Appendix K Framework of Voluntary Agreements

NOTE: Appendix K is a new appendix that has been added to the DEIR since initial publication, as part of the FEIR process. The additional appendix is not shown in underline for ease of reading.

FRAMEWORK OF VOLUNTARY AGREEMENTS

TO UPDATE AND IMPLEMENT THE BAY-DELTA WATER QUALITY CONTROL PLAN

February 4, 2020



Voluntary Agreements

- State and federal law require the State Water Board to protect beneficial uses.
- The State Water Board must complete its update to the Bay-Delta Water Quality Control Plan to protect beneficial uses in the Sacramento and San Joaquin Rivers and Bay-Delta.
- In recent years, salmon and other fish species that rely on these waterways have experienced dramatic declines and several native species are now threatened with extinction.
- Voluntary commitments of flows and habitat can help recover these fish populations more quickly and holistically than regulatory requirements, and with less negative social and economic impacts.

Refined Voluntary Agreements

- Includes the essential terms to finalize Voluntary Agreements to implement the update to the Bay-Delta Water Quality Control Plan.
- Supplements the Planning Agreement (March 2019) and the Framework Proposal (December 2018).
- Expands commitments of flows, habitat restoration and funding to build a package that the state team believes can meet scientific and legal adequacy.
- Goal is to execute enforceable VA agreement with commitments. We have made significant progress towards securing the assets required.

State Team's Process to Generate Refined VA Framework

- Water users detailed commitments from December 2018 Proposal in March 2019 Planning Agreement.
- State Team modeled flows and habitat commitments.
- Worked with water users and conservation groups to build a governance structure that will adaptively manage flows and habitat through scientific monitoring and experimentation.
- Interagency team performed a preliminary assessment of proposed Voluntary Agreements and what is needed for scientific and legal adequacy to implement the Bay Delta Plan update.

New Voluntary Agreement Framework

- Provides 800,000-900,000 acre feet of new flows for the environment above existing conditions in dry, below normal and above normal water year types, and several hundred thousand acre feet in critical and wet years to help recover fish populations.
- Restores over 60,000 acres of new habitat, from targeted improvements in tributaries to large landscape-level restoration in the Sacramento Valley.
- Generates over \$5 billion in new funding for environmental improvements.
- Enables a new, collaborative science hub for monitoring and experimentation.
- Expands tools to recover fish populations; more adaptiveness to respond to changing conditions.
- Expedites implementation; gets water and habitat added quickly.

Baseline for Improvements

- The baseline to which VA flows are to be added is recent long-term average annual tributary flows and Delta outflows, including flows required by Water Rights Decision 1641 (D-1641) and the 2008/09 Biological Opinion (BiOp) as well as other flows that are recent historical conditions. F or purposes of implementation, this total volume of water may be flexibly re-shaped in timing and seasonality in order to test biological hypotheses while reasonably protecting beneficial uses. Such shaping will be subject to VAs' governance program.
- The baseline for habitat restoration measures is physical conditions and regulatory requirements existing as of December 2018, when the State Water Board adopted Resolution 2018-0059.

Key Water Quality Objectives

- Advances a goal to achieve doubling of CA salmon populations by 2050. This puts a target date on what is known as the Doubling Objective for Salmon.
- Implements an objective that provides for viability of native fish populations.

Increased Flows above Baseline

(TAF)	С	D	BN	AN	W
San Joaquin Basin	63	215	249	182	50
Sacramento Basin	37	276	256	281	45
Water Purchase Programs	125	109	195	237	205
Exporters	0	100	0	0	0
Subtotal New Outflow Above Baseline (Year 1)	225	700	700	700	300
New Water Projects & Programs (Before Year 8)	45	202	212	115	45
Total New Outflow Above Baseline (Year 1-8)	270	902	912	815	345
Exporters (Spring baseline maintenance)	0	200	300	300	0
Total New and Re-operated Outflows	270	1,102	1,212	1,115	345
State Team's Adequacy Target	260-	740-	840-	840- 1 200	300*- 350
	350	1,000	1,100	1,200	350

*Only applies to a subset of wet years

Habitat Improvements Above Baseline

Area	Acres pursuant to Planning Agreement	Additional Acres per Framework to support > 50% of Doubling Objective
San Joaquin Basin	35 (instream), 80 (floodplain)	246 (floodplain)
Sacramento Basin	307 (spawning habitat) 487.5 (instream habitat) Up to 5,360 (floodplain habitat, middle	 200 (tributary floodplain habitat) 8,000 (floodplain habitat: lower Sutter Bypass) 58,600 (floodplain habitat: Sutter
	Sutter Bypass and tributary habitat)	Bypass, Butte Sink, Colusa Basin) 110,000 (food production from flooding rice fields)
North Delta Arc and Suisun Marsh	5,455	5,000*

*Contingent on securing additional funding

Governance, Science and Adaptive Management

- Governance program to strategically deploy flows and habitat, implement a science program, and develop strategic plans and annual reports.
 - Dedicated staff
 - Environmental water trustee
- Comprehensive science program guided by structured decision-making processes to determine and/or to adjust flow and non-flow measures.
- This program will implement specific experiments to test specific outcomes, learn from the experiments, and facilitate a collaborative and transparent process.

15-year Implementation Costs

\$5.2 billion investment to improve environmental conditions within the watershed.





Implementation

- The VAs remain in effect for a term of 15 years.
- The State Water Board will work with stakeholders to develop accounting procedures to ensure VA flows materialize as envisioned.
- The State Water Board will use its legal authority to protect VA flows against diversions for other purposes.
- Non-signatories to the VA will be subject to the State Water Board's regulatory requirements to achieve unimpaired flows.
- The State Team will work with willing participants to expedite early implementation in 2020, or as soon as possible following applicable environmental review, including, but not limited to, dedication of new flows, advanced planning and implementation of habitat projects.

Steps to Finalize VAs

- This Framework is an important milestone but there is work ahead to finalize the VAs.
- Work to harmonize VA with pumping rules to protect endangered species.
- Work with VA participants to refine framework to finalize outstanding governance, policy and legal issues.
- Submit proposal to the State Water Board for a third-party scientific review, environmental review, and a public consideration.
- Consistent with applicable laws, certain early actions could also be implemented to accelerate realization of VA benefits.

THANK YOU

For your continued constructive engagement and support