CENTRAL VALLEY WATER BOARD

CVCWA Executive Briefing



Patrick Pulupa, Executive Officer



CENTRAL VALLEY WATER BOARD

SURFACE WATER PROGRAM UPDATES



CENTRAL VALLEY WATER BOARD - UPDATES

1

Basin Planning

- CV-Salts Update
 - Salt & Boron Control Program
 - MUN Project Update
 - Pyrethroids Control Program
 - New Basin Planning –
 Pesticides Control
 - 2018 & 2020 Integrated Report
- Delta Regional Monitoring Program

2

Permitting

- NPDES Cost of Compliance
 - NPDES Backlog Prevention
 - SSM Rule Implementation
 - State Board's Chronic Toxicity Policy
 - NPDES Ammonia
 - POTW General Order
- Non-15 Permitting (Template, CalRecycle)

3

Compliance & Enforcement

- Significant Changes to 2017
 SB Water Quality Enforcement
 Policy
 - Penalty Calculator Changes
 - Revised Policy on Supplemental Environmental Projects (SEP)
 - Regional Board's SEP Initiatives



CENTRAL VALLEY WATER BOARD- PROGRAM UPDATES



- CV-Salts Program Updates
 - Pyrethroids Control Program
 - 2018 and 2020 Integrated Report
 - Delta Regional Monitoring Program
 - Permitting (NPDES, Non15)
 - Compliance and Enforcement

SALT & NITRATE MANAGEMENT STRATEGY – BROAD PERSPECTIVE



Goals

- 1. Safe Drinking Water Supply
 - Short & Long Term Solutions
- 2. Balanced Salt & Nitrate Loadings
 - Ongoing and Expanding Efforts
- Implement Managed Aquifer Restoration
 - Where Reasonable, Feasible and Practicable



Groundwater only

Groundwater and Surface Water

SCHEDULE TO ADOPT BASIN PLAN AMENDMENTS AND IMPLEMENTION



Date		Deliverable/Action	
May 2018	~	Regional Board Adoption	
Summer 2019		State Water Board Approval Consideration	
Fall 2019		Office Administrative Law Approval Consideration - Groundwater Components Effective Upon Approval	
2020		USEPA Approval Consideration - Surface Water Components Effective Upon Approval	
2019/2020		Initiate Notice to Comply Mailings	

PLANNING FOR IMPLEMENTATION



Early Management Zone Implementation

P&O Study Work Plan

Industry-specific Outreach to Permittees

Current Planning Activities

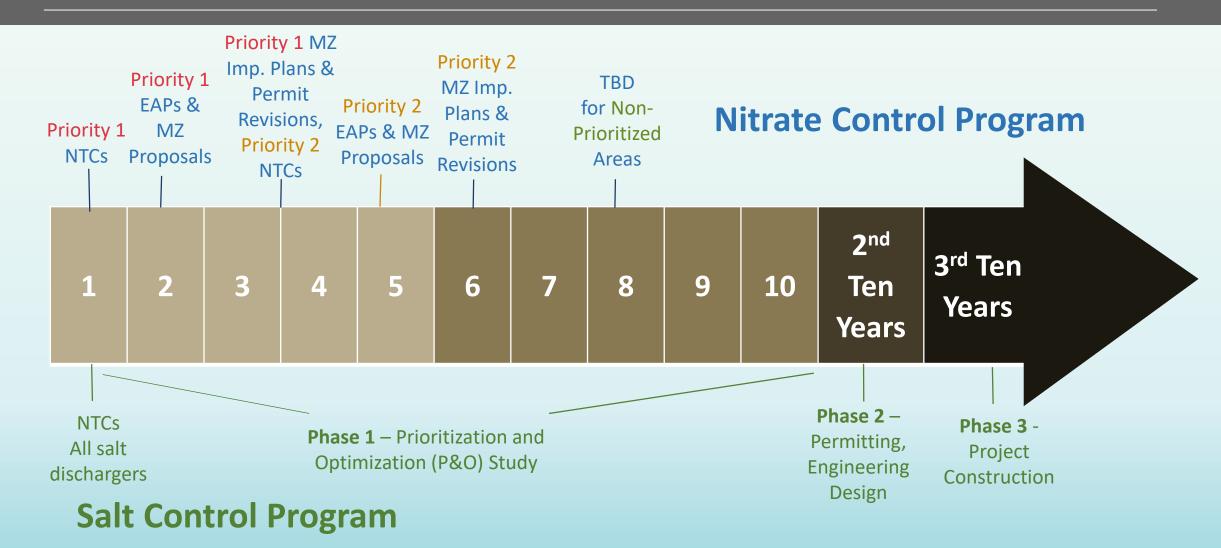
Draft Permit Language

PEOC Fact Sheets, Videos, Workshops

Notice Templates

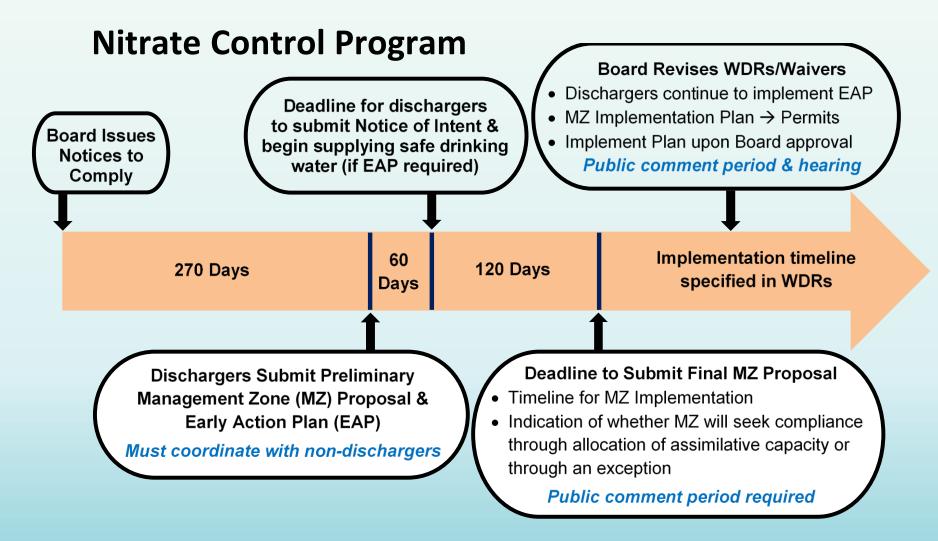
IMPLEMENTATION TIMELINE





IMPLEMENTATION TIMELINE





SALINITY OBJECTIVES IN THE LOWER SAN JOAQUIN RIVER



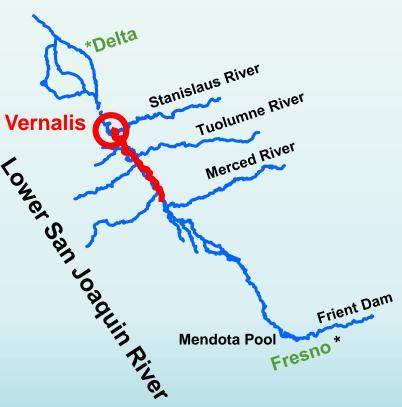
Basin Plan Amendments to Establish EC Objectives in the Lower San Joaquin River

WQO	1,550 μS/cm (30-day running average)
Performance Goal	1,350 μS/cm
Extended Dry Period WQOs	2,470 μS/cm (30-day running average) 2,200 μS/cm (annual average)

- ✓ Includes guidance for NPDES Compliance
 - Calculating RPA dilution to first AGR/MUN diversion
 - Effluent limitation EC concentration or TDS loading
 - Compliance Period monthly average for AGR

Status

- ✓ Amendments fully approved in December 2018
- WQOs effective on January 1, 2020



MUN EVALUATION IN AGRICULTURALLY DOMINATED WATER BODIES



Basin Plan Amendments to establish a

Consistent - Transparent - Streamlined

MUN Evaluation Process

in Ag dominated surface water bodies



Status

- ✓ Adopted by Regional Board August 2017
- State Board hearing July 2018
 - State Board staff review
 - Continuation of hearing in 2019



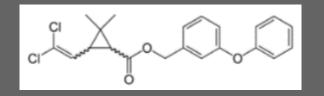


CENTRAL VALLEY WATER BOARD- PROGRAM UPDATES



- CV-Salts Program Updates
 - Pyrethroids Control Program
 - 2018 and 2020 Integrated Report
 - Delta Regional Monitoring Program
 - Permitting (NPDES, Non15)
 - Compliance and Enforcement

PESTICIDES IN WASTEWATER – PYRETHROID CONTROL PROGRAM



Pyrethroids Basin Plan Amendment

In development since 2012

Adopted June 2017

SWRCB July 2018 OAL 19 Feb 2019 *

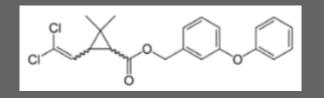
USEPA (TMDLs) 22 April 2019

Conditional Prohibition

Discharges above
 numeric triggers
 without an approved
 management plan
 prohibited

* Amendment Effective Date

PESTICIDES IN WASTEWATER – PYRETHROID CONTROL PROGRAM



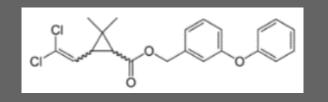
Basin Plan Amendment - Requirements for POTWs

- Monitoring (>1 MGD)
 - Pyrethroids in effluent
- Requirements for allocating use of Assimilative Capacity
 - Pyrethroids and toxicity to Hyalella in receiving water
 - Potentially pyrethroid alternatives

- Management Plans
 - When pyrethroid discharges are above prohibition triggers
 - Part of pollution prevention plans



PESTICIDES IN WASTEWATER – PYRETHROID CONTROL PROGRAM



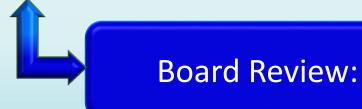
Basin Plan Amendment POTW – Timeline for Implementation

Baseline Monitoring:

Due with effluent characterization monitoring



Due starting Feb 2022 (3 years from effective date). After Feb 2022, due within 1 year of exceedance



Of all aspects of the program in 2034 (15 years)

NEW BASIN PLANNING: PESTICIDES CONTROL PROGRAM



New Basin Planning Efforts

Due Date	Research & Implementation Activities	
Feb 2020	Develop Pyrethroids Research Plan	
On-going	Partitioning Coefficients Research Contract – UC Davis	
Late 2019	Pyrethroid Method Validation & Lab Accreditation – ELAP	
May 2019	Pyrethroid Stakeholder Meetings	

NEW BASIN PLANNING: OTHER PESTICIDES IN WASTEWATER



Pro-active approaches - current concerns & replacement products

Triennial Review Priority

Amend both Basin Plans

Possible POTW-specific provisions

Comprehensive Pesticide Control Program

Update general pesticide provisions - fine tune specific programs

Stakeholder involvement; CEQA Scoping; Board Consideration 2022

Build on previous success and lessons

15 May 2019 CVCWA Executive Briefing



CENTRAL VALLEY WATER BOARD- PROGRAM UPDATES



- CV-Salts Program Updates
 - Pyrethroids Control Program
 - 2018 and 2020 Integrated Report Updates
 - Delta Regional Monitoring Program
 - Permitting (NPDES, Non15)
 - Compliance and Enforcement

2018 INTEGRATED REPORT— UPDATE



2018 Integrated Report - Update

Proposed Changes:

 Consideration by Central Valley Water Board -June 6-7, 2019

303(d) List Updates:

 Changes will update the USEPA approved 2014-2016 303(d) List

Recent Assessments:

 Assessments limited to impaired waterbodies addressed by existing regulatory programs

Full Assessments:

Full assessment of all readily available data for Central Valley Region waters in 2020 Integrated Report cycle



Proposed Changes to the CWA 303(d) List of Impaired Waters

Proposed Changes				
41 Listings	Addressed by USEPA Approved TMDL for pyrethroid pesticides			
22 Listings	 Addressed by an action other than a TMDL 9 impairments being addressed by Basin Plan control program for pyrethroid pesticides 13 impairments being addressed by approved ILRP management plans 			
31 Listings	Removed from the 303(d) list of impaired waterbodies			



2020 Integrated Report - Timeline

Data solicitation open – Closes June 14, 2019 Consideration by
Central Valley
Water Board Fall 2021
(Tentative)

Consideration by
State Water
Board - Fall 2022
(Tentative)

Consideration by USEPA – Winter 2022 (Tentative)



CENTRAL VALLEY WATER BOARD- PROGRAM UPDATES



- CV-Salts Program Updates
 - Pyrethroids Control Program
 - 2018 and 2020 Integrated Report
 - Delta Regional Monitoring Program
 - Permitting (NPDES, Non15)
 - Compliance and Enforcement

DELTA REGIONAL MONITORING PROGRAM



Overview of Updates

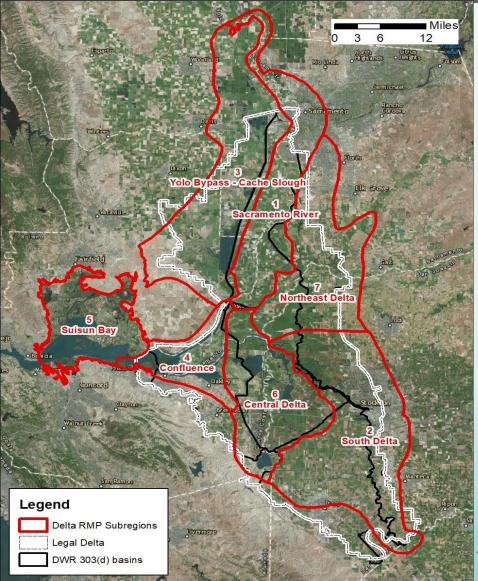
- In FY 18/19. Revenue grows to \$1.4M
- 16 Committee seats
 - Wastewater, stormwater, dredging, agriculture, water supply, coordinated monitoring, habitat restoration, EPA, Regional and State Board
- SEPs for RMP projects

- Current activities:
 - Pesticide/toxicity testing
 - Nutrient studies
 - Planning for Constituents of Emerging Concern (CEC) pilot study
 - Mercury monitoring (water and fish)



DELTA REGIONAL MONITORING PROGRAM – PESTICIDES AND TOXICITY





Pesticides and Toxicity

- Rotating basin design:
 - 2018-19 first year of a 4-year design
 - Monitoring in two Delta subregions annually, plus 2 fixed stations
 - 172 current use pesticides
 - 5 species toxicity testing
- Pesticides and Toxicity Data Interpretative Report:
 - Includes RMP data (2015-2017) plus other datasets from USGS, DPR, CEDEN
 - Due June 2019

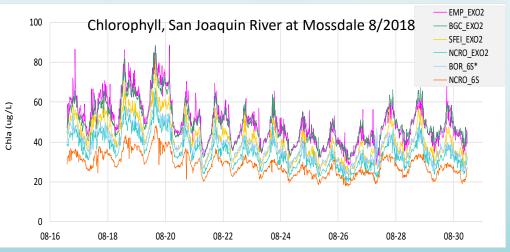
DELTA REGIONAL MONITORING PROGRAM – NUTRIENT STUDIES



Support of Delta Nutrient Research Plan

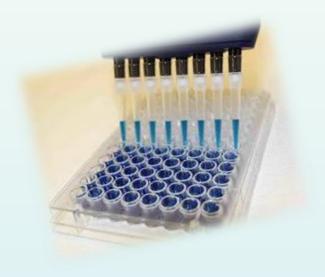
- Current work:
 - Intercalibration Study for Chlorophyll Sensors
 - High –Frequency Water Quality Data and Models to gain Insights into the Factors Regulating Phytoplankton Blooms in the Delta in WY2016
- Published Reports:
 - The program provided funding towards three reports published by USGS in 2017





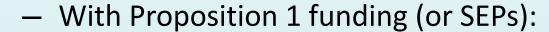
DELTA REGIONAL MONITORING PROGRAM – CONSTITUENTS OF EMERGING CONCERN (CECs)





CECs Pilot Study

- 3 year study:
 - Year 1: Ambient water, tissue & sediment
 - Years 2-3: Ambient and Source water
 - Year 3: Gradient study



 Additional design elements may include non-targeted analyses, bioanalytical and toxicity, microplastics

Common Use	Constituent
Hormones	Estrone 17-beta- estradiol
Pharmaceuticals and Personal Care Products	Ibuprofen Bisphenol Galaxolide (HHCB) Diclofenac Triclosan Triclocarban
Flame retardant	PBDE-47 PBDE-99
Water repellant Non-stick cookware Firefighting foams	PFOS PFOA



DELTA REGIONAL MONITORING PROGRAM – MERCURY MONITORING (WATER & FISH)



Mercury

- **Support Delta Methylmercury TMDL Review**
 - Mercury & methylmercury loading to the Delta
 - Revisit linkage between methylmercury in water and fish
 - Support Department of Water Resources mercury models
 - Monitor long term trends
- Collecting fish & water at 8 locations in the Delta







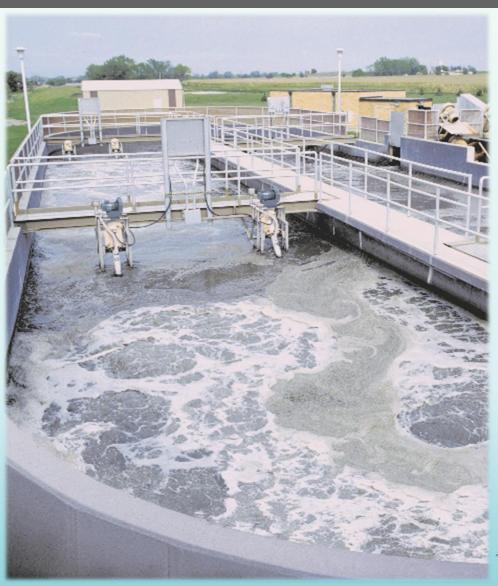
CENTRAL VALLEY WATER BOARD- PROGRAM UPDATES



- CV-Salts Program Updates
 - Pyrethroids Control Program
 - 2018 and 2020 Integrated Report
 - Delta Regional Monitoring Program
 - Permitting (NPDES, Non15)
 - Compliance and Enforcement

NPDES PERMITTING – COST OF COMPLIANCE





Monitoring and Reporting Requirements

- BOD/TSS limits
 - Remove max daily limit
 - Remove all mass limits
- Biosolids monitoring
 - Eliminate duplicative monitoring requirements

NPDES PERMITTING – PERMIT BACKLOG PREVENTION

Permit Renewal Process Changes

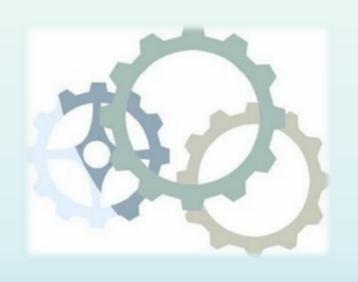
Goal: Identify issues early, prevent permit backlogging

Characterization
Monitoring
During 2nd Year

Mid-Permit Reviews During 3rd Year ROWD due 1-year prior to Expiration

NPDES PERMITTING – PERMIT BACKLOG PREVENTION

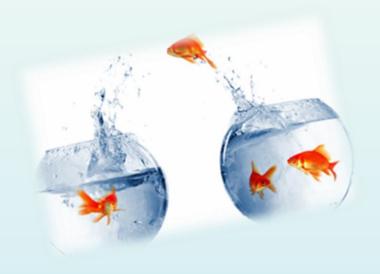
Permit Renewal Process Changes - Mid-Permit Review



- Conduct Preliminary RPA
- Review Technical Reports
- Issue ROWD reminder letter
- Allows Dischargers time to evaluate data issues
 - Conduct additional monitoring
 - Consider studies
 - Water-Effect-Ratio Studies
 - Metal Translator Studies
 - Mixing Zone Studies

NPDES PERMITTING – PERMIT BACKLOG PREVENTION

Technical Reports



- Technical report deliverables
 - Reduced reporting frequency



- 3rd to 2nd year
- Extra time for data review
- Reduce receiving water characterization monitoring

NPDES PERMITTING - SUFFICIENTLY SENSITIVE METHOD RULE (SSM RULE)



SSM Rule

SSM Rule
Effective September 2015

Requires EPA-approved analytical methods that are capable of detecting and measuring pollutants at, or below, applicable water quality criteria or permit limits

NPDES PERMITTING - SUFFICIENTLY SENSITIVE METHOD RULE (SSM RULE)

- More Sensitive Methods & Detection Limits
 - Potential increase laboratory costs



Impact to Dischargers

- Analytical Methods Report
 - Draft with ROWD
 - Final due 60 days after permit adoption
 - Check-in prior to characterization monitoring



- > Goal
- Obtain quality water quality data

NPDES PERMITTING – STATE BOARD'S CHRONIC TOXICITY POLICY

Chronic Whole Effluent Toxicity (WET)

- State Board currently developing
 Statewide Toxicity Provisions
- USEPA mandating numeric limits when reasonable potential
- Regional Board has Discretion for RPA
 - Considers multiple lines of evidence
 - Ensures data is representative
- Where RP, limits are being applied
 - Compliance Schedule can be provided in permit
- Plan to implement Statewide Toxicity
 Provisions during permit renewals



NPDES PERMITTING - AMMONIA

- USEPA updated criteria in 2013
 - More stringent than 1999 criteria
- Regional Board Basin Planning
 - Region-wide ammonia criteria based on resident mussel species
- Continuing to implement 1999 criteria in NPDES Permits.



NPDES PERMITTING - AMMONIA







Freshwater Mussel Study (Phase II.c)

- CVCWA Presentation of Results May 2, 2019
 - Acute toxicity testing with resident mussels and criteria recalculation
- Basin Plan Amendment
 - Expected end of 2020
- Regional Board may implement site-specific criteria
 - Future NPDES permits may contain recalculated criteria...Stay tuned

NPDES PERMITTING – PUBLICLY OWNED TREATMENT WORKS (POTW)

Municipal General Order

- Enrolled three facilities to date
- Developed NOA template w/ EID
 - Contains all relevant information as individual permit
 - MRP is similar in NOA as individual permit
 - Streamlined process
- Feedback is positive
- Plan to enroll 11 more by 1 July 2020







NPDES PERMITTING – PUBLICLY OWNED TREATMENT WORKS (POTW)

Municipal General Order

- Municipal General Order simplifies the permitting process
 - Easier application
 - Shorter renewal period
 - No Board meeting required
 - Easier to amend
- August 2019 amendment
 - Admin draft & tentative draft available for review





NON15 PERMITTING PROGRAM

Permit Template Development

Goals:

- Reduce overall size of permit
- Include table of contents and section headers
- Increase use of tables and attachments
- Easier to focus on areas to provide comment
- Consistency with other programs



NON15 PERMITTING PROGRAM

CalRecycle Diversion Regs and Biosolids Management

Senate Bill 1383 targets

- 50% reduction of organics to landfills by 2020
- 75% reduction of organics to landfills by 2025

State Board Order No. 2004-0012-DWQ

- All Class A biosolids not meeting metals concentrations and Class B biosolids
- All EQ biosolids mixtures; ≥ 50% biosolids;
 application > 10 dry-tons/acre; > 20 acres
- All EQ biosolids mixtures; < 50% biosolids;application > 20 dry-tons/acre; > 20 acres





CENTRAL VALLEY WATER BOARD- PROGRAM UPDATES



- CV-Salts Program Updates
 - Pyrethroids Control Program
 - 2018 and 2020 Integrated Report
 - Delta Regional Monitoring Program
 - Permitting (NPDES, Non15)
- Compliance and Enforcement

2017 State Water Board Water Quality Enforcement Policy

Adopted April 4, 2017 Effective October 5, 2017



STATE WATER RESOURCES CONTROL BOARD

WATER QUALITY ENFORCEMENT POLICY

Adopted April 4, 2017 Effective October 5, 201

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

Enforcement Policy Mission



 Protect and enhance the quality of the waters of the State by defining an enforcement process that addresses water quality problems in the most efficient, effective, and consistent manner.

Enforcement Policy Goals

- Identify and prioritize cases for enforcement
- Establish an even playing field
- Create public confidence
- Deter harmful conduct



Significant Changes in the 2017 Enforcement Policy



- General Provisions
- Penalty Calculator





General Provisions Changes

- Consistent
- Fair
- Progressive
- Transparent
- Emphasis on Environmental Justice and Human Right to Water



Penalty Calculator Changes

- Penalty Tables Adjusted the per gallon per day penalty factor to eliminate significant increase in penalties.
- High Volume Discharges Allows a reduction in the per gallon penalty for high volume discharges (discharges between 100,000 and 2 million gallons)

• Multiple Day Violations: Allows a reduction or "collapsing" of days for violations lasting more than 30 days:

4 0-30	Each day counted
---------------	------------------



Revised Policy on Supplemental Environmental Projects (SEPs)

Adopted December 5, 2017 Effective May 3, 2018



STATE WATER RESOURCES CONTROL BOARD

POLICY
ON
SUPPLEMENTAL
ENVIRONMENTAL PROJECTS

Adopted Deserver 5, 2017 EYestikk May 8, 2018

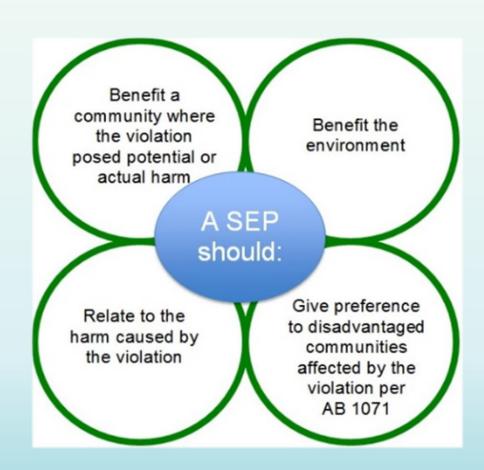
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

What are SEPs?

Environmentally beneficial projects that a settling party agrees to undertake in the settlement of an action to offset a portion of a civil penalty.

SEPs Categories

- SEPs performed by the discharger
- SEPs performed by third-parties paid by the discharger



Regional Board SEP Initiatives

- Delta Regional Monitoring Program (RMP) Adopted April 2, 2019
- Disadvantaged Communities (DACs) Expecting Summer/Fall 2019









Delta RMP SEPs

- Enables the Regional Board to allow penalties to be used for the Delta RMP
- Waives the SEP Policy requirement for Dischargers to address study findings
- Allows the Delta RMP to create a fund to aggregate MMP settlements and discretionary settlements under \$100,000
- All SEPs for RMP need geographic nexus
- Allows the Regional Board to release a Discharger's liability upon payment to the Delta RMP





QUESTIONS?

