

SAIC Recommended Revisions to the Habitat Restoration and Other Stressors Conservation Measures for Use in Conducting the Effects Analysis

Habitat Restoration Conservation Measures

Conservation Measure	Proposed Revision
<p>HRCM 16. Restore up to 65,000 acres of freshwater and brackish tidal marsh within Restoration Opportunity Areas (ROAs).</p> <p>Timing:</p> <ul style="list-style-type: none"> • 14,000 acres of Year 10, • 25,000 acres by Year 15, • Up to 65,000 acres by Year 40, as determined by the adaptive management program. <p>Minimum of:</p> <ul style="list-style-type: none"> • 5,000 acres freshwater tidal marsh within the Cache Slough Complex ROA. • 1,500 acres of freshwater tidal marsh within the Cosumnes/Mokelumne ROA. • 2,100 acres of freshwater tidal marsh within the West Delta ROA. • 5,000 acres of freshwater tidal marsh within the South Delta ROA. • 1,400 acres of freshwater tidal marsh within the East Delta ROA. • 7,000 acres of brackish tidal marsh within the Suisun Marsh ROA. 	<p>No Change</p>
<p>HRCM##. Enhance channel margin habitats along at least 20 linear miles of Delta channel banks.</p> <p>Channel margin habitat will be enhanced to improve habitat conditions for covered fish species in the following locations:</p> <ul style="list-style-type: none"> • Along Non-Project levees in the Delta • Along Steamboat and Sutter sloughs • Along the San Joaquin River between Vernalis and Mossdale • Sacramento River between Freeport and Walnut Grove 	<p>Proposed project is 20 linear miles. Another 20 miles will be analyzed in the Effects Analysis to include up to 20 additional linear miles (up to 40 miles total) in the adaptive management range.</p>
<p>HRCM11/HRCM14: Restore at least 5,000 acres of riparian forest and scrub in Restoration Opportunity Areas.</p>	<p>No Change</p>
<p>HRCM1/HRCM2: Restore 10,000 acres of seasonally inundated floodplain.</p> <p>Dependent on coordination with US Army Corps of Engineers and other flood agencies, seasonal floodplain restoration actions could be conducted along any suitable channels in the north, east, and south Delta.</p>	<p>Revise conservation measure to include criteria without providing specific locations.</p>
<p>HRCM##: Modify Lisbon Weir, Putah Creek alignment, and Fremont Weir to improve fish passage through the Yolo Bypass. [Formerly part of WOCML2]</p>	<p>Revise measure (WOCML2) based on language provided by DFG</p>

Other Stressors Conservation Measures

Note: If marked "Delete CM" and "Research" that means it is not a conservation measure and should be moved to the BDCP Research Program

Conservation Measure	SAIC Recommendation	Delete CM	Research	Important Related Action ¹
OSCM1: Determine whether ammonia and ammonium have adverse direct and/or indirect effects on BDCP covered species and, if adverse effects are found, assist wastewater treatment plants in identifying funding sources to reduce the load of ammonia and ammonium in effluent discharges.	Move to research program.	X	X	X
OSCM2: Determine whether endocrine disrupting compounds have adverse direct and/or indirect effects on BDCP covered species and, if adverse effects are found, assist wastewater treatment plants in identifying funding sources to reduce the load of endocrine disrupting compounds in effluent discharges.	Move to research program.	X	X	
OSCM3: Reduce the load of methyl mercury entering Delta waterways.	Reduce in scope and revise as offsetting measure for habitat restoration conservation measures.			
OSCM4: Reduce the load of agricultural pesticides and herbicides entering Delta waterways from in-Delta sources that are believed to be toxic to covered fish species and the food organisms upon which they depend.	Delete.	X		
OSCM5: Reduce the loads of toxic contaminants in stormwater and urban runoff by working with existing efforts in the Delta.	Delete.	X		X
OSCM7: Maintain dissolved oxygen levels above levels that impair covered fish species in the Stockton Deep Water Ship Channel during periods when covered fish species are present.	Keep. Continued funding through existing cost share.			
OSCM8: Improve the quality of water discharged from managed seasonal wetlands into Suisun Bay and Delta waterways to prevent dissolved oxygen sags.	Delete.	X		
OSCM10: Reduce the risk for future introductions of non-native aquatic organisms from recreational watercraft.	Delete.	X		X

¹ Important Related Action = There are actions that would be beneficial to covered fish species that are the responsibility of other state, federal, and local agencies.

Conservation Measure	SAIC Recommendation	Delete CM	Research	Important Related Action ¹
OSCM11: Improve the rapid detection of and rapid response to new non-native species introductions into Delta waterways.	Delete.	X		
OSCM13: Remove non-native submerged and floating aquatic vegetation from Delta waterways.	Keep, but revise as an offsetting measure for habitat restoration conservation measures.			X
OSCM14: Increase the harvest of non-native predatory fish to decrease their abundance.	Move to research program.	X	X	X
OSCM16: Reduce illegal harvest of Chinook salmon, Central Valley steelhead, green sturgeon, and white sturgeon in the Delta (DBEEP).	Keep.			
OSCM17: Reduce adverse effects of harvest on Sacramento splittail abundance.	Move to research program.	X	X	X
OSCM18: Develop and implement hatchery and genetic management plans to minimize the potential for genetic and ecological impacts of hatchery reared salmonids on wild salmonid stocks.	Keep.			X
OSCM19: Reduce losses of wild stocks of Chinook salmon to commercial fishing and recreational fishing through a mark-select fishery.	Delete.	X		X
OSCM20: Establish new and expand existing conservation propagation programs for Delta and longfin smelt.	Keep.			X
OSCM21: Screen, remove, relocate, consolidate, modify and/or alter timing of non-project diversions to reduce entrainment of covered fish species in the Delta. Selective operable screens	Delete.	X		X
OSCM24: Reduce the effects of predators on covered fish species by conducting localized predator control of high predator density locations.	Keep.			
OSCM25: Improve the survival of outmigrating juvenile salmonids by using non-physical barriers to re-direct them away from channels in which survival is lower.	Keep.			