

Poudre River Headwaters Restoration Project



A diverse group of public and private partners is proposing a major new effort to restore Colorado's state fish—the threatened greenback cutthroat trout—to the headwaters of the Cache la Poudre River in Rocky Mountain National Park and the Arapaho-Roosevelt National Forests.

PROJECT PARTNERS

Colorado Trout Unlimited

Water Supply & Storage Company

City of Greeley

Colorado Division of Wildlife

Colorado Water Conservation Board

Greenback cutthroat trout are the native trout of the South Platte and Arkansas River drainages, and were once thought extinct. They were rediscovered by Colorado State University professor Dr. Bob Behnke and have since been reintroduced into multiple lakes and streams. These restored populations have been in relatively small, isolated locations where the greenbacks can reproduce and thrive without competition from other non-native trout and without the risk of hybridizing with other trout species.



While these populations have great value, many leading scientists believe that long-term protection of species also requires *metapopulations*: multiple populations in a larger, connected set of habitats. Greenbacks lack such a connected area—but the headwaters of the Cache la Poudre offer an ideal location for establishing one.

Over the course of ten years, the Poudre River Headwaters Restoration Project will remove non-native trout and reintroduce greenbacks into the upper Cache la Poudre and several tributaries, including La Poudre Pass Creek, Corral Creek, Neota Creek, Willow Creek, Hague Creek, and Chapin Creek. In total, the project will restore greenbacks to more than 40 miles of streams as well as to Long Draw Reservoir. It will be the largest native trout restoration ever conducted in Colorado



and among the largest and most complex ever done anywhere. When completed, it will be a major step in recovering the greenback and allowing the species to be removed from the Endangered Species Act threatened species list.



Restoring A Colorado Native



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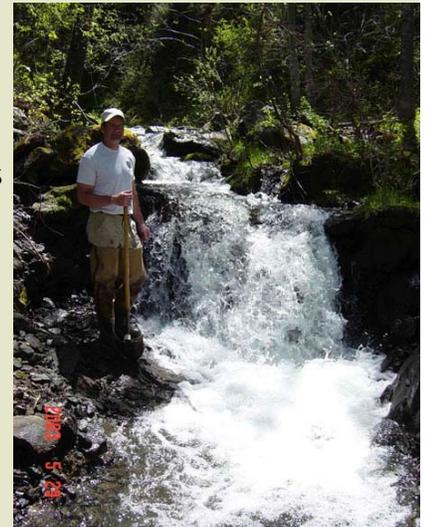
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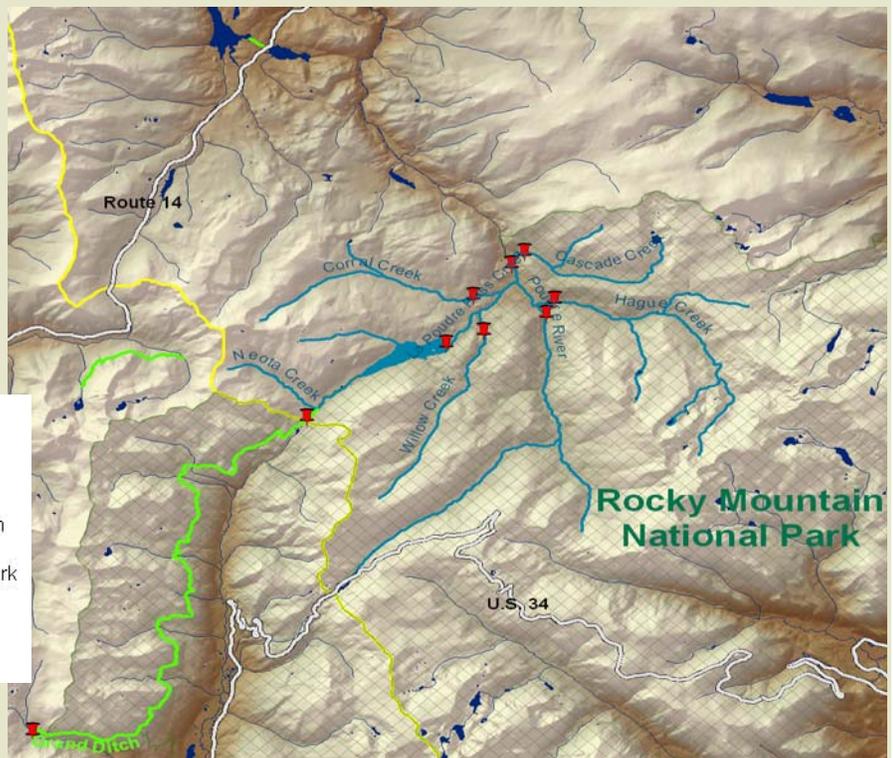
Returning the greenback cutthroat trout to the Poudre headwaters is a major undertaking and involves multiple phases. To prevent problems from interbreeding and competition, it is important that restored areas are free of non-native trout and that they be protected by barriers that prevent upstream migration of non-natives into the restored area. The Poudre River Headwaters Restoration Project will take advantage of existing barriers where possible, but new man-made barriers and enhancements to existing natural barriers will be needed as well. Most of these will be temporary barriers, used to break up the large project area into smaller sub-pieces that can more easily be tackled in a given year.

Once barriers are in place, existing population of non-native fish must be removed through chemical treatments with rotenone or antimycin A—substances that kill off fish in the project area but can be detoxified at the bottom of the project reach to prevent effects downstream. These treatments are challenging projects and will be pursued one piece at a time, until (over a ten year period) the entire project area is reclaimed. Once non-native fish are removed from a stream, small “fingerling” size greenback cutthroat trout are stocked over a three year period to “jump start” a new self-sustaining population. Once greenbacks are established throughout the headwaters project area, temporary manmade barriers can be removed so that the populations will be connected and be able to function as a “metapopulation”.



One example of a fish barrier.

The total project will cost approximately \$1 million, in addition to in-kind contributions of manpower from Division of Wildlife biologists, federal agency staff, and Trout Unlimited volunteers. Water Supply and Storage Company will provide \$100,000 in seed money to help launch the effort.



Legend

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|---------------------|------------------------------|
| Restoration | Roads |
| Streams | Approximate Barrier Location |
| Ditch | Rocky Mountain National Park |
| Lakes & Reservoirs | |
| Long Draw Reservoir | |
| Continental Divide | |