

In progress draft dated June 2, 2010

#4 Objective for Winter-run Chinook Salmon - Genetic and Life History Diversity

Global Goal: Winter- run Chinook salmon will see substantial increases in their 1) abundance, 2) spatial distribution, 3) life history diversity, and 4) population productivity.

NMFS Recovery Plan Goal: Increase the genetic and life history diversity of the Sacramento River winter-run Chinook salmon ESU, DPS to support removal from the Federal List of Endangered and Threatened Wildlife (50 C.F.R. 17.11).

Global Objective: In general, viable populations should demonstrate a combination of population growth rate and abundance that produces an acceptable probability of population persistence. Specifically, viable populations should meet the low extinction risk levels for the population decline and population size criteria described in Table 4-1. (See NMFS Draft Recovery Plan for further details).

BDCP Species Goal	Goal GEXX: Assure no impacts of hatcheries on the genetic integrity and fitness of artificially propagated and wild winter-run Chinook salmon.	
BDCP Species Objectives: <i>Note that blank () variables need additional input on appropriate percentages, measurement, and methodologies intervals for the objectives.</i>	Objective GECF2.1: Monitor the genetic diversity and population abundance of wild Winter-run Chinook salmon to assure no change in genetic integrity and minimal influence of hatchery fish on natural production on an ongoing basis.	
Stressors/Limiting Factors: <i>Note: Stressors summarized from NMFS stressor matrix on 5th tab bottom right.</i>	1) Hatchery effects - genetics	2) Hatchery effects - ecological
Sub-objectives: <i>Intended to address highest priority stressors.</i>	1) Maintain a monitoring program of the genetic diversity of hatchery and wild Winter-run Chinook salmon within __ years of permit issuance to assure no genetic introgression from other sources.	2) Maintain a monitoring program to investigate ecological interactions between hatchery and wild winter run Chinook salmon within years of permit issuance to assure minimal risks of ecological interaction between wild and hatchery fish.
Conservation Measures:	CM4. Hatchery and Genetic Management Plans	
Expected Outcome:		
Metrics:		