

DRAFT
**Conservation Measures that are Anticipated to Fully or Partially Achieve
 Biological Objectives for Covered Fish Species**

Note: Objective codes are defined in Table 1 following the conservation measure/biological objective crosswalk.

Proposed Conservation Measures	Biological Objectives			
Water Operations Conservation Measures				
WOCM1a: Construct a new water diversion facility in the north Delta with multiple intakes and fish screens and an isolated canal facility. WOCM1b: Preferentially operate a new water diversion facility in the north Delta while maintaining sufficient bypass flows for covered fish species.	ECSY1.1 ECSY1.2 ECSY1.3 ECSY5.1 GECF1.2 GECF1.3 DESM1.1	DESM1.2 DESM1.4 LOSM1.1 LOSM1.2 LOSM1.4 CHIN1.2 CHIN1.4	CHIN1.5 CHIN3.1 CHIN4.1 STEE1.2 STEE1.4 STEE3.1 STEE4.1	GRST1.1 GRST3.1 WHST1.1 WHST3.1 RILA1.1 RILA1.2
WOCM2a: Modify the Fremont Weir and the Yolo Bypass to provide for a higher frequency and duration of inundation. WOCM2b: Operate the Fremont Weir to provide for a higher frequency and duration of inundation of the Yolo Bypass.	ECSY1.1 ECSY1.2 ECSY2.1 ECSY5.1 ECSY5.2 NACO1.1 GECF1.5 DESM1.1	DESM1.2 DESM1.4 LOSM1.1 LOSM1.2 LOSM1.4 CHIN1.1 CHIN1.2	CHIN2.1 CHIN4.1 CHIN4.2 STEE1.1 STEE1.2 STEE2.1 STEE4.2	SASP 1.2 SASP1.3 SASP1.4 SASP1.5 SASP1.6 GRST1.2 WHST1.2
WOCM3a: Create a new flood bypass in the Yolo Bypass/Cache Slough Complex ROA to restore seasonally inundated floodplain habitat. WOCM3b: Operate a new flood bypass in the Yolo Bypass/Cache Slough Complex ROA to restore seasonally inundated floodplain habitat.	ECSY1.1 ECSY2.1 ECSY5.1 ECSY5.2 NACO1.2 DESM1.1	DESM1.2 DESM1.4 LOSM1.1 LOSM1.2 LOSM1.4	CHIN1.2 CHIN2.1 CHIN4.1 STEE1.2 STEE2.1	SASP 1.2 SASP1.3 SASP1.4 SASP1.5 SASP1.6
WOCM4: Maintain sufficient flows in Sutter and Steamboat Sloughs for environmental benefits.	ECSY1.1 ECSY5.1	GECF1.3 CHIN1.2	CHIN2.1 STEE1.2	STEE2.1

Proposed Conservation Measures	Biological Objectives			
WOCM5: Operate the Delta Cross Channel Gate for environmental benefits.	ECSY1.1 ECSY1.3 ECSY5.1 GECF1.1 GECF1.2 DESM1.1	DESM1.2 DESM1.4 CHIN1.1 CHIN1.2 CHIN1.3	CHIN1.4 CHIN1.5 CHIN4.1 STEE1.1 STEE1.2 STEE1.3	STEE1.4 STEE4.1 GRST1.1 WHST1.1 RILA1.1
WOCM6: Maintain sufficient Rio Vista flows for environmental benefits.	ECSY1.1 ECSY1.2 ECSY1.3	ECSY5.1 CHIN4.1	STEE4.1 GRST1.1	WHST1.1 RILA1.1
WOCM7: Install and operate a Three Mile Slough Gate to reduce the entry of covered species into the interior Delta.	ECSY1.1 ECSY1.3 ECSY5.1 GECF1.2	DESM1.1 DESM1.2 DESM1.4 LOSM1.1	LOSM1.2 LOSM1.4 CHIN1.1 CHIN1.2	CHIN4.1 STEE1.1 STEE1.2 STEE4.1
WOCM8: Install and operate gates at Old River and Connection Sloughs (“Two Gates”) to reduce the entry of saline water and covered species into the interior Delta.	ECSY1.1 ECSY1.3 ECSY5.1 GECF1.2	DESM1.1 DESM1.2 DESM1.4 LOSM1.1	LOSM1.2 LOSM1.4 CHIN1.1 CHIN1.2	CHIN4.1 STEE1.1 STEE1.2 STEE4.1
WOCM9: Maintain sufficient Delta outflows for environmental benefits.	ECSY1.1 ECSY1.2 ECSY1.3 ECSY5.1 DESM1.1	DESM1.2 DESM1.3 DESM1.4 LOSM1.1	LOSM1.2 LOSM1.3 LOSM1.4 CHIN4.1 STEE4.1	GRST1.1 WHST1.1 RILA1.1 RILA1.2
WOCM10: Maintain sufficient Suisun Bay and Western Delta salinity conditions for environmental benefits.	ECSY1.3 ECSY5.1 DESM1.1	DESM1.2 DESM1.3	DESM1.4 LOSM1.1 LOSM1.2	LOSM1.3 LOSM1.4
WOCM11: Operate the Montezuma Slough Salinity Control Gate for environmental benefits.	ECSY1.1	ECSY1.3	ECSY5.1	
WOCM12: Operate the South Delta diversions for environmental benefits.	ECSY1.1 ECSY5.1 GECF1.2 DESM1.1 DESM1.2 DESM1.3 DESM1.4 LOSM1.1	LOSM1.2 LOSM1.3 LOSM1.4 CHIN1.1 CHIN1.2 CHIN1.3 CHIN1.4	CHIN1.5 CHIN3.1 CHIN4.1 STEE1.1 STEE1.2 STEE1.3 STEE1.4 STEE3.1	STEE4.1 SASP 1.2 SASP1.3 GRST1.1 GRST3.1 WHST1.1 WHST3.1

Proposed Conservation Measures	Biological Objectives			
WOCM13: Maintain sufficient Old and Middle River flows for environmental benefits.	ECSY1.1 ECSY5.1 GECF1.2	DESM1.1 DESM1.2 DESM1.3	DESM1.4 LOSM1.1 LOSM1.2	LOSM1.3 LOSM1.4
WOCM14: Maintain sufficient Delta Salinity Standards for human benefits.	ECSY1.3		ECSY5.1	
Habitat Restoration Conservation Measures				
HRCM1: Restore floodplain habitat along __ miles of the San Joaquin River from Vernalis to Mossdale.	ECSY1.1 ECSY2.1 ECSY5.1 ECSY5.2	N ACO1.2 N ACO1.5 CHIN1.4 CHIN1.5	STEE1.4 SASP 1.2 SASP1.3 SASP 1.4	SASP1.5 SASP 1.6 GRST 2.1 WHST 2.1
HRCM2: Restore floodplain habitat along __ miles of the San Joaquin River from Mossdale to French Camp Slough.	ECSY1.1 ECSY2.1 ECSY5.1 ECSY5.2	N ACO1.2 N ACO1.5 CHIN1.4 CHIN1.5	STEE1.4 SASP 1.2 SASP1.3 SASP 1.4	SASP1.5 SASP 1.6 GRST 2.1 WHST 2.1
HRCM3: Restore a mosaic of __ to __ acres of freshwater tidal marsh, shallow subtidal aquatic, and transitional grassland habitat within the Yolo Bypass/Cache Slough Complex Restoration Opportunity Area.	ECSY2.1 ECSY5.2 N ACO1.3 DESM1.1 DESM1.2 DESM1.3	DESM1.4 LOSM1.1 LOSM1.2 LOSM1.3 LOSM1.4 CHIN1.1	CHIN1.2 CHIN2.1 STEE1.1 STEE1.2 STEE2.1 SASP 1.2	SASP1.3 SASP 1.4 SASP1.5 SASP 1.6 GRST 2.1 WHST2.1
HRCM4: Restore a mosaic of __ to __ acres of freshwater intertidal marsh, shallow subtidal aquatic, and transitional habitat within the Cosumnes/Mokelumne ROA.	ECSY2.1 ECSY5.2 N ACO1.3 DESM1.1 DESM1.2	DESM1.3 DESM1.4 CHIN1.4 CHIN2.2	STEE1.4 STEE2.2 SASP 1.2 SASP1.3 SASP 1.4	SASP1.5 SASP 1.6 GRST 2.1 WHST2.1
HRCM5: Restore a mosaic of __ to __ acres of intertidal marsh and shallow subtidal aquatic habitat within the West Delta Restoration Opportunity Area.	ECSY2.1 ECSY5.2 N ACO1.3 DESM1.1 DESM1.2 DESM1.3 DESM1.4 LOSM1.1	LOSM1.2 LOSM1.3 LOSM1.4 CHIN1.1 CHIN1.2 CHIN1.3 CHIN1.4 CHIN1.5	CHIN2.1 CHIN2.2 STEE1.1 STEE1.2 STEE1.3 STEE1.4 STEE2.1 STEE2.2	SASP 1.2 SASP1.3 SASP 1.4 SASP1.5 SASP 1.6 GRST 2.1 WHST2.1

Proposed Conservation Measures	Biological Objectives			
HRCM6: Restore a mosaic of __ to __ acres of intertidal marsh, shallow subtidal aquatic, and transitional grassland habitat within the South Delta Restoration Opportunity Area.	ECSY2.1 ECSY5.2 N ACO1.3 DESM1.1 DESM1.2	DESM1.3 DESM1.4 CHIN1.4 CHIN1.5 CHIN2.2	STEE1.4 STEE2.2 SASP 1.2 SASP1.3 SASP 1.4	SASP1.5 SASP 1.6 GRST 2.1 WHST2.1
HRCM7: Restore a mosaic of __ to __ acres of intertidal marsh, shallow subtidal aquatic, and transitional grassland habitat within the East Delta Restoration Opportunity Area.	ECSY2.1 ECSY5.2 N ACO1.3 DESM1.1 DESM1.2	DESM1.3 DESM1.4 CHIN1.4 CHIN1.5 CHIN2.2	STEE1.4 STEE2.2 SASP 1.2 SASP1.3 SASP 1.4	SASP1.5 SASP 1.6 GRST 2.1 WHST2.1
HRCM8: Restore a mosaic of __ to __ acres of brackish intertidal marsh, shallow subtidal aquatic, and transitional grassland habitat within the Suisun Marsh Restoration Opportunity Area.	ECSY2.1 ECSY5.2 N ACO1.4 DESM1.1 DESM1.2 DESM1.3 DESM1.4 LOSM1.1	LOSM1.2 LOSM1.3 LOSM1.4 CHIN1.1 CHIN1.2 CHIN1.3 CHIN1.4 CHIN1.5	CHIN2.1 CHIN2.2 STEE1.1 STEE1.2 STEE1.3 STEE1.4 STEE2.1 STEE2.2	SASP 1.2 SASP1.3 SASP 1.4 SASP1.5 SASP 1.6 GRST 2.1 WHST2.1
HRCM9: Support development and implementation of levee construction and maintenance designs that incorporate aquatic, tidal marsh, and riparian habitat features.	ECSY2.1 ECSY5.1 ECSY5.2 N ACO1.5 CHIN1.1 CHIN1.2	CHIN1.3 CHIN1.4 CHIN1.5 CHIN2.1 CHIN2.2	STEE1.1 STEE1.2 STEE1.3 STEE1.4 STEE2.1 STEE2.2	SASP 1.2 SASP1.3 SASP 1.4 SASP1.5 SASP 1.6
HRCM10: Provide for the establishment of native riparian woody vegetation and emergent vegetation on BDCP constructed levees.	ECSY2.1	ECSY5.1	ECSY5.2	N ACO1.5
HRCM11: Enhance channel margin habitats along __ to __ miles of Steamboat and Sutter Sloughs to improve habitat conditions for covered fish species.	ECSY2.1 ECSY5.1 ECSY5.2 N ACO1.5	CHIN1.2 CHIN2.1 STEE1.2	STEE2.1 SASP 1.2 SASP1.3	SASP 1.4 SASP1.5 SASP 1.6
HRCM12: Enhance channel margin habitats along __ to __ miles of the San Joaquin River in the San Joaquin River ROA to improve habitat conditions for covered fish species.	ECSY2.1 ECSY5.1 ECSY5.2 N ACO1.5	CHIN1.4 CHIN1.5 CHIN2.2	STEE1.4 STEE2.2 SASP 1.2 SASP1.3	SASP 1.4 SASP1.5 SASP 1.6

Proposed Conservation Measures	Biological Objectives			
HRCM13: Restore between ___ and ___ acres of riparian forest and scrub communities as a component of restored floodplain, freshwater tidal marsh, and channel margin habitats.	ECSY2.1	ECSY5.1	ECSY5.2	N ACO1.5
Other Stressors Conservation Measures				
OSCM1: Reduce the Load of Ammonia in Effluent Discharged from the Sacramento Regional County Sanitation District into the Sacramento River if Warranted Based on Research.	ECSY2.1 ECSY4.1	DESM1.1	DESM1.2 DESM1.3	DESM1.4
OSCM2: Reduce the Load of Endocrine Disrupting Compounds in Effluent Discharged from Wastewater Treatment Plants into Delta Waterways if Warranted Based on Research.	ECSY4.1 DESM1.2 CHIN1.2	CHIN1.4 CHIN1.5	STEE1.2 STEE1.4	SASP1.3 LOSM1.2
OSCM3: Reduce the Load of Methylmercury Entering Delta Waterways.	ECSY4.3			
OSCM4: Reduce the Load of Pesticides and Herbicides Entering Delta Waterways from In-Delta Sources that are Believed to be Toxic to Covered Fish Species.	ECSY2.1 ECSY4.4 DESM1.1 DESM1.2 DESM1.4 LOSM1.1	LOSM1.2 LOSM1.4 CHIN1.1 CHIN1.2 CHIN1.3 CHIN1.4	CHIN1.5 CHIN2.1 CHIN2.2 STEE1.1 STEE1.2 STEE1.3	STEE1.4 STEE2.1 STEE2.2 SASP 1.2 SASP1.3
OSCM5: Reduce the Loads of Toxic Contaminants in Stormwater Pollution and Urban Runoff by Working with Existing Efforts in the Delta.	ECSY2.1 ECSY4.2 DESM1.1 DESM1.2 DESM1.4 LOSM1.1	LOSM1.2 LOSM1.4 CHIN1.1 CHIN1.2 CHIN1.3 CHIN1.4	CHIN1.5 CHIN2.1 CHIN2.2 STEE1.1 STEE1.2 STEE1.3	STEE1.4 STEE2.1 STEE2.2 SASP 1.2 SASP1.3
OSCM6: Provide for Rapid Detection of and Response to Toxic Contaminant Events that could Affect Covered Fish Species.	ECSY2.1 DESM1.1 DESM1.2 DESM1.4 LOSM1.1 LOSM1.2	LOSM1.4 CHIN1.1 CHIN1.2 CHIN1.3 CHIN1.4	CHIN1.5 CHIN2.1 CHIN2.2 STEE1.1 STEE1.2 STEE1.3	STEE1.4 STEE2.1 STEE2.2 SASP 1.2 SASP1.3

Proposed Conservation Measures	Biological Objectives			
OSCM9: Reduce the Risk for Future Introductions of Non-Native Aquatic Organisms from Commercial Vessels.	ECSY2.1 ECSY3.3 DESM1.1 DESM1.2 DESM1.4 LOSM1.1	LOSM1.2 LOSM1.4 CHIN1.1 CHIN1.2 CHIN1.3 CHIN1.4	CHIN1.5 CHIN2.1 CHIN2.2 STEE1.1 STEE1.2 STEE1.3	STEE1.4 STEE2.1 STEE2.2 SASP 1.2 SASP1.3
OSCM10: Reduce the Risk for Future Introductions of Non-Native Aquatic Organisms from Recreational Watercraft.	ECSY2.1 ECSY3.3 DESM1.1 DESM1.2 DESM1.4 LOSM1.1	LOSM1.2 LOSM1.4 CHIN1.1 CHIN1.2 CHIN1.3 CHIN1.4	CHIN1.5 CHIN2.1 CHIN2.2 STEE1.1 STEE1.2 STEE1.3	STEE1.4 STEE2.1 STEE2.2 SASP 1.2 SASP1.3
OSCM11: Provide for Rapid Detection of and Response to New Introductions of Non-Native Species into Delta Waterways.	ECSY2.1 ECSY3.3 DESM1.1 DESM1.2 DESM1.4 LOSM1.1	LOSM1.2 LOSM1.4 CHIN1.1 CHIN1.2 CHIN1.3 CHIN1.4	CHIN1.5 CHIN2.1 CHIN2.2 STEE1.1 STEE1.2 STEE1.3	STEE1.4 STEE2.1 STEE2.2 SASP 1.2 SASP1.3
OSCM12: Reduce the Risk for Establishment of Zebra Mussel and Quagga Mussel in Delta Waterways.	ECSY2.1 ECSY3.3 DESM1.1 DESM1.2 DESM1.4 LOSM1.1	LOSM1.2 LOSM1.4 CHIN1.1 CHIN1.2 CHIN1.3 CHIN1.4	CHIN1.5 CHIN2.1 CHIN2.2 STEE1.1 STEE1.2 STEE1.3	STEE1.4 STEE2.1 STEE2.2 SASP 1.2 SASP1.3
OSCM13: Remove Non-Native Submerged and Floating Aquatic Vegetation from Delta Waterways.	ECSY3.1 ECSY3.2 DESM1.1 DESM1.2 DESM1.4	LOSM1.1 LOSM1.2 LOSM1.4 CHIN1.1	CHIN1.2 CHIN1.3 CHIN1.4 CHIN1.5	STEE1.1 STEE1.2 STEE1.3 STEE1.4
OSCM14: Increase the Harvest of Non-Native Predatory Fish to Decrease their Abundance.	ECSY3.3 DESM1.1 DESM1.2 DESM1.4 LOSM1.1	LOSM1.2 LOSM1.4 CHIN1.1 CHIN1.2	CHIN1.3 CHIN1.4 CHIN1.5 STEE1.1 STEE1.2	STEE1.3 STEE1.4 SASP 1.2 SASP1.3

Proposed Conservation Measures	Biological Objectives			
OSCM16: Reduce Illegal Harvest of Chinook Salmon, Central Valley Steelhead, Green Sturgeon, and White Sturgeon in the Delta.	GECF1.5			
OSCM17: Reduce Adverse Effects of Harvest on Sacramento Splittail Abundance.	GECF1.5	SASP 1.2	SASP1.3	
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.	GECF2.1			
OSCM19: Reduce Losses of Wild Stocks of Chinook Salmon to Commercial Fishing and Recreational Fishing through a Mark-Select Fishery.	GECF1.5			
OSCM20: Establish New and Expand Existing Conservation Propagation Programs for Delta and Longfin Smelt.	GECF2.2 DESM1.1	DESM1.2 DESM1.4	LOSM1.1 LOSM1.2	LOSM1.4
OSCM21: Screen, Remove, Relocate, Consolidate, Modify and/or Alter Timing of Non-Project Diversions to Reduce Entrainment of Covered Fish Species at within the Delta.	GECF1.1 DESM1.1 DESM1.2 DESM1.4 LOSM1.1 LOSM1.2	LOSM1.4 CHIN1.1 CHIN1.2 CHIN1.3	CHIN1.4 CHIN1.5 STEE1.1 STEE1.2	STEE1.3 STEE1.4 SASP 1.2 SASP1.3
OSCM22: Establish No Wake Boating Zones in Delta Waterways to Protect Sensitive Covered Species Shoreline Habitat.				

Table 1. BDCP Biological Objectives for Covered Fish Species (March 17, 2009 version)

Objective ECSY1.1: Provide hydrodynamic conditions that support the movement of larval and juvenile life stages of covered fish species to downstream rearing habitats.
Objective ECSY1.2: Provide hydrodynamic conditions that support the movement of adult life stages of covered fish species to upstream spawning habitats.
Objective ECSY1.3: Provide a range of salinity conditions that support habitat and food production for covered fish species.
Objective ECSY2.1: Over the term of the BDCP, increase the abundance of zooplankton species that provide food and support food production for covered fish species in Delta waterways.
Objective ECSY3.1: Manage the distribution and abundance of established non-native invasive species in the Delta to reduce non-native species predation on and competition with covered fish species.

Objective ECSY3.2: Manage the distribution and abundance of established non-native invasive species in the Delta to rehabilitate aquatic ecosystem processes.
Objective ECSY3.3: Minimize the likelihood for future invasions and establishment of non-native species into the Delta's aquatic ecosystem.
Objective ECSY4.1: Contribute to reducing the load of contaminants of concern that enter the Delta in wastewater treatment plant discharges to levels in conformance with existing and future water quality standards to reduce their effects on and biological uptake by covered fish species.
Objective ECSY4.2: Contribute to reducing the load of contaminants of concern that enter the Delta from urban sources to levels in conformance with existing and future water quality standards to reduce their adverse effects on and biological uptake by covered fish species.
Objective ECSY4.3: Contribute to reducing the load of methyl mercury entering the Delta from in-Delta and upstream sources to levels in conformance with existing and future water quality standards to reduce adverse effects of methyl mercury on and biological uptake by covered fish species.
Objective ECSY4.4: Contribute to reducing the load of contaminants of concern entering the Delta from in-Delta and upstream sources from agricultural practices in conformance with existing and future water quality standards to reduce their adverse effects on and biological uptake by covered fish species.
Objective ECSY5.1: Provide the hydrodynamic and salinity and other water quality conditions within the Delta that support the effective movement of all life stages of covered fish species between spawning, larval, juvenile, and adult habitat areas.
Objective ECSY5.2: Contribute to the availability of well-distributed restored floodplain, riparian, tidal marsh, and shallow subtidal aquatic habitats to support increased distribution of covered species and improved connectivity among covered species habitats within and adjacent to the BDCP planning area.
Objective NACO1.1: Increase the frequency that floodplain habitat within the Yolo Bypass is inundated for at least <input type="text"/> consecutive days to approximately <input type="text"/> percent of years.
Objective NACO1.2: Provide for the inundation of at least <input type="text"/> acres of historical floodplain surfaces that have been disconnected from river channels to provide habitat and ecosystem functions that support of covered species.
Objective NACO1.3: Restore, manage, and protect at least <input type="text"/> acres of freshwater tidal marsh in the Delta that provides habitat and ecosystem functions in support of covered species.
Objective NACO1.4: Restore, manage, and protect <input type="text"/> acres of brackish tidal marsh in Suisun Marsh/Bay to provide habitat and ecosystem functions in support of covered species.
Objective NACO1.5: Restore at least <input type="text"/> acres of riparian forest and scrub within the Delta to provide habitat and ecological functions in support of covered species.
Objective GECF1.1: Reduce entrainment of covered fish species at non-project diversions.
Objective GECF1.2: Reduce entrainment of covered fish species at the Banks Pumping Plant and the Jones Pumping Plant.
Objective GECF1.3: Reduce entrainment of covered fish species into the SWP and CVP north Delta diversion intakes in the BDCP long-term implementation period.
Objective GECF1.4: Contribute towards reducing the risk for dissolved oxygen sags in Delta and Suisun Marsh waterways that could result in mortality of covered fish species.
Objective GECF1.5: Minimize the adverse effects of harvest on covered fish species.
GECF2.1: Minimize the adverse effects of salmonid hatcheries on the genetic integrity of wild Chinook salmon and steelhead populations.
GECF2.2: Maintain or establish genetic refugia for delta smelt and longfin smelt to reduce the risk for the extinction of delta smelt and the extirpation of longfin smelt.

<p>Objective DESM1.1: Contribute to maintaining the existing distribution of delta smelt in the Delta and Suisun Bay and expanding the distribution of delta smelt the eastern and southern Delta such that the number of gravid and spent adult delta smelt sampled from Spring Kodiak Trawl Eastern and Southern Zone survey stations is similar to that sampled from [year] to [year].</p>
<p>Objective DESM1.2: Contribute to increasing the abundance of delta smelt within the Delta and Suisun Bay such that, in any five year period, the combined Fall Midwinter Trawl (FMWT) catch for September and October will exceed 29 in two years and the two-year running average will never fall below 84.</p>
<p>Objective DESM1.3: Increase habitat availability for all delta smelt life stages in the Delta and Suisun Marsh/Bay.</p>
<p>Objective DESM1.4: Increase delta smelt stock recruitment in years of comparable hydrology relative to hydrological conditions observed from [year] to [year].</p>
<p>Objective LOSM1.1: Contribute to increasing the abundance of delta smelt within the Delta and Suisun Bay such that, in wet water years the FMWT index will be at least 5,000 and the FMWT index does not decline below 100 in any year.</p>
<p>Objective LOSM1.2: Increase the abundance of longfin smelt within the Delta and Suisun Bay relative to mean abundance indices for [year] to [year] based on results of FMWT surveys.</p>
<p>Objective LOSM1.3: Increase habitat availability for all longfin smelt life stages in the Delta and Suisun Marsh/Bay.</p>
<p>Objective LOSM1.4: Increase longfin smelt stock recruitment in years of comparable hydrology relative to hydrological conditions observed from [year] to [year], such that in wet years the FMWT index will be at least 5000 and the FMWT will not fall below 100 in any year.</p>
<p>Objective CHIN1.1: Increase the survival of juvenile Sacramento Basin spring-run Chinook salmon passing through the Delta to Chipps Island in the BDCP near-term implementation period by █ percent, fall/late fall-run Chinook salmon by █ percent, and winter-run Chinook salmon by █ percent from mean survival rates observed from [year] to [year].</p>
<p>Objective CHIN1.2: Increase the survival of juvenile Sacramento Basin spring-run Chinook salmon passing through the Delta to Chipps Island in the BDCP long-term implementation period by █ percent, fall/late fall-run Chinook salmon by █ percent, and winter-run Chinook salmon by █ percent from mean survival rates observed from [year] to [year].</p>
<p>Objective CHIN1.3: Increase the survival of juvenile San Joaquin Basin fall-run Chinook salmon passing through the Delta to Chipps Island in the BDCP near-term implementation period by █ percent from mean survival rates observed from [year] to [year].</p>
<p>Objective CHIN1.4: Increase the survival of juvenile San Joaquin Basin fall-run Chinook salmon passing through the Delta to Chipps Island in the BDCP long-term implementation period by █ percent from mean survival rates observed from [year] to [year].</p>
<p>Objective CHIN1.5: When a spawning population of spring-run Chinook salmon established in the San Joaquin River, provide for survival of San Joaquin Basin spring-run Chinook salmon passing through the Delta to Chips Island in the BDCP long-term implementation period of at least █ percent.</p>
<p>Objective CHIN2.1: Increase the mean weight and length of juvenile Sacramento Basin spring-run Chinook salmon, fall/late fall-run Chinook salmon, and winter-run Chinook salmon passing through the Delta to Chipps Island.</p>
<p>Objective CHIN2.2: Increase the mean weight and length of juvenile San Joaquin Basin fall-run Chinook salmon passing through the Delta to Chipps Island.</p>
<p>Objective CHIN3.1: Provide for flows through the Delta that reflect the variability present in the natural hydrograph to provide for a diversity of rearing conditions for all runs of Chinook salmon over time.</p>
<p>Objective CHIN4.1: Provide flow conditions that minimize occurrences of false attraction of all runs of adult Chinook salmon into non-natal basins.</p>
<p>Objective CHIN4.2: Increase the passage of all runs of Sacramento Basin adult Chinook salmon past the Fremont Weir into the Sacramento River by █ percent from the passage efficiency provided by the existing Fremont Weir fish ladder.</p>

<p>Objective CHIN4.3: Increase the passage of all runs of San Joaquin Basin adult Chinook salmon past the Stockton Deep Water Ship Channel by contributing towards maintaining dissolved oxygen levels of at least 5 ppm within the Stockton Deep Water Ship Channel during periods Chinook salmon are present.</p>
<p>Objective STEE1.1: Increase the survival of juvenile Sacramento Basin steelhead passing through the Delta to Chipps Island in the BDCP near-term implementation period by █ percent from mean survival rates observed from [year] to [year].</p>
<p>Objective STEE1.2: Increase the survival of juvenile Sacramento Basin steelhead passing through the Delta to Chipps Island in the BDCP long-term implementation period by █ percent from mean survival rates observed from [year] to [year].</p>
<p>Objective STEE1.3: Increase the survival of juvenile San Joaquin Basin steelhead passing through the Delta to Chipps Island in the BDCP near-term implementation period by █ percent from mean survival rates observed from [year] to [year].</p>
<p>Objective STEE1.4: Increase the survival of juvenile San Joaquin Basin steelhead passing through the Delta to Chipps Island in the BDCP long-term implementation period by █ percent from mean survival rates observed from [year] to [year].</p>
<p>Objective STEE2.1: Increase the mean weight and length of juvenile Sacramento Basin steelhead passing through the Delta to Chipps Island.</p>
<p>Objective STEE2.2: Increase the mean weight and length of juvenile San Joaquin Basin steelhead passing through the Delta to Chipps Island.</p>
<p>Objective STEE3.1: Provide for flows through the Delta that reflect the variability present in the natural hydrograph to provide for a diversity of rearing conditions for Central Valley steelhead over time.</p>
<p>Objective STEE4.1: Provide flow conditions that minimize occurrences of false attraction of all runs of steelhead into non-natal basins.</p>
<p>Objective STEE4.2: Increase the passage of steelhead past the Fremont Weir into the Sacramento River by █ percent from the passage efficiency provided by the existing Fremont Weir fish ladder.</p>
<p>Objective STEE4.3: Increase the passage of San Joaquin Basin adult steelhead past the Stockton Deep Water Ship Channel by contributing towards maintaining dissolved oxygen levels of at least 5 ppm within the Stockton Deep Water Ship Channel during periods steelhead are present.</p>
<p>Objective SASP 1.1: Implement a new comprehensive monitoring program for Sacramento splittail in their current range with multiple mark recapture techniques as designed by the Department of Fish and Game.</p>
<p>Objective SASP 1.2: Contribute towards increasing the abundance of Sacramento splittail within the Delta and Suisun Bay in the near-term implementation period such that the following conditions are met.</p> <ol style="list-style-type: none"> 1. The FMWT numbers will exceed 19 or greater for seven of 15 years, the Suisun Marsh catch per trawl will exceed 3.8 for seven out of 15 years, and young-of-year abundance will exceed 3.1 per trawl for at least three out of 15 years (splittail young-of-year abundance can be applied to meet the total abundance (i.e., 3.1 young per trawl can be applied to meet the 3.8 target). 2. Bay Study otter trawl numbers will be 18 or greater and catch of young-of-year will exceed 14 for 3 out of 15 years.
<p>Objective SASP1.3: Contribute towards increasing the abundance of Sacramento splittail within the Delta and Suisun Bay in the long-term implementation period to achieve target abundance values based on the new monitoring program established under Objective SASP1.1.</p>
<p>Objective SASP1.4: Maintain the distribution of Sacramento splittail within the Delta and Suisun Bay to achieve targets distribution values based on the new monitoring program established under Objective SASP1.1.</p>
<p>Objective SASP1.5: Provide increased spatial availability of Sacramento splittail spawning habitats.</p>

Objective SASP1.6: Maintain multiple spawning cohorts of Sacramento splittail as part of the breeding population as indicated by first dorsal ray aging data collected under the new monitoring program established under Objective SASP1.1.
Objective GRST1.1: Provide flow conditions that minimize occurrences of false attraction of adult green sturgeon into non-natal basins.
Objective GRST1.2: Increase the passage of adult green sturgeon past the Fremont Weir into the Sacramento River by █ percent from the passage efficiency provided by the existing Fremont Weir fish ladder.
Objective GRST1.3: Provide for the potential reestablishment of green sturgeon in the San Joaquin River by contributing towards maintaining dissolved oxygen levels of at least 5 ppm within the Stockton Deep Water Ship Channel during periods adult green sturgeon are migrating to spawning habitats.
Objective GRST 2.1: Increase the spatial distribution of juvenile green sturgeon within the Delta.
Objective GRST3.1: Provide for flows through the Delta that reflect the variability present in the natural hydrograph to provide for a diversity of rearing conditions for green sturgeon over time.
Objective WHST1.1: Provide flow conditions that minimize occurrences of false attraction of white sturgeon into non-natal basins.
Objective WHST1.2: Increase the passage of white sturgeon past the Fremont Weir into the Sacramento River by █ percent from the passage efficiency provided by the existing Fremont Weir fish ladder.
Objective WTST1.3: Increase the passage of white sturgeon past the Stockton Deep Water Ship Channel by contributing towards maintaining dissolved oxygen levels of at least 5 ppm within the Stockton Deep Water Ship Channel during periods white sturgeon are present.
Objective WHST 2.1: Increase the spatial distribution of white sturgeon within the Delta.
Objective WHST3.1: Provide for flows through the Delta that reflect the variability present in the natural hydrograph to provide for a diversity of rearing conditions for white sturgeon.
Objective RILA1.1: Provide flow conditions that support upstream migration of adult river lamprey through the Delta to upstream spawning habitats.
Objective RILA1.2: Maintain sufficient low salinity zone holding habitat to support the abundance of river lamprey needed to successfully metamorphosis and outmigrate from the Delta to maintain a viable Central Valley population.