

# SWP Water Operations Updates

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CALIFORNIA DEPARTMENT OF  
WATER RESOURCES

# OVERVIEW

- Coordinated Operations Agreement (COA)
  - December 2018 Addendum
- State Long-Term Operations
  - CESA Incidental Take Permit Process
- Forecast-Informed Reservoir Operations



# Coordinated Operations Agreement (COA)

- No sharing formulas provided in the water rights permits for SWP
- De facto water rights settlement between SWP and CVP
- Need for agreement to coordinate operations between the SWP and CVP was recognized by 1960
- Informally agreements used to guide operations until 1986
- Formal agreement reached in 1986
- Determines the sharing of water supply benefits and in-basin obligations.



# 2018 COA Addendum

- Original agreement mandates periodic review
- Substantial regulatory changes have occurred since 1986
  - State Water Board D-1641
  - Biological Opinions
- New infrastructure constructed
  - Four pump expansion at Banks Pumping Plant
  - North Bay Aqueduct
  - Freeport Diversion
  - California Aqueduct / Delta Mendota Canal Inter-tie
- Climatological extremes experienced
  - 2013-2016 drought



# 2018 COA Addendum (cont.)

## What were the major changes from the original agreement?

- Relative contributions to meet in-basin needs was tailored to year type
  - Old rules split this obligation 25% SWP / 75% CVP
  - New rules varies SWP obligation from 40% in critically dry years to 20% in wetter years
- Established proportional shares for the SWP and CVP to export water when constrained by south Delta regulation (e.g. Old and Middle River flow objectives found in the Biological Opinions)
  - Excess water conditions: CVP 60% / SWP 40%
  - Balance water conditions: CVP 65% / SWP 35%
- Established potentially more frequent and more streamlined review processes



# SWP Long-Term Operations ITP

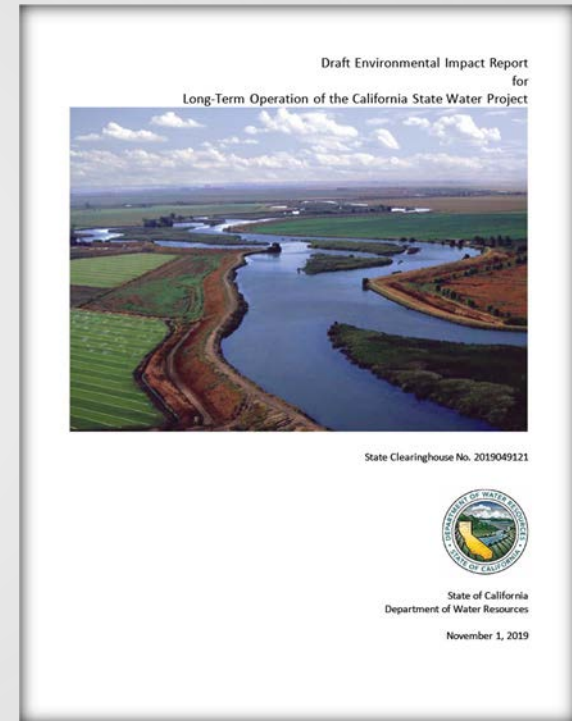
## Regulatory Background

- SWP operations under CESA currently covered through Consistency Determinations (CDs) that were based on federal Biological Opinions.
- DWR coverage for Longfin smelt (not federally-listed) under a CESA Incidental Take Permit (ITP).
- Notice of Preparation (April 2019): New approach to CESA coverage based on a separate ITP for four species.
- Provides for CESA authorization for the SWP regardless of any potential changes in federal law
- The Environmental Impact Report (EIR) was released for public review on November 21, 2019 in support of DWR's ITP application.



# Environmental impact report (EIR)

- Foundational Principles
  - CEQA and CESA have different standards of review.
    - minimization or full mitigation of take under CESA, but not under CEQA.
- Contents
  - No Project, Proposed Project, and Alternatives
  - SWP facilities only
  - Delta-focused



# Proposed Project Water Operations

- D-1641 Delta export constraints and flow and water quality requirements
- Real-time Old and Middle River (OMR) operations
  - OMR management controls the flows toward the export pumps that can cause entrainment
- Summer/Fall Habitat Actions
  - Actions to improve habitat conditions and food supply for Delta Smelt
- Adaptive Management Plan
  - Allows evaluation of the efficacy of actions in the Proposed Project





# Alternatives

- Alternative 1 – No Project
- Alternative 2a – Spring outflow via SWP export curtailment with no outflow protection.
- Alternative 2b – Spring outflow as in 2a and adaptively managed block of water to be used in the summer-fall of wet and above normal years
- Alternative 3 – Operation of Head of Old River Barrier (spring) and Georgiana Slough Non-physical Barriers.
- Alternative 4 – CDFW-proposed alternative for summer/fall habitat.



# SWP LTO Next Steps

- Submit ITP application to CDFW, including appropriate minimization and/or mitigation measures: **mid-December 2019**
- Close of DEIR Public Comment Period: **January 6, 2020**
- Final EIR and Notice of Determination (NOD): **Late February 2020**



# Yuba-Feather Forecast-Informed Water Operations (Y-F FIRO)

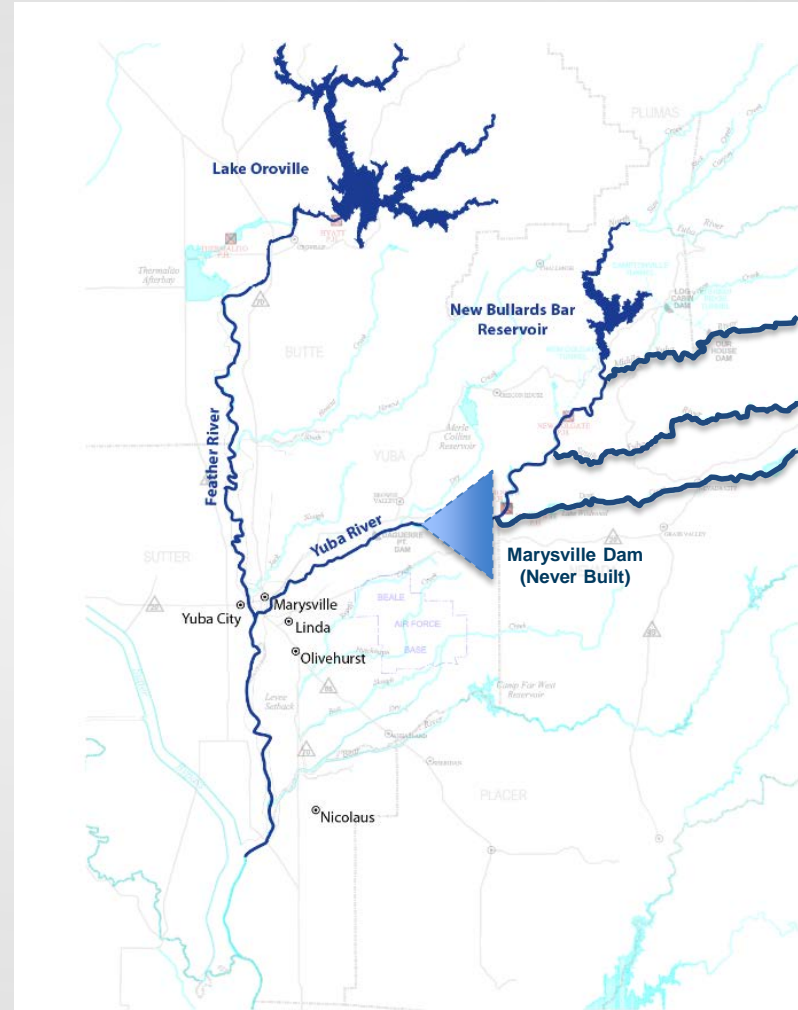
## Collaborative Effort

- Department of Water Resources
- Yuba Water Agency
- UCSD / Scripps Institute
- USACE
  - Research and Development
  - Water Operations
- National Weather Service
- National Marine Fishery Service
- Sonoma Water Agency

## Project Partners



# Yuba-Feather System



# Yuba-Feather FIRO Initiative

- Formal kick-off this year
- Third official on-going FIRO program
- Builds upon existing Forecast Coordinated Operations Program
- Initiate research investigations to improve forecasting
- Develop and conduct viability assessments for formal operations changes
- Expected to provide:
  - ✓ Flood risk reduction
  - ✓ Water supply savings
- Informing development of Water Control Manual updates
  - ✓ Current Water Control Manuals are dated to the early 1970s



# Atmospheric River Research Investments

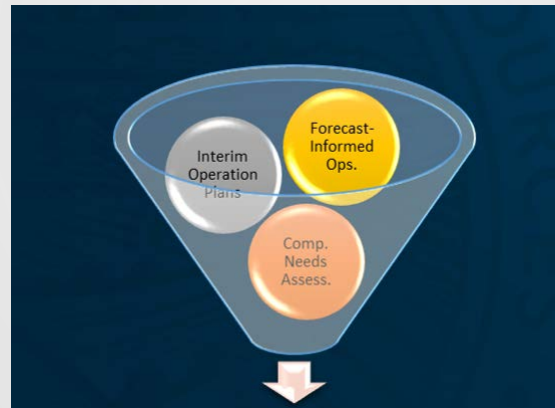


- Ocean Reconnaissance
  - WC-130j Hurricane Hunter
  - Northeast Pacific Buoy Observations
- Land-Based Monitoring Installations
  - Atmospheric Observatories via Weather Balloon
  - Snow Level Vertically Pointing Radar
  - Surface Meteorology Stations
  - Soil Moisture Instrumentation



# Yuba-Feather FIRO Next Steps

- Interim Flood Control Operations Planning
- Comprehensive Needs Assessment for Dam Safety
- Forecast Informed Reservoir Operations Initiative



Updated Water Control Manual



# Questions



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