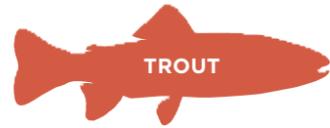


# Little Kern Golden Trout

*Oncorhynchus mykiss whitei*

chances for survival:  
*poor*

2



The Little Kern golden trout is endemic to the Kern Plateau and closely related to the California golden trout. The two are very similar in appearance and have been isolated for thousands of years by barriers between the Little Kern River and the rest of the Kern River basin.

Little Kern golden trout are well adapted for living in small, meandering meadow streams and the steeper slope areas surrounding them. They are not as well studied as California golden trout, but their life histories and habitat requirements are quite similar.

**DISTRIBUTION:** This subspecies is endemic to roughly 100 miles of the Little Kern River and tributaries. By 1973, their range had decreased to just five headwater streams in the basin (Wet Meadows Creek, Deadman Creek, Soda Spring Creek, Willow and Sheep Creeks, and Fish Creek) plus an introduced population in Coyote Creek, a tributary to the nearby Kern River. The Upper Coyote Creek population was

eventually found to be genetically influenced by California golden trout. Excluding Coyote Creek, the 1973 distribution of Little Kern golden trout was approximately ten miles of creek. Recent genetic studies have identified unhybridized populations in Upper Soda Spring Creek, Trout Meadow Creek, Clicks Creek, Burnt Corral Creek, Tamarack Creek, Deadman Creek, Wet Meadows Creek, Fish Creek and Coyote Creek. All of these streams, except Coyote Creek, are within the subspecies' native range.

**ABUNDANCE:** When Little Kern golden trout were at their minimum range, their population was estimated at 4,500 fish. Based on a current habitat of approximately 32 miles,

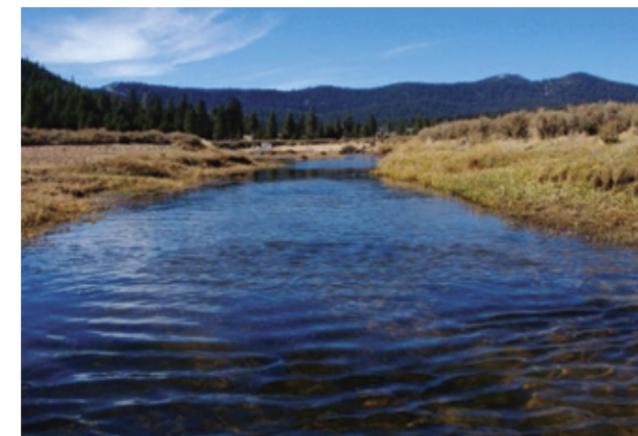
estimated population numbers hover around 15,000 fish. During low flow years, these numbers are probably considerably less. The number of Little Kern golden trout spawning within each stream is likely small and so may limit persistence of populations.

**FACTORS AFFECTING STATUS:** Factors affecting Little Kern golden trout in the past included, (1) hybridization with rainbow trout, (2) competition with alien trout, and (3) grazing, logging, and road-building activities. Today, the biggest problems are invasions of non-native trout (including hatchery rainbow trout), grazing in riparian areas, and heavy recreational use of the basin, including angling. Since the trout was listed as a threatened species, several miles of stream and seven headwater lakes have been treated with fish poisons to eradicate hybrid Little Kern golden trout/rainbow trout and brook trout, a fierce competitor. However, a major continuing problem is that fish available for restoration programs are either interbred with rainbow trout or come from small isolated populations with limited genetic diversity which, in turn, could lead to inbreeding and decreased viability.

**STATUS 2:** Despite major efforts to protect the Little Kern golden trout, they still have a high probability of disappearing as a genetically distinct species within the next 50 to 100 years. This possibility has long been recognized and serious management efforts to protect the fish began in 1975. The species was listed as threatened by the U.S. Fish and Wildlife Service in 1978 and is considered a species of special concern by the California Department of Fish and Game. Critical habitat for the fish has been designated in the Little Kern River, including the main channel and all streams tributary to the Little Kern River, but little has changed for the fish despite this designation. One of the main goals of a multi-

agency management plan for the upper Kern River basin is restoration of native trout so they can be delisted. Beginning in 1975, efforts by the Department of Fish and Game and other agencies were made to restore Little Kern golden trout to their historic range by applying fish poisons to streams and lakes in the drainage, constructing barriers to immigration of non-native trout, and rearing Little Kern golden trout at the Kern River Planting Base near Kernville. This effort resulted in the apparent restoration of fish to approximately 32 miles of stream, in addition to the introduction of fish into three headwater lakes by 1998. Subsequent genetic studies, however, have shown that many of the re-established populations have hybridized with rainbow trout.

**CONSERVATION RECOMMENDATIONS:** All planting of rainbow trout in the upper Kern watershed should be halted to prevent movement of fish into Little Kern golden trout waters. Where possible, non-native trout should be removed and barriers constructed or maintained. Grazing should be eliminated and other human uses restricted.



South Fork Kern River. PHOTO: RICHARD JAMES



Little Kern Golden Trout Are Native To A Small Section Of The Upper Kern River Basin



PHOTO: ANDREW HARRIS

## California Trout is There for the Fish!

California Trout has a long history working to conserve the Little Kern golden trout. California Trout was directly involved collecting Little Kern golden trout genetic samples throughout the Little Kern Basin, developing the Little Kern Golden Trout Management Plan to enhance their populations throughout the basin, and working with the Sequoia National Forest to establish policies that ensure the health and viability of Little Kern golden trout for generations to come.

CATEGORY	SCORE	EXPLANATION
Range	1	Occupies about 31% of its historic habitat, but the most secure populations are above barriers in a few small headwater streams amounting to less than 10% of historic habitat
Population size	3	Existing populations are fairly dense
Intervention needs	3	Barriers must be maintained and non-native trout removed from streams using piscicides
Tolerance	2	Little Kern golden trout require cool, clean water
Genetic risk	2	Hybridization with rainbow trout is a constant high risk
Climate change	3	Risk declines with better grazing and other management practices
Overall status	2	
Reliability	4	Populations have been well studied