



MWDOC/OCWD Joint Planning Committee

Bay-Delta Regulatory Update

Item 1

January 25, 2023

Bay-Delta Regulatory Update

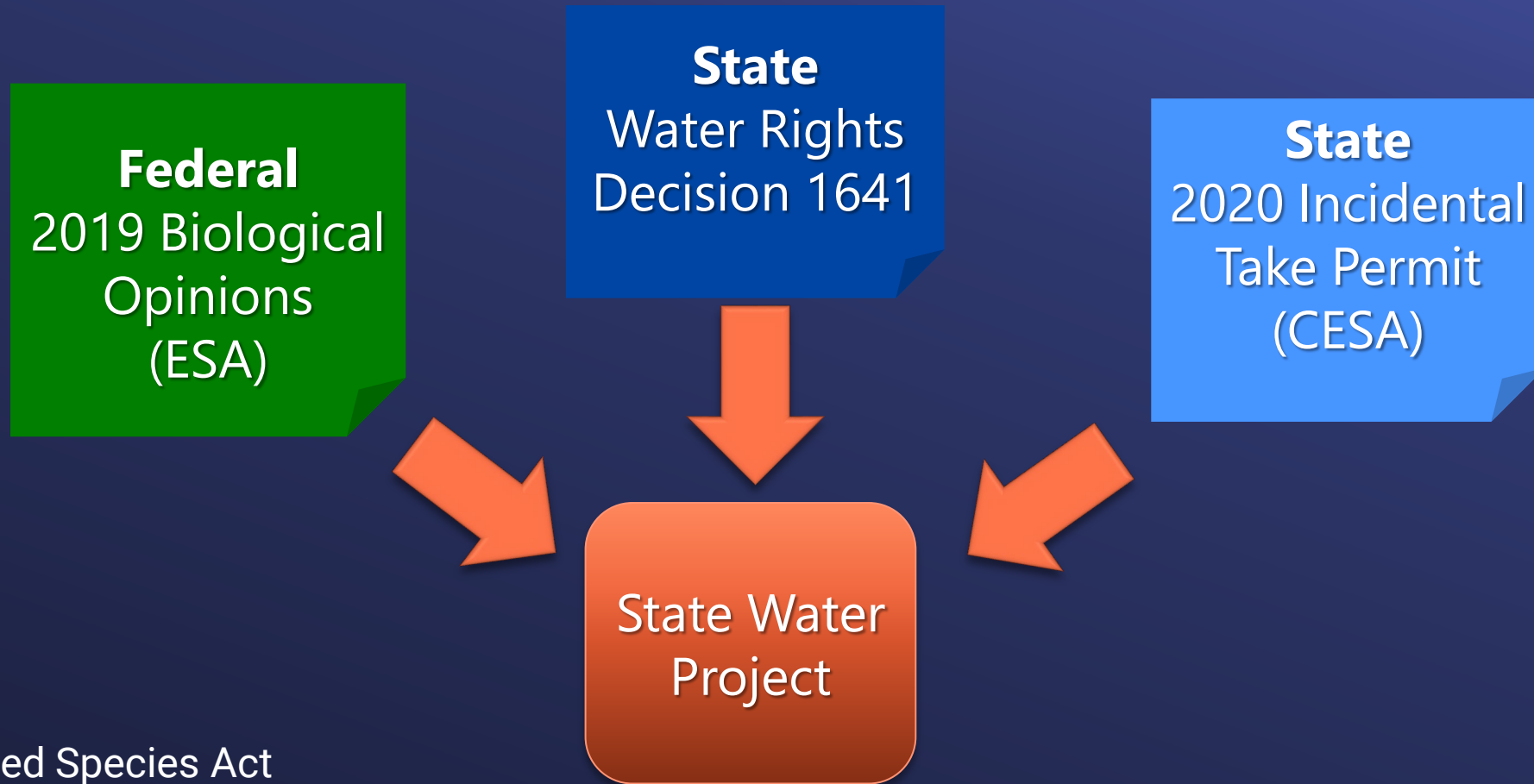
Agenda

- Overview and Current Operations
- Long-Term Operations
- Voluntary Agreements

Regulatory Overview

Background: Regulatory Overview

Key Permits and Standards Governing Project Operations



ESA = Endangered Species Act
CESA = California Endangered Species Act

Shasta Reservoir
Temperature Management

Shasta Reservoir
Temperature Management

Bay-Delta Regulatory Framework

Summer Flow

Export/Inflow Ratio

Cross Channel Gates
Cross Channel Gates

Winter/Spring X2

Agriculture/Urban Salinity

Summer/Fall Habitat Actions

Fish and Wildlife Flows

Summer/Fall Habitat Actions

Old and Middle River
Reverse Flows

San Joaquin River
Inflow/Export
Ratio

Old and Middle River
Reverse Flows

Inflow/Export Ratio

2019 Biological Opinions (ESA)

Incidental Take Permit (CESA)

Permit/Water Quality Control Plan

Banks
(SWP)

Jones
(CVP)

Current Bay Delta Operations

Net Delta
Outflow

Export/Inflow
Ratio

3 Day Average

Flows \geq
25,000 cfs

and

Turbidity
 \geq 50 NTU

01/03-01/16

Early Winter
Pulse Protection
“First Flush”

01/17-Present

Turbidity Bridge
Avoidance

Delta Water Quality
Standards

Turbidity
 \geq 12 NTU

Old and Middle River
Reverse Flow
(OMR)

-2,000 cfs for 5 days

-3,500 cfs

2019 Biological Opinions (ESA)

Incidental Take Permit (CESA)

Permit/Water Quality Control Plan



Regulation of Water Operations

Alignment is Foundational

State
Water Quality
Control Plan

Voluntary
Agreements

Federal
Biological
Opinions
(ESA)

State
Incidental Take
Permit
(CESA)

Reinitiation of Consultation Long-Term Operation of the CVP and SWP

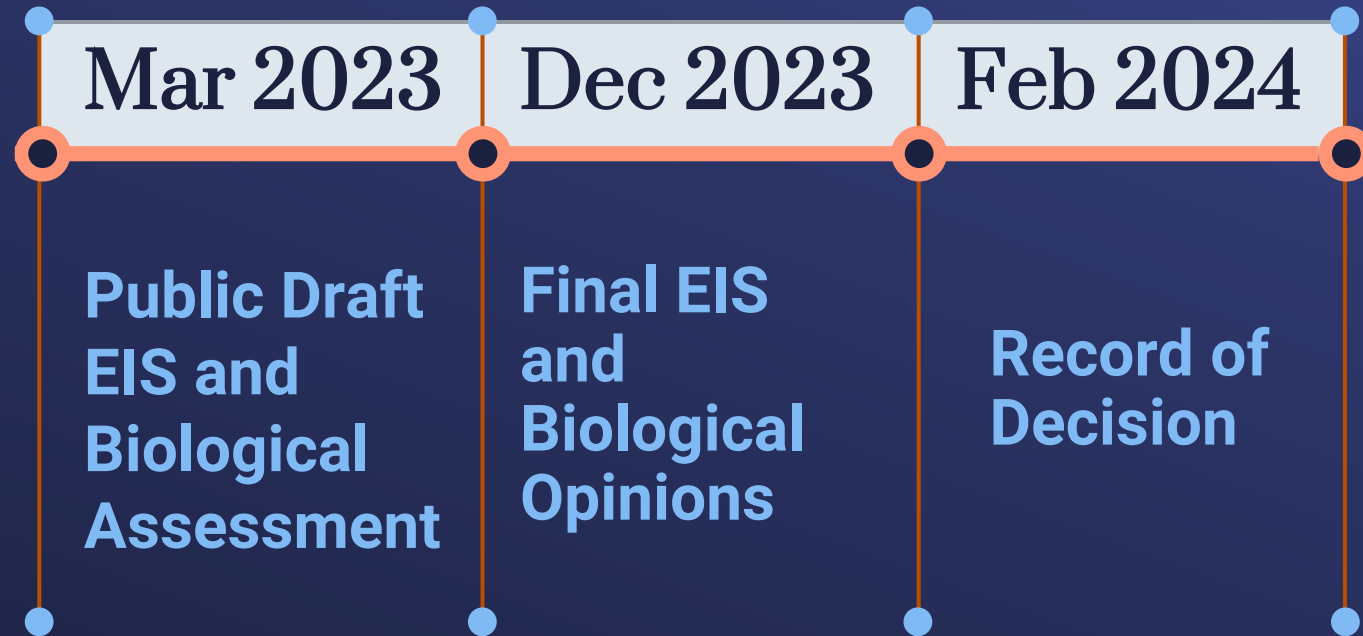
Timeline to Date

Reinitiation of Consultation on Long-Term Operations



Remaining Milestones*

Reinitiation of Consultation on Long-Term Operations



Key Areas of Interest

- Consistency between State and Federal Permits
- Appropriate attribution of CVP and SWP obligations
- Incorporation of Voluntary Agreement commitments

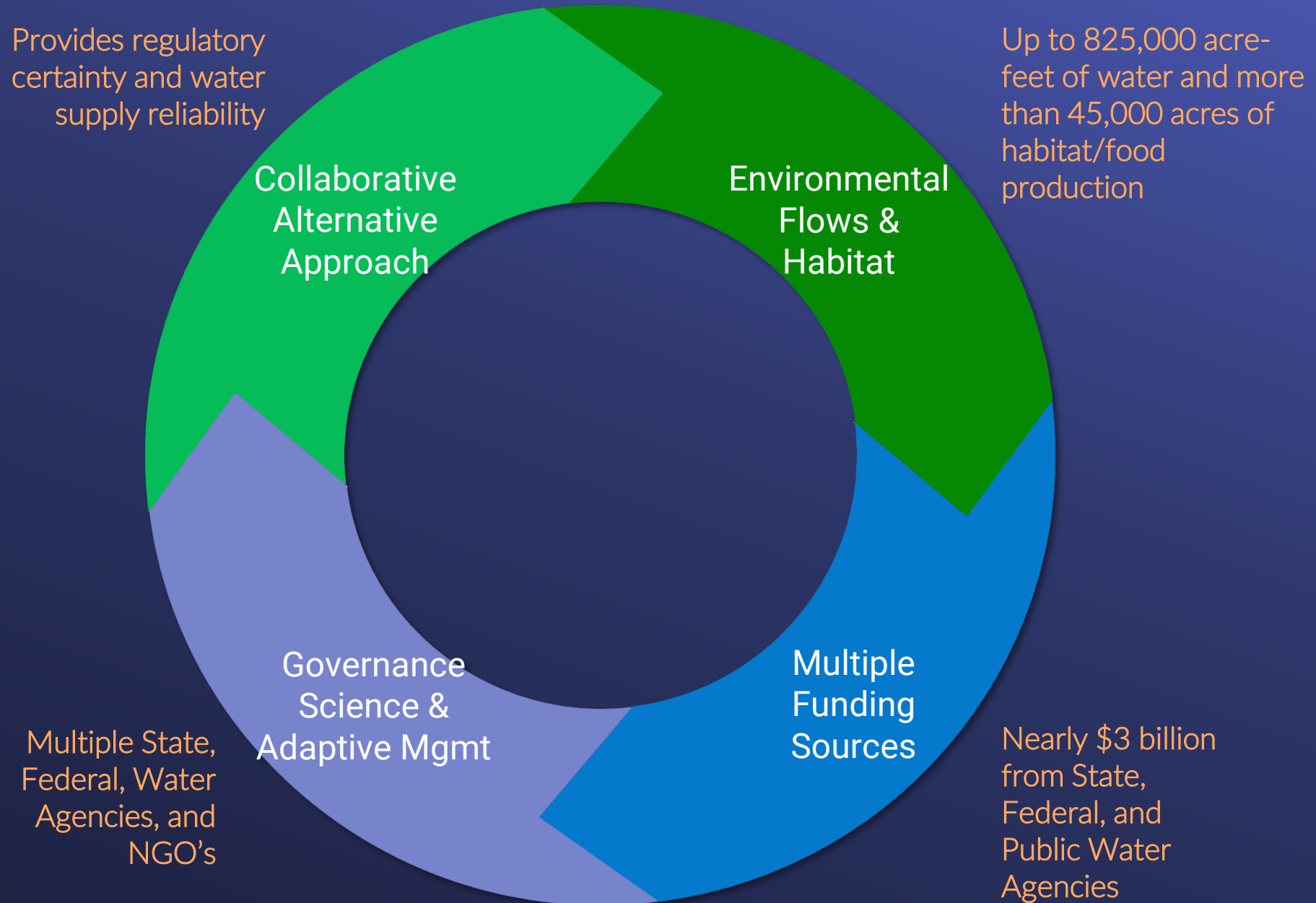
Reinitiation of
Consultation
on the
Long-Term
Operation of
the CVP and
SWP



Voluntary Agreements

Voluntary Agreements Summary

Watershed Wide Approach



Voluntary Agreements

Nine Additional Signatories Since March 2022

March 2022 Initial Signatories

- California Natural Resources Agency
- California Environmental Protection Agency
- Department of Water Resources
- Department of Fish and Wildlife
- U.S. Bureau of Reclamation
California Great Basin Region
- State Water Contractors
- Metropolitan Water District
- Kern County Water Agency
- Westlands Water District
- Glenn-Colusa Irrigation District
- Yuba Water Agency
- Regional Water Authority
- Western Canal Water District
- River Garden Farms
- Garden Highway Mutual Water Company
- Sutter Mutual Water Company

Additional Signatories

August 2022

- East Bay Municipal Utility District
- Friant Water Authority
- San Luis Delta Mendota Water Agency
- Tehama – Colusa Canal Authority
- Solano County Water Agency

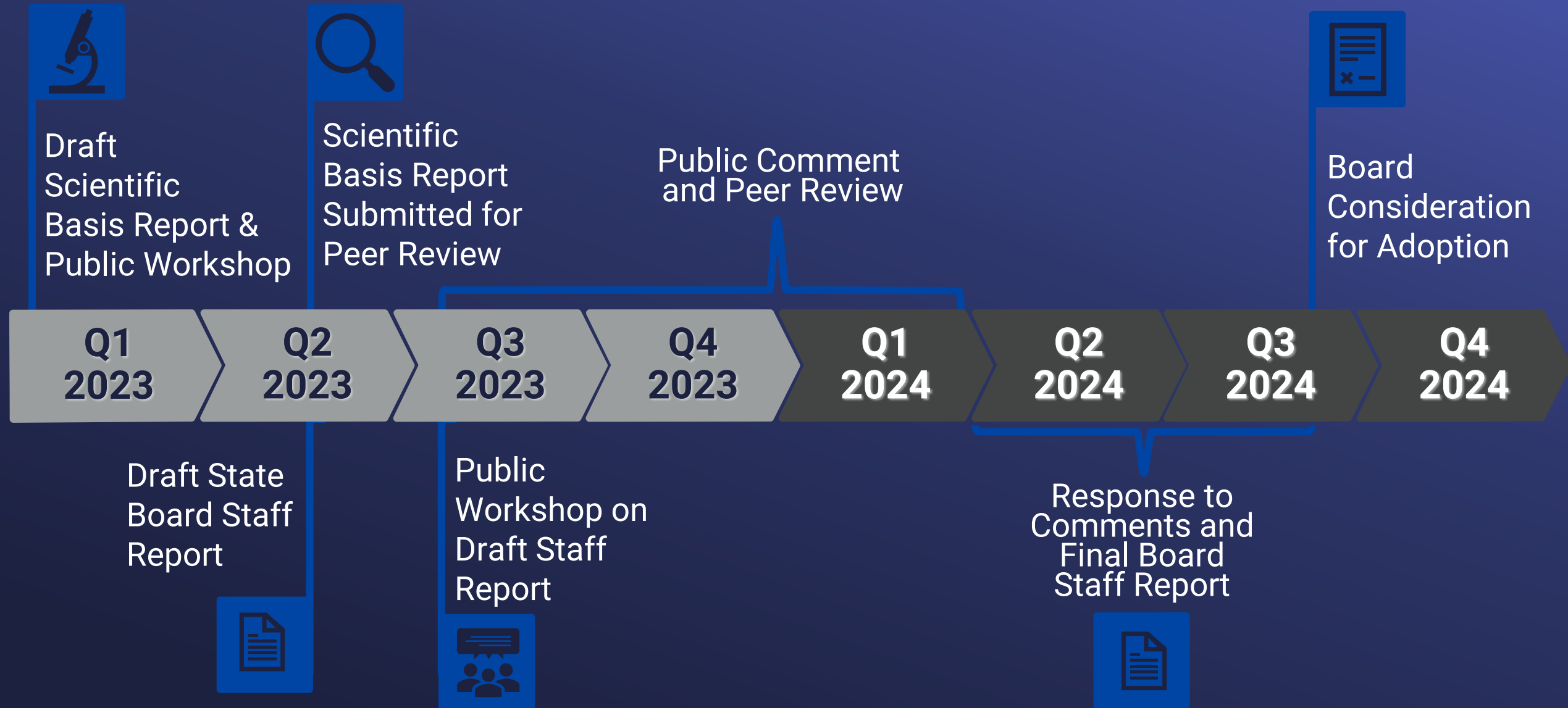
September 2022

- Contra Costa Water District

November 2022

- San Francisco Public Utilities Commission
- Turlock Irrigation District
- Modesto Irrigation District

Voluntary Agreement Timeline*



Bay-Delta Regulatory Update

Summary and Lookahead

- Voluntary Agreements (ongoing)
- Long Term Operations (ongoing)
- Staff Regulatory Update Q3 2023
- Takeaway – Regulatory Alignment is Key

Federal
Biological
Opinions
(ESA)

State
Incidental
Take Permit
(CESA)

State
Water Quality
Control Plan

Voluntary
Agreements



Backup Slides

Theoretical Delta Conveyance Diversions

MISSED OPPORTUNITY

If the DCP was operational during the high rain events in the first half of January, we could have moved

188,000 acre-feet of water
into the San Luis Reservoir

188,000 acre-feet of water = enough water to supply:



Over **1.9 MILLION**
people for one year

or
Nearly **660,000**
households for one year

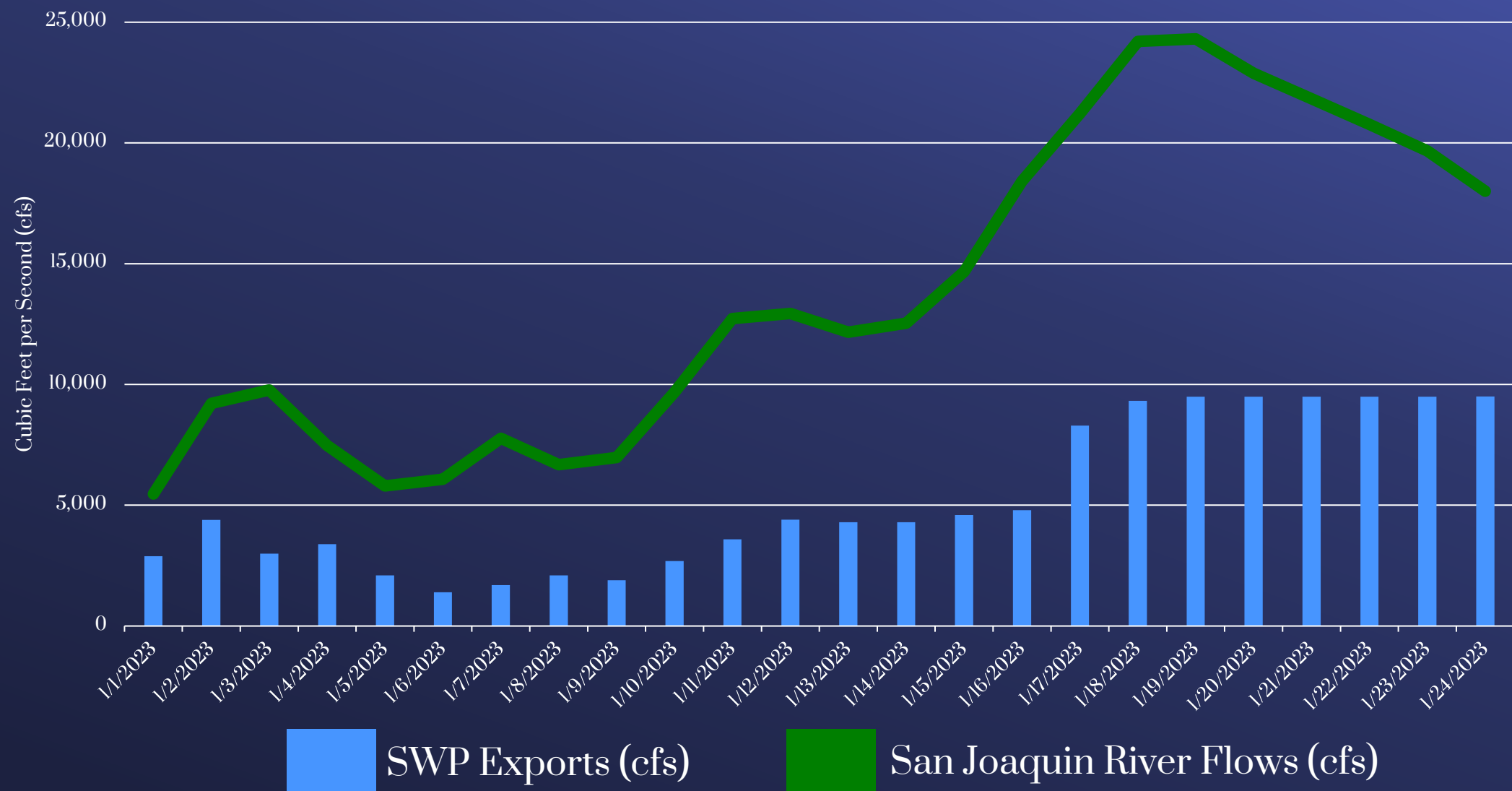
The theoretical DCP diversion of 188,000 acre-feet is about **30%** of the total volume exported by the SWP in water year 2022.

Diversions for Water Year 2023 (Estimates through January 16, 2023)

Month	State Water Project Exports* (Acre-Feet)	Central Valley Project Exports* (Acre-Feet)	Theoretical Additional DCP Diversion** (Acre-Feet)	South Delta Export Limiting Factors (days in month)
October	29,000	63,000		WQ (10/1-10/31)
November	38,000	81,000		WQ (11/1-11/30)
December	115,000	86,000		WQ (12/1-12/26), E/I (12/27-12/31)
January	102,000	116,000	188,000	OMRI-5k (1/1-1/2), IEWPP (1/3-1/16)

https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Delta-Conveyance/Public-Information/DCP_Diversions_01172023_Final.pdf

SWP Exports vs San Joaquin River Flows



Calculation of the OMR Index

$$Q_{OMR} = A * Q_{\text{Vernalis}} + B * Q_{\text{South Delta Diversions}} + C$$

Where: $Q_{\text{South Delta Diversions}} = Q_{CCF} + Q_{\text{Jones}} + Q_{CCWD} + Q_{\text{South Delta NCD}}$

HORB	GLC Barrier	Vernalis (cfs)	A	B	C
Out	Out	< 16,000	0.471	-0.911	83
Out	Out	16,000 – 28,000	0.681	-0.940	-3008
Out	Out	> 28,000	0.633	-0.940	-1644
Out	In	All	0.419	-0.924	-26
In (Spring)	Out/In	All	0.079	-0.940	69
In (Fall)	Out/In	All	0.238	-0.930	-51

<https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Operations-And-Maintenance/Files/Operations-Control-Office/Delta-Status-And-Operations/Delta-Operations-Daily-Summary.pdf>

<https://water.ca.gov/Programs/State-Water-Project/Operations-and-Maintenance/Operations-and-Delta-Status>

https://www.baydeltalive.com/assets/588ee18bdb51ef1619ac6fd28b97f694/application/pdf/Hutton_2008_OMR_Report.pdf