In progress draft dated April 21, 2010. Not for distribution.

#2 Objective for Winter-run Chinook Salmon

NMFS Recovery Plan Overarching Goal: Removal of the Sacramento River winter-run Chinook salmon ESU, DPS from the Federal List of Endangered and Threatened Wildlife (50 C.F.R. 17.11).

NMFS: Population, Productivity and Abundance Objectives: 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).

Viable Salmonid Population Parameters	Abundance, Productivity, Diversity (genetic and life history), Spatial Structure		
BDCP Species Goal	Goal CHIN2: Increase the growth of winter-run juvenile Chinook salmon (all 3 populations) that pass through and rear in the Delta in order to increase the survival (producvity) of juvenile Chinook salmon in San Francisco Bay and ocean habitats.		
BDCP Objectives: *Note that blank (__) variables need additional input on appropriate percentages, measurement, and methodologies intervals for the objectives.*	Increase the mean weight and length of juvenile winter-run Chinook salmon migrating between Knights Landing and Chipps Island by __% on a 5 year running average basis within 10 years of permit issuance and by __% on a 5 year running average basis within 20 years of permit issuance. Maintain juvenille condition thereafter on a 5 year running basis thereafter.		
Stressors/Limiting Factors: *Note: Stressors summarized from NMFS stressor matrix on 6th tab bottom right. Order reflects relatve importance.*	1) Loss of riparian habitat and instream cover; 2) Loss of floodplain habitat; 3) Invasive and non-native species; 4) food web disruption; 5) Loss of tidal marsh		
Sub-objectives: *Intended to address highest priority stressors.*	1) Improve and increase rearing habitat in the Delta by adding __ acres (or miles) of ___ habitat(s) by ___date;	*Note: Sub-objectives for each of the above stessors will be added soon.*	
Conservation Measures: ***Note new numbers.***	CM1: Water Facilities and Operation; CM9. Non-Native Aquatic Vegetation Control. CM10. Tidal Marsh Restoration (Suisun and Cache Slough ROAs). CM11. Channel Margin Enhancement (includes Sutter and Steamboat sloughs); CM12. Riparian Habitat Restoration; CM14. Fremont Wier/Yolo Bypass Habitat Improvements;		
Expected Outcome: *Question for Group (What is the best metric for this?? Is this something that should be established now, or thru science program, or later thru AM?*	HRCM4-P1c1; Rearing habitat Yolo Cache	HRCM4-P3 : Export food from Yolo Cache	HRCM9-P1c1 : Rearing habitat Suisun Marsh
Metric:	1 (OC, phyto- and zoo-plankton); 2 (inverts); 3 (extent habitat), 10 (fish abundance)	1 (OC, phyto- and zoo-plankton); 2 (inverts); 3 (extent habitat)	3 (extent habitat), 10 (fish abundance).
Expected Outcome:		HRCM11-P3e: Riparian Levees	HRCM12-P3e: Channel Margin Sutter
Metric:		X	X