

Paiute Cutthroat Trout

Oncorhynchus clarki seleniris

chances for survival:
poor

2

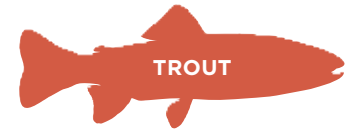


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California Trout is There for the Fish!

With the generous support from foundations and our donors, California Trout will be opening a new Tahoe Region Office in early 2009. Protection, restoration, and recovery of the Paiute cutthroat trout will be a major focus and emphasis of our conservation work in the Tahoe Basin.

Paiute cutthroat trout are the rarest of native California trout. They are a subspecies of cutthroat endemic to Silver King Creek below Llewellyn Falls in Alpine County. Paiutes are pale yellow to bronze in color and almost completely lack the spotting characteristic of their close relative, Lahontan cutthroat trout.

Few Paiute cutthroats survive beyond three to four years in the wild, which gives them just two years of potential spawning activity. Peak spawning activity is June and July. Mature fish grow to be about six to ten inches long. The juvenile fish rear in backwaters, shoals and small tributaries until they reach approximately two inches in length. Larger fish occupy the more desirable pool habitats, whereas smaller fish are relegated to riffle and runs. Paiute cutthroat trout require pools for successful over-wintering.

DISTRIBUTION: Historically, Paiute cutthroats existed in only about nine miles of stream from Llewellyn Falls

downstream to Silver King Canyon, and included three small tributary creeks, Tamarack Creek, Tamarack Lake Creek, and the lower reaches of Coyote Valley Creek. They are extinct in these streams at the present time. In the early 20th century, Basque sheepherders moved the trout to above Llewellyn Falls and into other creeks in the basin, such as Corral Valley and Coyote Creeks. Numerous out-of-basin transfers were made throughout the 20th century, but many failed probably due to the presence of other trout. Some populations are still present in Cottonwood Creek in the White Mountains, Cabin Creek, and Stairway Creek.

CATEGORY	SCORE	EXPLANATION
Range	2	Paiute Cutthroat occupy several watersheds, but they are isolated
Population size	3	The largest population may be around 1,000 but most are smaller
Intervention needs	3	Management is required to maintain genetic diversity and protect its limited habitats
Tolerance	2	Actual physiological tolerances of Paiute cutthroats are not known, but they are adapted for small cold-water headwater streams which suggests limited tolerance
Genetic risk	1	Past hybridization has reduced the current population size and genetic diversity
Climate change	3	They are vulnerable because their streams are very small and some may become dry during droughts
Overall status	2	
Reliability	4	Paiute cutthroat trout are well documented in the peer-reviewed literature and in agency studies

ABUNDANCE: Paiute cutthroat trout currently occupy a minimum of about 21 miles of stream habitat in five widely separated drainages. Population surveys in the Silver King Basin indicate a population of 400 to 700 adults. The out-of-basin populations probably total a few hundred individuals. There are approximately nine streams and lakes that currently hold pure Paiute cutthroat trout. The results of a 2001 California Department of Fish and Game population survey in the Silver King drainage above Llewellyn Falls estimated about 424 fish, a number that, over the years, indicates the population is either stable or growing. Paiute cutthroat trout were originally planted in Sharktooth Lake, but are now found only in its outlet creek. All other lake introductions have failed.

FACTORS AFFECTING STATUS: The biggest threats to the survival of Paiute cutthroat trout include, (1) alien trout which compete and hybridize with, and prey on, Paiute cutthroats, (2) loss of genetic diversity, and (3) habitat loss. All populations are small and isolated, and therefore vulnerable, to illegal introductions of alien trout as well as to local natural and man-made disasters. The many unauthorized introductions of non-native trout are the single biggest threat to Paiute cutthroat trout. However, had it not been for the 1946 stocking of Paiutes into Cottonwood Creek and unauthorized introduced populations within Silver King basin in Fly Valley and Four Mile Creeks, the species might have been completely lost. Efforts by the California Department of Fish and Game, U.S. Fish and Wildlife Service, and the U.S. Forest Service to eradicate alien trout in lower Silver King Creek with piscicides have been blocked by litigation. Hopefully, these agencies can soon move forward with the treatment so that Paiute cutthroat trout can be reintroduced into their native range.

STATUS 2: Paiute cutthroat trout were listed as federally endangered in 1967 but were subsequently downlisted to threatened in 1973 to facilitate management of the species. They have a high likelihood of extinction within the next 50 years without continued intense monitoring and management. The 2004 Paiute Cutthroat Trout Recovery Plan lists reintroduction to their native range and eradication of non-native salmonids in their streams as one of the criteria for delisting the species. They are not listed by the California Department of Fish and Game on the premise that federal protection alone is adequate for the Paiute cutthroats.

CONSERVATION RECOMMENDATIONS: Key protective elements for the Paiute cutthroat trout are to restore them to their historic range and to remove non-native trout from their habitat. Restoring Paiute cutthroats to their historic habitat will more than double the number of fish in the Silver King basin and provide greater connectivity of habitat to preserve their genetic diversity.



Silver King Creek. PHOTO: PETER MOYLE



Silver King Creek, Home Of The Paiute Cutthroat Trout, Is Part Of The Carson River Watershed

