

Klamath Mountains Province

Winter Steelhead *Oncorhynchus mykiss*

chances for survival:
better

4



PHOTO: JEFF BRIGHT

California Trout is There for the Fish!

In 2007, California Trout co-sponsored legislation with the Karuk Tribe to stop motorized suction dredge mining practices harmful to coho salmon populations on segments of the Klamath, Scott, and Salmon Rivers, but the measure was vetoed. California Trout championed similar reforms as part of the 2008 state budget in partnership with our allies and continues to seek creative solutions to reforming these practices.

Klamath Mountains Province winter steelhead are distinguished from other California steelhead through genetics and life history traits. Together with the summer steelhead located in this region, they form the Klamath Mountains Province steelhead ESU. These fish differ from summer steelhead by their entry into fresh water in winter as sexually mature fish that spawn soon after arrival. They migrate upstream from September through March with the fry typically emerging beginning in April.

Juveniles begin downstream emigration in May, before peaking in June and July, with the migrants being about equally divided among young-of-year, one, and two year olds. The presence of “half-pounders,” sub-adult individuals that have spent two to four months in the estuary or inshore marine areas before returning to the river in winter, is a distinguishing life history trait. Adults remain in the ocean for one to three years before returning to spawn.

DISTRIBUTION: The Klamath Mountains Province winter steelhead range includes coastal streams throughout

the Klamath and Trinity basins, and streams north of the Klamath River to the Elk River near Port Orford, Oregon. Their range includes the Smith River in California and the Rogue River in Oregon. In the Klamath River they ascend as high as Iron Gate Dam, although historically they ascended into tributaries to Upper Klamath Lake. In the Trinity River their upstream access is blocked by Lewiston Dam. Their migration and spawning period coincides with the period of greatest flows, so winter steelhead often ascend into smaller tributaries not accessible during low-flow periods.

CATEGORY	SCORE	EXPLANATION
Range	5	Widely distributed
Population size	5	Wild populations in Klamath seem to be large
Intervention needs	4	Wild populations may require protection from hatchery fish
Tolerance	4	Steelhead are physiologically tolerant and have a flexible life history
Genetic risk	4	Some risk from hatchery fish in the Klamath River
Climate change	4	More opportunities to respond than most salmonids
Overall status	4	
Reliability	4	Well documented population

ABUNDANCE: Winter run steelhead numbers in the Klamath and Trinity Rivers declined from 283,000 spawners in 1965 to between 87,000 and 181,000 between 1982 to 1983. Based on creel and gill net harvest data, the winter run steelhead population was estimated at 10,000 to 30,000 spawners per year in the Klamath River. The Trinity River steelhead run seems to be in the same range, however it is more variable. Returns to the Iron Gate hatchery have been distinctly depressed in recent years. Trinity River hatchery returns have been on the increase since 2000 with some of the highest hatchery returns recorded in the last several years. On the Smith River, spawning escapement was estimated to be approximately 30,000 adult steelhead during the 1960s, but there are no subsequent drainage-wide estimates.

FACTORS AFFECTING STATUS: Populations of Klamath Mountains Province winter steelhead are large enough to support sport fisheries, but appear to be in a long-term decline and are increasingly supported by hatcheries. Their long-term decline is the result of (1) dams blocking access to upstream areas, (2) diversions that diminish flows in tributaries, (3) degradation of critical watersheds from logging, agriculture, and other factors, and (4) a possible reduction of fitness due to hatchery practices.

STATUS 4: There is no immediate extinction risk for Klamath Mountains Province winter steelhead. The entire ESU was rejected by the National Marine Fisheries Service for listing under the Endangered Species Act in March 1998. A court ruling in 2000 overturned this decision, finding that the agency had relied too heavily on the expected benefits of future conservation efforts. However, in 2001 the species’ listing was again determined to be “not warranted.” Klamath Mountains Province winter steelhead

today are largely managed to support major sport fisheries. A number of key goals for reversing trends include the reduction of dependence on hatchery stocks, improved flows below dams or dam removal, and watershed restoration. The latter requires reducing the impacts of road building, logging, and instream mining, as well restoring riparian and instream habitat where possible.

CONSERVATION RECOMMENDATIONS: Key elements for Klamath Mountain Province winter steelhead conservation include increasing naturally produced stocks, improving flows below Iron Gate and Lewiston Dams, and restoring favorable instream conditions to benefit multiple species. Protection from the adverse effects of logging practices allowed by the State of California is also important. Finally, in the long run, dams on the Klamath and Shasta Rivers should be removed to greatly increase the amount of habitat available for these steelhead, as well as for improving downstream flows.



Trinity River. PHOTO: JEFF BRIGHT



Klamath Mountain Province Winter Steelhead Distribution

