

Southern Oregon/Northern California Coastal Chinook Salmon *Oncorhynchus tshawytscha*

chances for survival:
better

4



PHOTO: CURTIS KNIGHT

California Trout is There for the Fish!

California Trout has continually sought and secured state and federal restoration funding for the California Coastal Salmon and Steelhead Restoration Program resulting in over \$100 million in restoration projects coastwide in the last decade. California Trout reviews all restoration proposals within this program and provides recommendations for expenditures.

Chinook salmon have numerous small black spots on the back, dorsal fin, and both lobes of the tail in both sexes which distinguishes them from other salmon. Spawning adults are the largest Pacific salmon. Smith River Chinook routinely exceed 40 inches in length and have been recorded up to 86 pounds, although Klamath River Chinook are smaller, more rounded, and heavier in proportion to their length compared to Sacramento River Chinook. Spawning adults are the largest Pacific salmon. Smith River Chinook routinely exceed 40 inches in length and have been recorded up to 86 pounds, although

Klamath River Chinook are smaller, more rounded, and heavier in proportion to their length compared to Sacramento River Chinook. They are principally late fall

run salmon and are adapted to coastal watersheds in the Klamath Mountains Province. These fish enter the rivers in September through December and spawning activity occurs

CATEGORY	SCORE	EXPLANATION
Range	4	Blue Creek and Smith River are stable populations with additional populations in Oregon
Population size	4	About 200 fish spawn in the Lower Klamath tributaries and at least 1,000 in the Smith River
Intervention needs	5	California populations are largely self-sustaining
Tolerance	3	Multiple juvenile life histories and spawner age diversity demonstrate physiological tolerances
Genetic risk	4	There are limited hatchery operations in California, but there is some concern for hybridization with hatchery ‘strays’ from other ESUs
Climate change	4	The fall run is least vulnerable to climate change in the north coastal environment of California since they spawn later, and their streams are likely to stay cool since they are close to the coast
Overall status	4	
Reliability	3	This species is the least studied of Klamath River Chinook runs

between October and February. Fry emerge from February through mid-April and usually emigrate to the sea soon thereafter when the stream flows are still high, however some young will rear in fresh water for four to six months. These Chinook rear in the California Current off the California and Oregon coasts and follow predictable ocean migration routes.

DISTRIBUTION: The ESU includes all Chinook salmon from Cape Blanco, Oregon (south of the Elk River) to the Klamath River. Tributaries of the Klamath River up to the Trinity River confluence are included. In California, these fish are found primarily in relatively small watersheds that are heavily influenced by maritime climate.

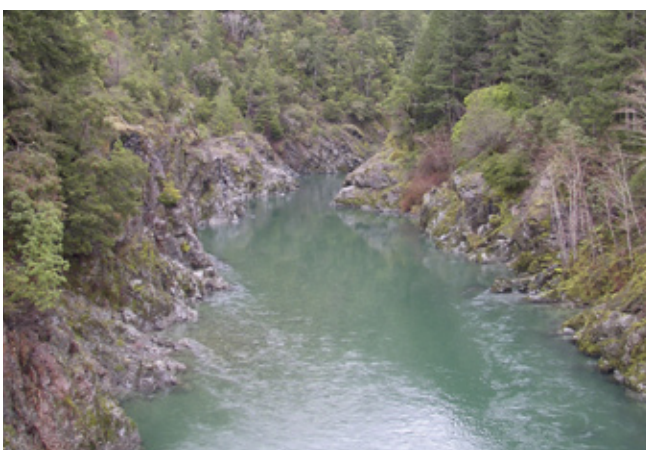
ABUNDANCE: The majority of Southern Oregon Northern/California coastal Chinook originate from the Rogue River in Oregon, with Lower Klamath tributaries and the Smith River contributing relatively small numbers of fish to the ESU. About 4,000 fish on average use tributaries of the lower Klamath and Trinity Rivers.

FACTORS AFFECTING STATUS: Population levels of these Chinook seem to have been fairly stable in recent years except for fluctuations in response to ocean conditions. However, they are presumably less abundant than they have been in the past because of habitat alteration and the commercial fishery, although the effects are poorly documented. Upslope land practices and road building likely have affected habitat quality in many of the rivers through increased sedimentation and the reduction in large woody debris, landslides from road construction and clear-cut logging can cause chronic sedimentation and reduce the ability of spawning areas to support fish. In the Smith River estuary, land reclamation through the construction of dikes and levees has reduced the amount

of juvenile rearing habitat by up to 40%. Commercial fisheries have probably reduced escapement in the past but are currently restricted.

STATUS 4: Southern Oregon/Northern California coastal Chinook do not face extinction, although their distribution is limited in California to only a few fairly wild watersheds. In 1999, this ESU was determined not to warrant federal listing under the Endangered Species Act, although it is considered a sensitive species by the U.S. Forest Service. Currently, this species is primarily managed for its fishery value.

CONSERVATION RECOMMENDATIONS: All hatchery Chinook salmon should be marked so that a mark-selective fishery can be instituted and the contribution of hatchery fish to wild spawning better evaluated. Large-scale restoration of the Smith River estuary is needed to improve juvenile growth and survival before they head out to sea. Sediment reduction in all spawning rivers should become a major goal of restoration activities.



Smith River. PHOTO: TOM WESELOH

