prairie fishes** and their habitats on Pawnee National Grassland (PNG). Fish biologists characterized changes in water levels and groundwater influence in rare aquatic habitats of PNG.

► The **plains topminnow**, located on PNG, was added to the Rocky Mountain Region's Regional Forester's list of sensitive species due to discovering declines in occurrence trends and increased threats to the species' long-term persistence.

► Further research in cooperation with **Colorado State University** on the distribution and habitat needs of the **Arapahoe snowfly**, an insect proposed for federal protection, led to the discovery of three additional localities where the endemic species is known to occur on the Canyon Lakes Ranger District (CLRD).

► Through a large cooperative effort, roughly **1.5 miles of fish habitat** in South Boulder Creek on the Boulder Ranger District was improved within the area affected by the Moffat Tunnel water deliveries. The effort involved **CPW, Boulder Flycasters, Denver Water and Union Pacific Railroad Company**. The project improved both low flow and high flow habitat availability for resident trout. In the spring of 2014, final construction of fishing accesses and revegetating disturbed sites with native plant materials will be completed.

► SRD continued to cooperate with the CPW to help prevent **aquatic nuisance species (quagga/zebra mussel)** from being spread or introduced into Lake Granby and Shadow Mountain Reservoir in the **Arapaho National Recreation Area**. More than 13,000 inspections and 1,230 boats were disinfected at the inspection stations.



Canyon Lakes Fishing Day attracted more than 100 youth with a day of fishing and education, providing them with their own fishing gear to cast them off into the world of angling and conservation.

## FISH 2013FACTS

- Improved **5 miles** of cutthroat trout habitat.
- Improved **13 miles** of stream habitat for resident fish.
- Garnered **\$1.83 in partner funds** for every \$1 of base funding.
- Educated over **200 children** on fisheries conservation issues.
- Evaluated **40 miles** of fish habitat.
- Monitored fish populations in **3 major watersheds**.



Seine net fish sampling on Pawnee National Grassland occurred in cooperation with Colorado Parks and Wildlife.



A track hoe helps improve habitat for trout in South Boulder Creek. This project was completed in cooperation with Colorado Parks and Wildlife, Boulder Flycasters, Denver Water and Union Pacific.



This young painted turtle was found on Pawnee National Grassland.



Electroshocking is a technique used to study and improve fish populations.

► Since 2010, the **Mizpah Campground** located off U.S. Highway 40 has been closed due to road failure. In anticipation of culvert failure and possible damage to private property downstream, the Clear Creek Ranger District (CCRD), with the invaluable help of **Colorado Department of Transportation**, removed the culvert. The culvert acted as a barrier to fish passage, and its removal restored access to 3-plus miles of **West Fork Clear Creek**.

► CCRD completed the **High Peaks to Headwaters Fisheries and Watershed Restoration Environmental Assessment and Decision Notice**. From this effort an interdisciplinary Watershed Restoration Action Plan was created for fish habitat and watershed condition improvement in the Upper Clear Creek Watershed.

► In an effort to identify potential locations for **greenback cutthroat trout reintroductions**, fish crews began collecting baseline habitat data in watersheds along the eastern slope of the Front Range of the ARP. This data will be used cooperatively with the interagency **Greenback Cutthroat Trout Recovery Team** to identify long-term management solutions. A cooperative project with CPW proposed Zimmerman Lake on CLRD for introduction of the Bear Creek greenback cutthroat trout.

► Fish biologists and district staff hosted **Kids Fishing Day** event on CLRD, providing well over 100 youth with a day of fishing and their own fishing gear to get them started as anglers and conservationists. CCRD's Kid's Fishing Day event in 2013 took on a new twist as it was accomplished in partnership with **CPW Outdoor Education** program and **Rocky Mountain Easter Seals**. It included not only fishing opportunities, but also provided opportunities to try their hands at riflery, archery, fly casting, and more. The day was complete with a free lunch provided by **West Denver Trout Unlimited**.

► Biologists led conservation education programs for local youth in Fort Collins and Boulder, including presenting the watershed protection messages of the National Forest System to 80 fifth and sixth grade students at the **Boulder Water Festival**. ARP fisheries biologists also provided education on fish habitat protection and conservation programs in the National Forest System and on the ARP to 20 young anglers at the **Rocky Mountain Flycasters' Youth Camp** in Fort Collins.

► Nearly 4 miles of **eroding riparian roads were naturalized** in the South Lone Pine and Elkhorn Creek watersheds to benefit stream habitat on the CLRD. These under-maintained and user-created roads crossed streams, reduced riparian habitat, and degraded stream habitat for fish and other aquatic animals.

► Work continued on the **Trail Creek Habitat Restoration and Travel Management Project on SRD**. This project is Phase II of a multi-phased initiative, and it eliminated a low water crossing contributing to cutthroat trout habitat degradation by routing full size vehicles away from the stream. Once the re-route was complete, the crossing was restored and .5 mile of the original road was naturalized.

# SOILSWATERSHEDS

## *Healthy streams*

The watershed program for the ARP includes water, soil and air resources. As headwaters for two of Colorado's major river basins; the Colorado and the Platte, the ARP is the source of agricultural and municipal water for much of northern Colorado. Water and soils on the Forest are essential building blocks that support all forest vegetation, including wetlands and riparian areas as well as upland forests and grasslands.

► **Watershed restoration work** for 2013 included road decommissioning, fence construction, and slump repair. While roads provide essential access into the Forest, they also **create adverse effects** to watershed resources. Roads fragment wildlife habitat and disrupt wildlife movement as well as creating long term sources of sediment and increased runoff. Because of the shared effects to resources, the wildlife and watershed programs often work together to decommission roads that are no longer needed.

► Sulphur Ranger District watershed and wildlife programs decommissioned more than 26 miles of road in the Willow Creek watershed with help from a **Rocky Mountain Elk Foundation** grant. This year marked a milestone for the SRD when their cumulative road decommissioning exceeded 100 miles.

► Title II dollars from the **Secure Rural Schools Act** allowed Canyon Lakes Ranger District (CLRD) to decommission a number of unauthorized routes on the district. Between 2012 and 2013, **Wildland Restoration Volunteers** and the district decommissioned 12 miles of unauthorized routes with **\$76,836**. CLRD watershed and wildlife programs decommissioned 9 miles of road in the Elkhorn Creek watershed. Following mechanical decommissioning, **Wildland Restoration Volunteers** helped seed and mulch the restored road surface.

► With volunteers from Wildland Restoration Volunteers, Pawnee National Grasslands fenced 12 acres in the **Allenbaw allotment** to provide protection for a gully restoration effort that had been completed the previous year.

► Post-fire burn treatments consisting of aerial application of wood fiber and straw mulch were applied to 5,200 acres that burned in the **High Park Fire** to reduce erosion, sediment, and flood peaks. This complemented similar treatments that were applied to non-Forest lands within the burned area. Additional treatments on Forest lands included road and trail stabilization.

► 2013 was the 19th year that the Forest monitored water chemistry in eight alpine lakes in partnership with the **Rocky Mountain Research Station**. The monitoring is designed to indicate whether air pollution is affecting water quality in the fragile alpine environment.



Greenback cutthroat trout in Roaring Creek.

## **WATERSHED** **2013FACTS**

■ **With 13 major reservoirs and 153 authorized water facilities, ARP lands provide the source of drinking water for more than 2 million people.**

■ **Completed 5,200 acres of stabilization treatments on the High Park Fire.**

■ **Decommissioned some 35 miles of road to improve watershed condition, and wildlife habitat.**



This hydroelectric weir is located on Cabin Creek in the Clear Creek Ranger District.