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## **Historical Decline and Current Status of Coho Salmon in California**

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### **Abstract**

Abstract. -The southernmost populations of coho salmon *Oncorhynchus kisutch* occur in California where native coho stocks have declined or disappeared from all streams in which they were historically recorded. Coho salmon previously occurred in as many as 582 streams, from the Smith River near the Oregon border to the San Lorenzo River on the central coast. Information on the recent presence or absence of coho salmon was available for only 248 (43%) of those streams. Of these 248 streams, 54% still contained coho salmon and 46% did not. The farther south a stream is located, the more likely it is to have lost its coho salmon population. We estimate that the total number of adult coho salmon entering California streams in 1987-1991 averaged around 31,000 fish per year, with hatchery populations making up 57% of this total. Thus, about 13,000 nonhatchery coho salmon have been spawning in California streams each year since 1987, an estimate that includes naturalized stocks containing about 9,000 fish of recent hatchery ancestry. There are now probably less than 5,000 native coho salmon (with no known hatchery ancestry) spawning in California each year, many of them in populations of less than 100 individuals. Coho populations today are probably less than 6% of what they were in the 1940s and there has been at least a 70% decline since the 1960s. There is every reason to believe that California coho populations, including hatchery stocks, will continue to decline. The reasons for the decline of coho salmon in California include: stream alterations brought about by poor land-use practices (especially those related to logging and urbanization) and by the effects of periodic floods and drought, the breakdown of genetic integrity of native stocks, introduced diseases, overharvest, and climatic change. We believe that coho salmon in California qualify for listing as a threatened species under state law, and certain populations may qualify for listing as threatened or endangered under federal law.