



CENTRAL VALLEY WATER BOARD PUBLIC HEARING

Central Valley-wide Salt and Nitrate Control Program

Proposed Basin Plan Amendments to the Water Quality Control Plans for the Sacramento River and San Joaquin River Basins and the Tulare Lake Basin



Agenda Item 8

31 May – 1 June 2018



PUBLIC HEARING PURPOSE

Consider Adoption Central Valley-wide Salt and Nitrate Control Program

- Environmentally and Economically Sustainable Future
- Based on CV-SALTS Salt and Nitrate Management Plan (SNMP)
- Modifies Basin Plans
 - *Management Strategies*
 - *Supporting Policies*
- Does not modify Bay-Delta Plan

Central Valley Water Board Hearing Item #8
31 May 2018



PUBLIC HEARING FORMAT

- Overview
- Proposed Amendments
 - *Changes since January 2018 Workshop*
 - *Revisions to March 2018 Staff Report*
- Written Comments Received
- Panel Discussions
- Public Discussion
- Consider Adoption of Proposed Amendments
 - *With any approved late revisions*



Handouts
Key Summaries

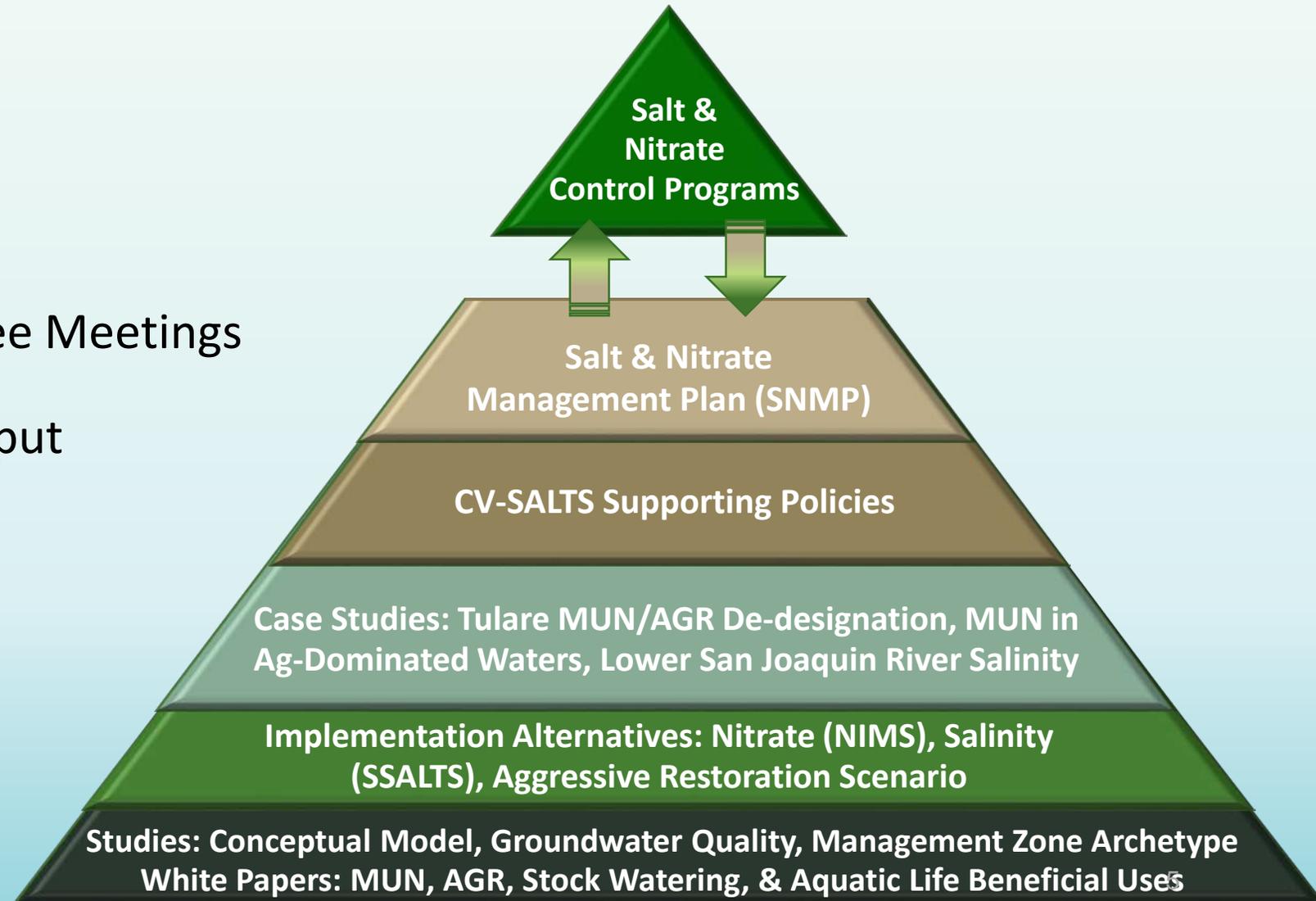


PROGRAM OVERVIEW



CONTROL PROGRAM DEVELOPMENT PROCESS

- Stakeholder-driven
- Initiated in 2006
 - 154 Executive Committee Meetings
- Agency Oversight/Public Input
- Materials at:
 - www.cvsalinity.org



MEASURES OF SUCCESS

*Ensure Safe Drinking Water
and
Sustain the Agricultural
Economy*



Basin Plan Amendments will:

- ✓ Ensure replacement drinking water
- ✓ Provide alternatives to how the Board regulates nitrates and salts
- ✓ Limit and manage degradation
- ✓ Restore groundwater where feasible and practicable
- ✓ Recognize diverse conditions

CONTROL PROGRAM DEVELOPMENT PROCESS

2017

12 January: CV-SALTS Salt and Nitrate Management Plan (SNMP) Submitted

9 March: Public Hearing on Salt and Nitrate Control Program

2018

19 January: Board Workshop on Salt and Nitrate Control Program

22 March: Draft Staff Report and Amendments Posted for Public Review

21 May: Revised Staff Report/Response to Comments Posted

Today: Hearing to Consider Adoption of Amendments



PROPOSED BASIN PLAN AMENDMENTS



COMPONENTS OF PROPOSED AMENDMENTS

Chapter 3 Water Quality Objectives

- Variance/Exception
- Secondary Maximum Contaminant Levels (Revisions)

See Handout

Chapter 4 Implementation

- Salt and Nitrate Control Program, including Conditional Prohibition and Monitoring Program
- Supporting Policies
 - Variance Policy (revised)
 - Exceptions Policy (revised)
 - Drought and Conservation Policy (new)
 - Offsets Policy (new)
- Implementation of Secondary MCLs (new)
- Costs to Agriculture (new)
- Prioritized Basins (new)

ESTABLISH SALT & NITRATE CONTROL PROGRAM BASED ON THREE MANAGEMENT GOALS

Management Goal 1

- Safe Drinking Water Supply
 - Short & Long Term Solutions



Management Goal 2

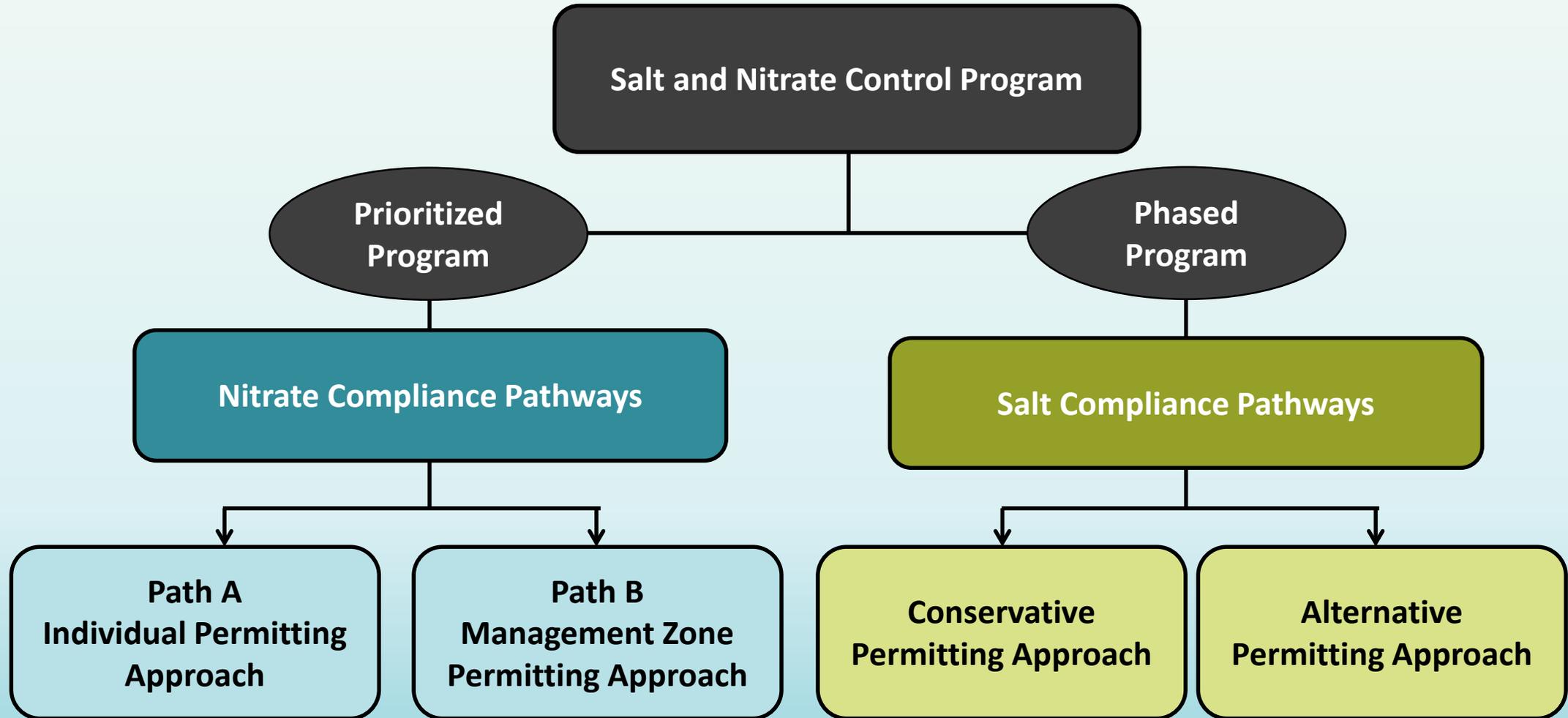
- Balanced Salt & Nitrate Loadings
 - Ongoing and Expanding Efforts



Management Goal 3

- Implement Long-term Managed Aquifer Restoration
 - Where Reasonable, Feasible & Practicable

SALT & NITRATE MANAGEMENT STRATEGY THAT IS PRIORITIZED AND PHASED



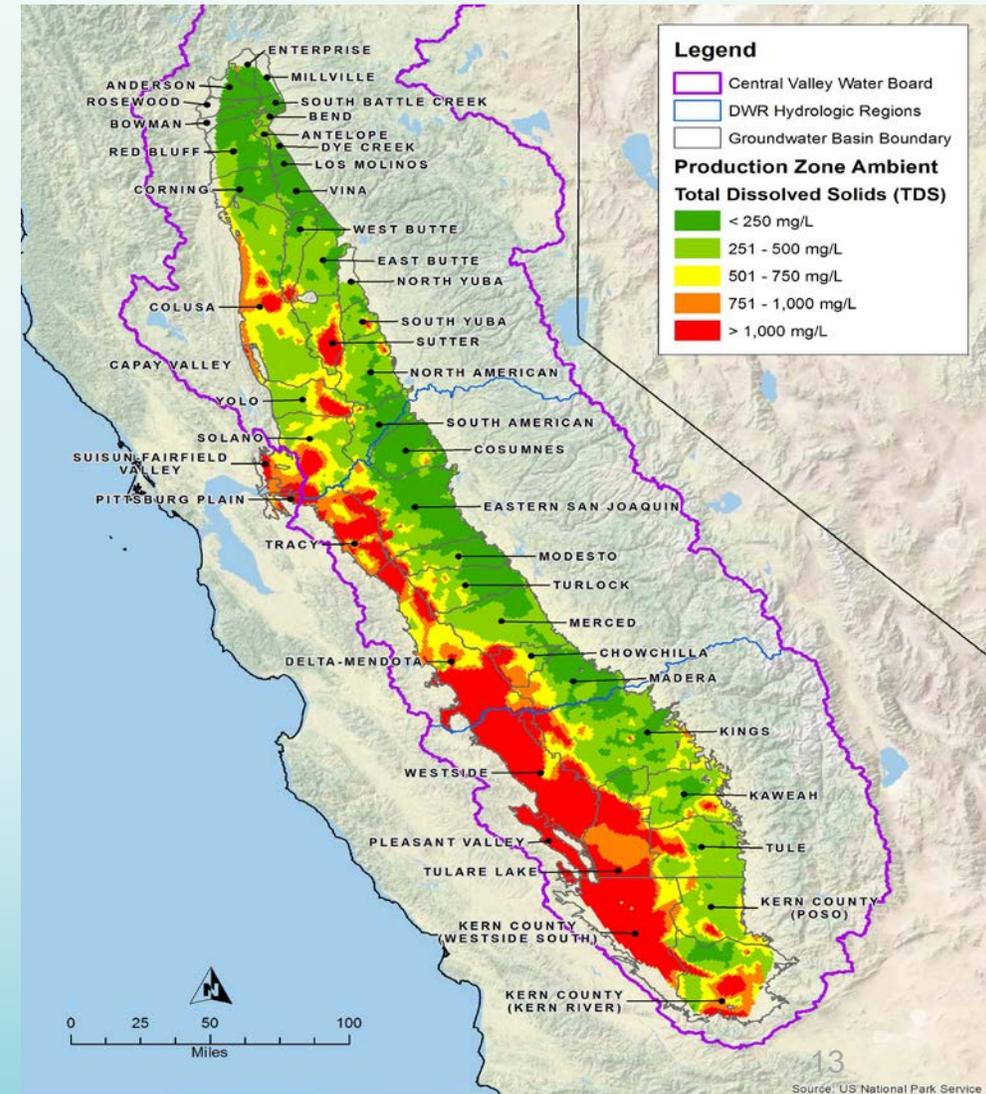


SALT CONTROL PROGRAM



SALINITY CONTROL PROGRAM OVERVIEW

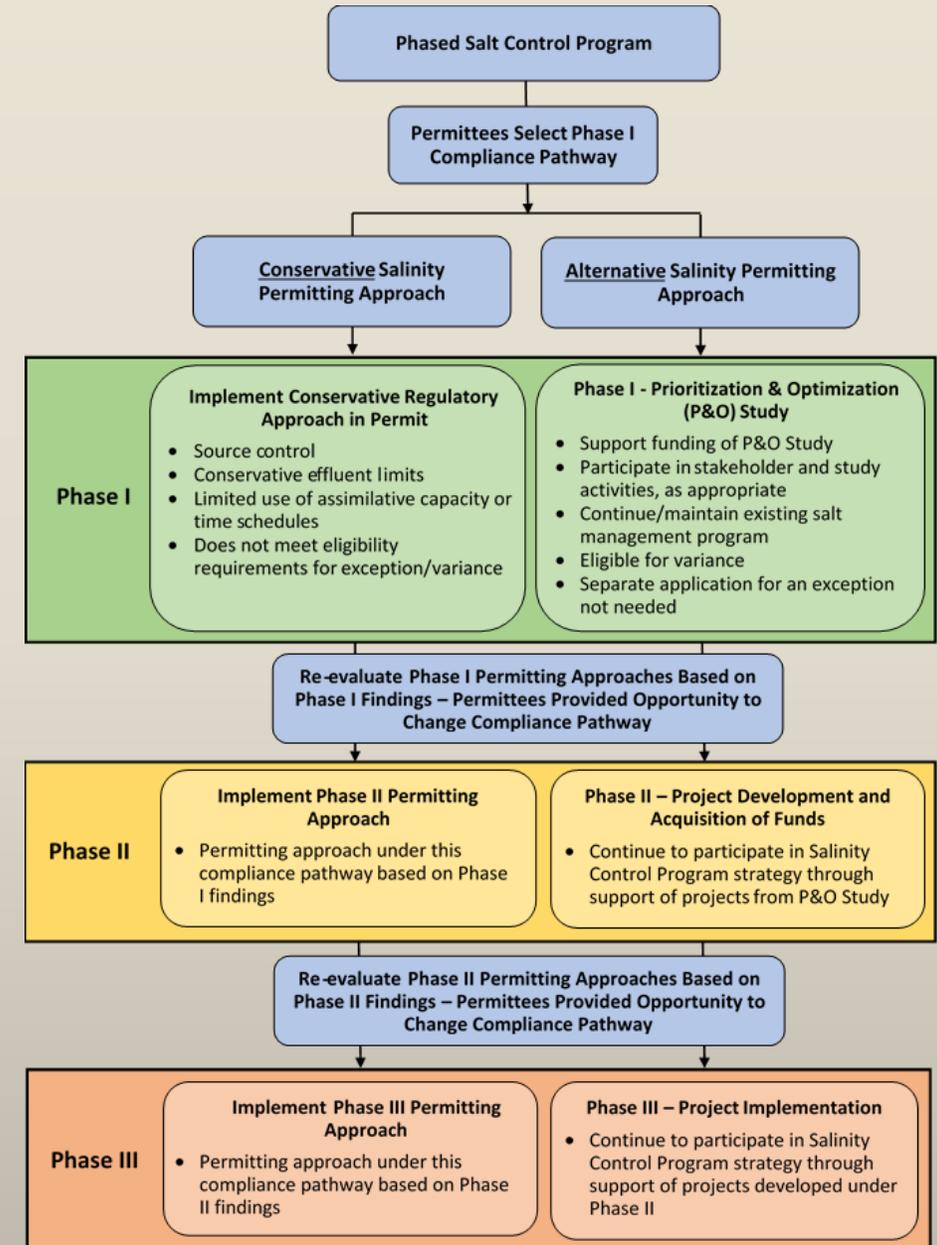
- Basin-Wide
- Long-term Sustainability
 - Maintain good water quality while improving poor water quality



SALINITY PERMITTING STRATEGY

- Two Compliance Pathways
 - *Conservative Permitting*
 - *Alternative Compliance*
- Discharger “elects” their compliance pathway at beginning of each phase
- Phased Approach
 - *10-15 years for each phase*

(See Handout)



SALINITY PERMITTING STRATEGY

Phase 1: Prioritization/Optimization Study

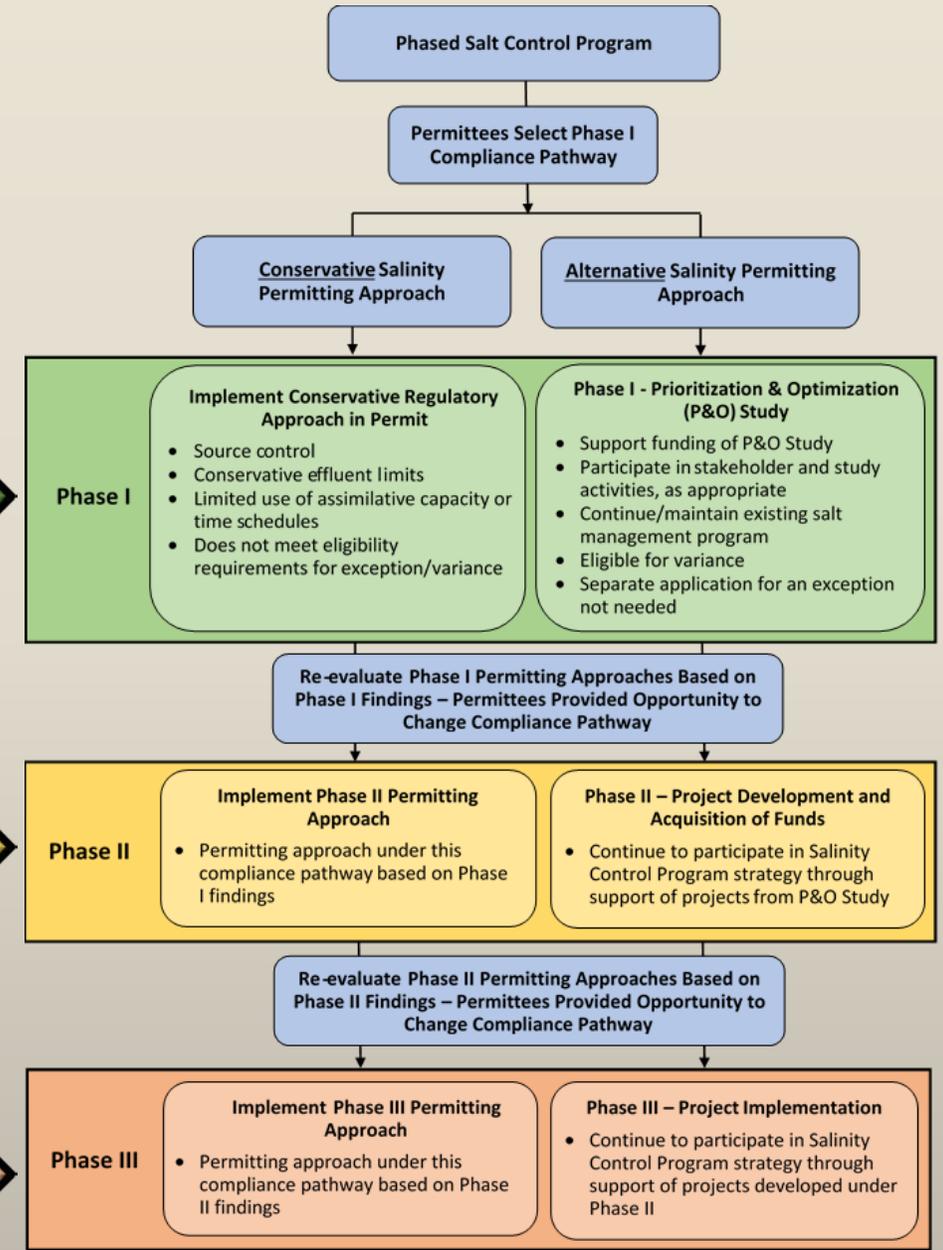
- *Expanded Evaluations*
- *Physical/Non-Physical Projects*
- *Governance/Funding*

Phase 2: Project Development

- *Funding/Permits/Non-Physical Projects*

Phase 3: Project Implementation

- *Construction*



PHASE 1

Conservative

All Permittees

- Apply conservative assumptions for interpretation of the narrative objectives and application of numeric water quality objectives to protect AGR and MUN beneficial uses
- Limited availability of a compliance or time schedule to meet a salinity-related effluent limit or waste discharge requirement

Groundwater Discharge and Non-NPDES Discharge

- Limited new or expanded allocation of assimilative capacity in groundwater
- ~~Receiving water compliance determined using shallow groundwater~~
- Does not meet eligibility requirements for an exception

NPDES Surface Water Discharge

- A new or expanded allocation of assimilative capacity may be authorized only where a discharger can show that the impact of the discharge is temporary or de minimus
- Does not meet eligibility requirements for a variance

Alternative

All Permittees

- Participate in the Phase I Prioritization and Optimization Study throughout its duration
- Continue implementing reasonable, feasible and practicable efforts to control salinity through performance-based limits, including:
 - Salinity management practices
 - Pollution prevention, watershed, and/or salt reduction plans
 - Monitoring
 - Maintenance of existing discharge concentration or loading levels of salinity

Groundwater and Non-NPDES Discharges

- Salinity limits not used as compliance metric except to ensure implementation of performance-based measures;
- Deemed in compliance with salinity limits, ~~eligible for a salinity exception~~

NPDES Surface Water Discharges

- Eligible for a salinity variance

PHASE I P&O STUDY - KEY MILESTONES

Category	Year of Implementation (From Notice to Comply)										
	1	2	3	4	5	6	7	8	9	10	
Stakeholder Coordination	Stakeholder Coordination Meetings (as needed frequency)										
	SGMA GSA Coordination Meetings (as needed frequency)										
Phase I Workplan	Phase I Workplan										
Governance	Phase I Governance Plan	Long-term Governance Plan for Phases II & III									
Funding	Phase I Funding Plan	Long-term Funding Plan for Phases II & III									
Preferred Physical/Non-Physical Salt Management Projects	Development of Recommended Preferred Physical and Non-Physical Projects			Interim Project Report							
					Conceptual Design and Assessment of Environmental Permitting Requirements for Preferred Physical Projects				Final Project Report		
Special Studies				Groundwater Quality Trace Constituent Study							
					Recycled Water Imports Study						
								Stormwater Recharge Master Plan Study			
					Emerging Tech Update No. 1				Emerging Tech Update No. 2		
Basin Planning								Phase II Recommendations			
Reports	Progress Reports at Key Milestones (Years 1; 5; and 10 with documentation (electronic or otherwise) of participation)										

PHASE I PRIORITIZATION & OPTIMIZATION STUDY IMPLEMENTATION

Issue	Expectations
Participation	<ul style="list-style-type: none"> • Permitted dischargers of salt (surface water or groundwater) • Entities that benefit from import/export Central Valley water
Management	<ul style="list-style-type: none"> • 3rd Party Entity (also decides required level of commitment)
Implementation	<ul style="list-style-type: none"> • Open stakeholder process • Milestones established in Phase I

CHANGES TO SALT CONTROL PROGRAM POST-WORKSHOP

Added Clarifying Language

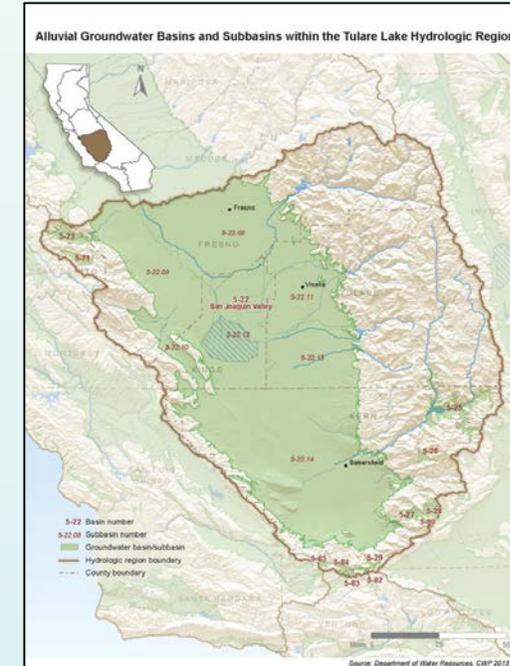
- Ability to use historic/representative data for assessments
- Satisfying Alternative Permitting requirements = compliance salinity limits

Specific Revisions to Tulare Lake Basin Plan for Consistency

PROPOSED REVISIONS TO TULARE LAKE BASIN PLAN

Chapter 4 (Implementation):

- Modify sections applicable to:
 - *Discharges to Navigable Waters (pg. IV-10)*
 - *Discharges to Land (pg. IV-11)*
 - *Industrial Wastewater (pgs. IV-13, IV-14)*
 - *Oil Field Wastewater (IV-15)*
- Removed language specific to Electrical Conductivity and Chloride limits
- Revise language specifying boron “limits” to “*applicable water quality objective for boron*”





NITRATE CONTROL PROGRAM



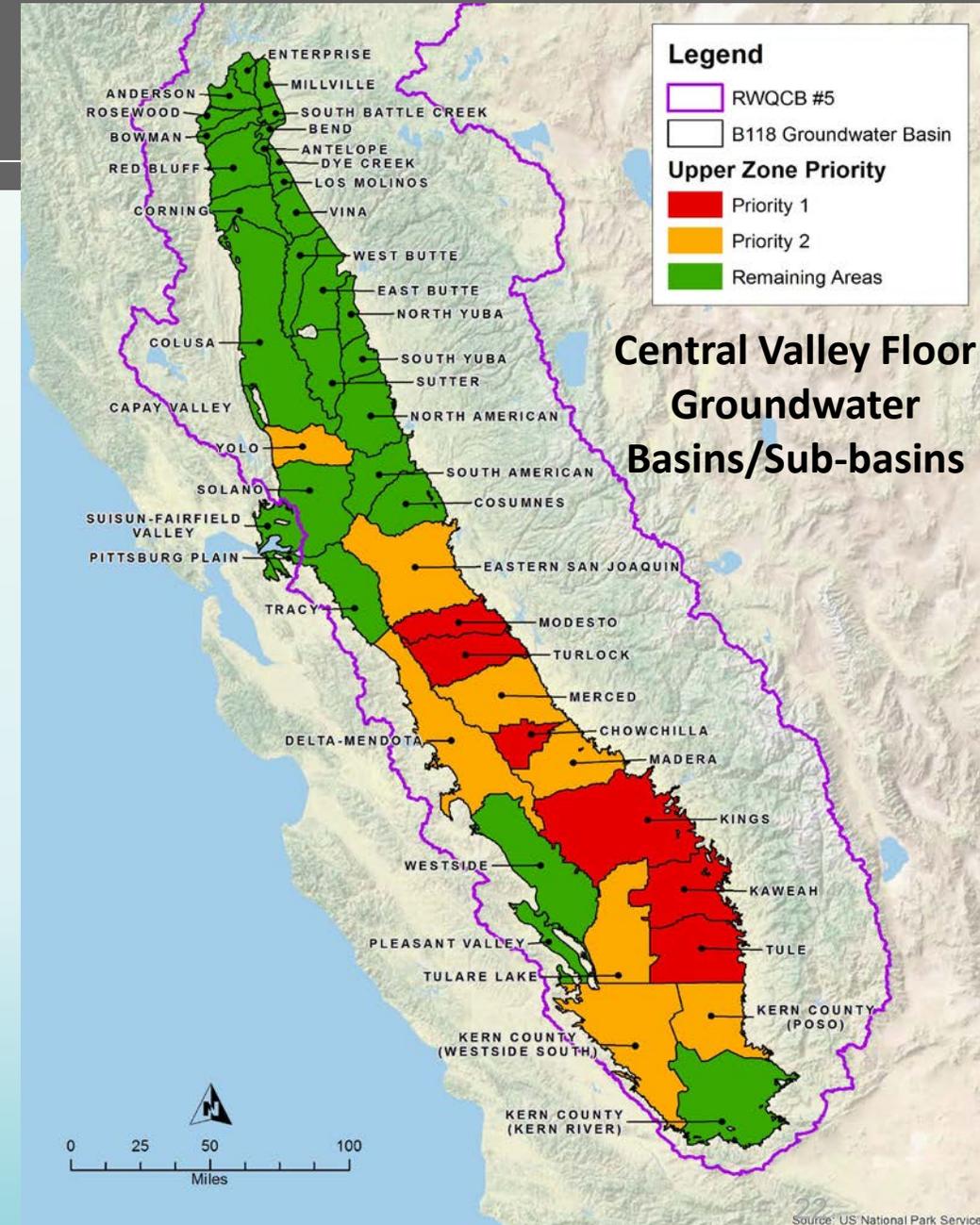
RECOMMENDED PRIORITY AREAS

Groundwater Basins/Sub-basins

- Priority 1 Area (Red)
 - *Notice to Comply within one year of Effective Date*
- Priority 2 Area (Orange)
 - *Notice to Comply within 2-4 years of Effective Date*
- Remaining Basins
 - *As Necessary*

Areas Not Part of a Groundwater Basin

- *As Necessary*

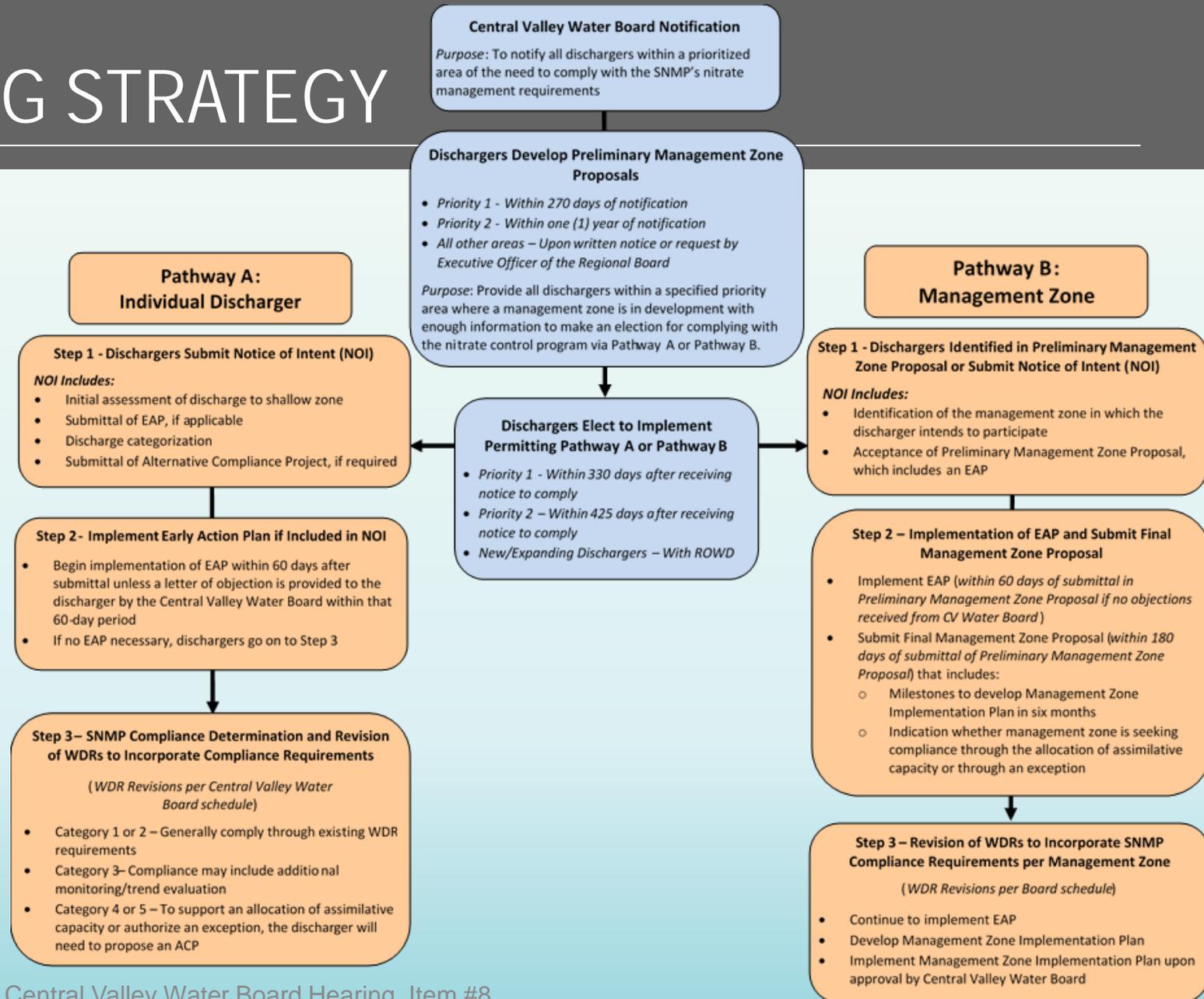


NITRATE PERMITTING STRATEGY

Two Compliance Pathways

- Path A – Individual Discharger
- Path B – Management Zone
- Permittees “elect” compliance pathway after receiving a Notice to Comply

(See Handout)



NITRATE PERMITTING STRATEGY

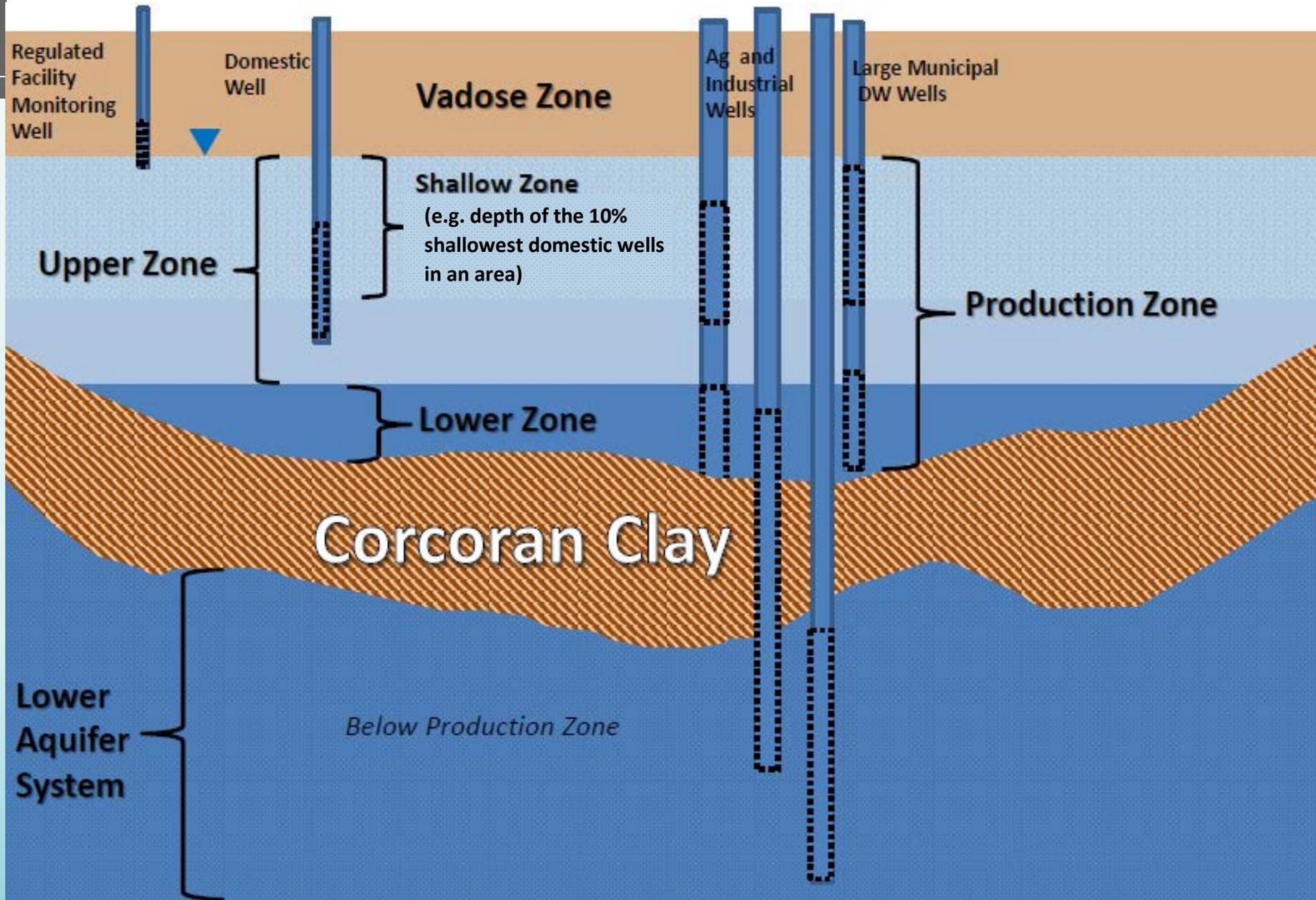
Path A: Individual Permitting Approach

- Permittee elects individual or third party compliance
- Defines receiving water as Shallow Zone
- Establishes five discharge categories with associated permit compliance requirements
- Early Action Plan where required to address elevated nitrate in public water supply and/or domestic wells
- Alternative Compliance Project for assimilative capacity above trigger/exception
 - (75% nitrate objective)

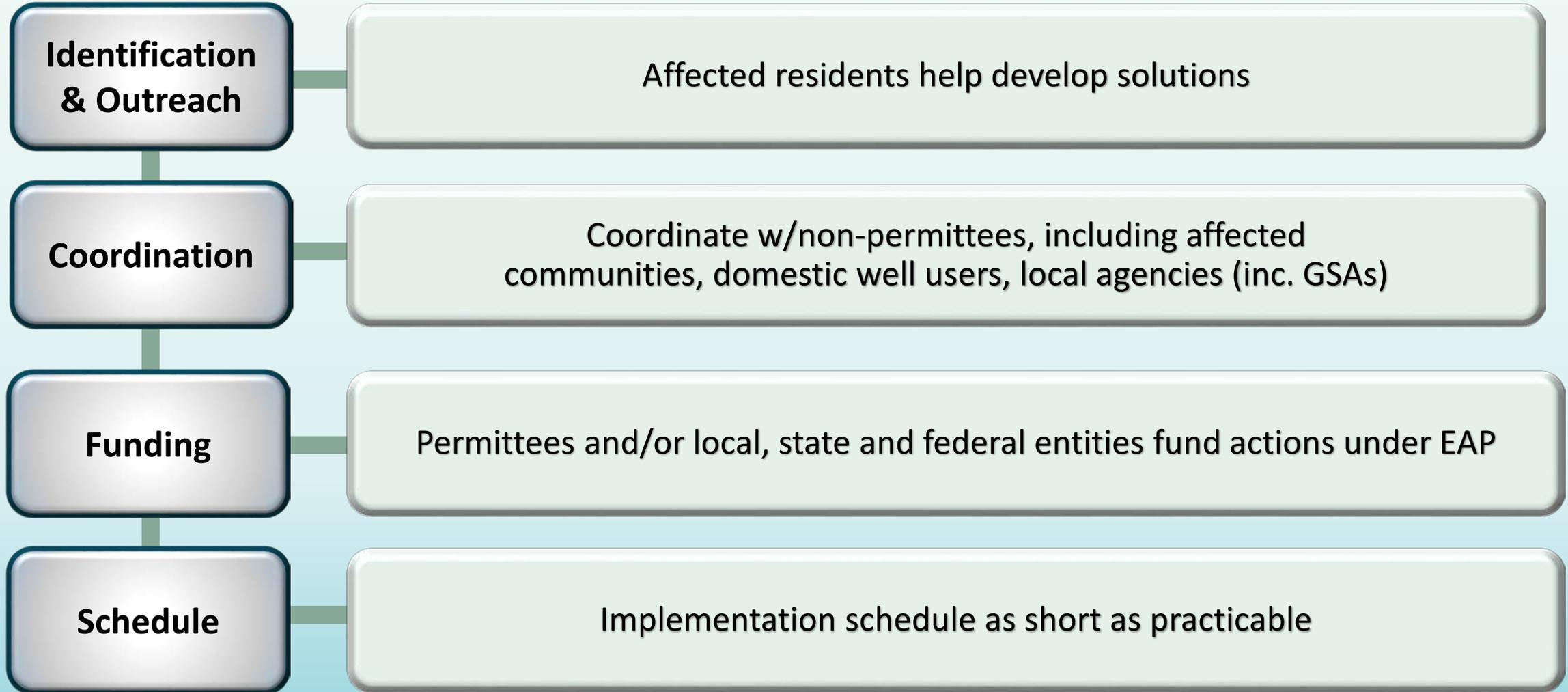
Path B: Participation in a Management Zone

- Permittee opts to work collectively with other permittees/entities through a Management Zone
- Receiving water defined as Upper Zone
- Early Action Plan where required
- Other deliverables:
 - Preliminary Management Zone Proposal
 - Final Management Zone Proposal
 - Management Zone Implementation Plan

Schematic of Aquifer System Within Corcoran Clay Extent



EARLY ACTION PLAN COMPONENTS (PATH A & B)



FOCUSED HIGHLIGHTS OF MANAGEMENT ZONE

Preliminary Management Zone Proposal (270 days to 1 year after Notice to Comply)

- ✓ Identification of others that may join Management Zone
- ✓ Summary of current control efforts and management practices
- ✓ Process used to identify affected residents and provide opportunities to participate in development of Early Action Plan
- ✓ Early Action Plan
 - Initiate w/in 60 days

FOCUSED HIGHLIGHTS OF MANAGEMENT ZONE

Final Management Zone Proposal (180 days after Preliminary MZ Plan)

- ✓ Identification of proposed compliance approach
 - Assimilative Capacity
 - Exception
- ✓ Interaction/coordination with Groundwater Sustainability Agencies and other entities
- ✓ Documentation of actions taken to implement Early Action Plan

FOCUSED HIGHLIGHTS OF MANAGEMENT ZONE

Management Zone Implementation Plan (<6 months after Final Management Zone Plan)

- ✓ Document collaboration with communities
- ✓ Information necessary to request
 - Allocation of assimilative capacity
 - Exception for meeting nitrate objective
- ✓ Equivalent of Alternative Compliance Project
- ✓ Must be adopted by Regional Board as part of Waste Discharge Requirements

ALTERNATIVE COMPLIANCE PROJECTS (ACP)

Alternative Compliance Project Needed for:

- Allocation of Assimilative Capacity Above a Trigger
- Use of an Exception to Meeting Water Quality Objective

Provides:

- Ability to continue discharging while working toward long-term water quality improvements

ALTERNATIVE COMPLIANCE PROJECT (ACP) REQUIREMENTS

Minimum Requirements

- Identification Impacted Wells
- Timeline and Milestones for:
 - *Short/long term safe drinking water supply*
 - *Balanced nitrate loading*
 - *Managed aquifer restoration*
- Documented Collaboration
- Funding
- Ongoing Water Quality Characterization
- Participant Responsibilities

Additional Guidelines in
Appendix H

APPROVAL PROCESS ACP/MZ IMPLEMENTATION PLAN

Both Path A (Individual ACP) & Path B (MZ Implementation Plan)

- Meets Minimum Requirements and Follows Guidelines
 - *Milestones to meet three overarching management goals*
 - *Vetted with local communities and stakeholders*

Path A

- *Provided with Notice of Intent*
- *Incorporated into WDR (Public Process)*
 - Public Review; Comment; Hearing

APPROVAL PROCESS ACP/MZ IMPLEMENTATION PLAN

Path B—Three Vetting Stages

- Preliminary Management Zone Proposal
 - *Board staff collaboration on outreach*
 - *30 day public comment*
- Final Management Zone Plan
 - *30 day public comment*
 - *Equivalent to Report of Waste Discharge*
- Management Zone Implementation Plan
 - *Public hearing to revise Waste Discharge Requirements*



MODIFICATIONS TO NITRATE CONTROL PROGRAM

Three Major Clarifications since January 2018 Workshop

1. Complete Management Zone Implementation Plan meets requirements for an Exception
2. Path A (Individual) Compliance in “Shallow” Groundwater Zone

Three Options to Calculate Average Nitrate in Shallow Zone

1. CV-SALTS information on shallowest 10% domestic wells
 2. Site/Area specific evaluation (new data)
 3. Central Valley Water Board-approved equivalent alternative
3. Reprioritization of Basins/Sub-basins/Areas

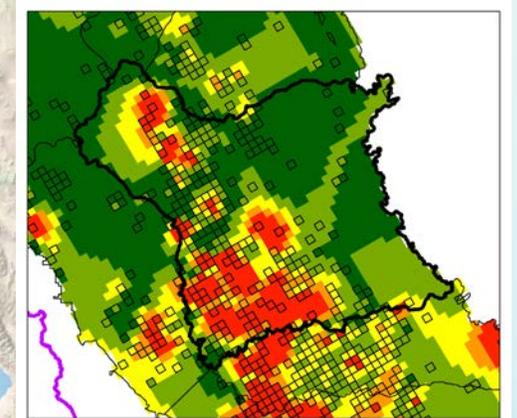
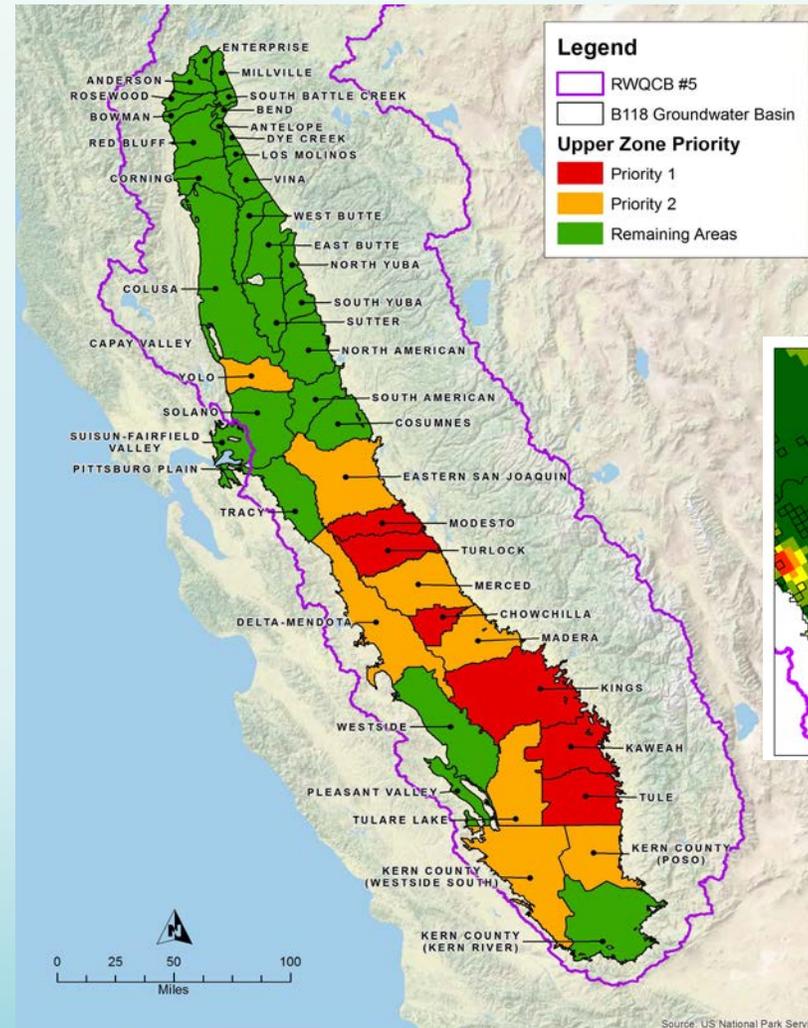
RE-PRIORITIZATION OF PRIORITY BASINS/SUB-AREAS

Board Discretion to Consider

- Community Request to Prioritize
- Permittee(s) Request to Defer Notice to Comply
 - *Six months prior to scheduled issuance of Notice to Comply*

Based in part on:

- *New local data*
- *Drinking water contamination*
- *Primary source drinking water*
- *Efficient use of resources*





SUMMARY ACTIVITIES/SCHEDULE

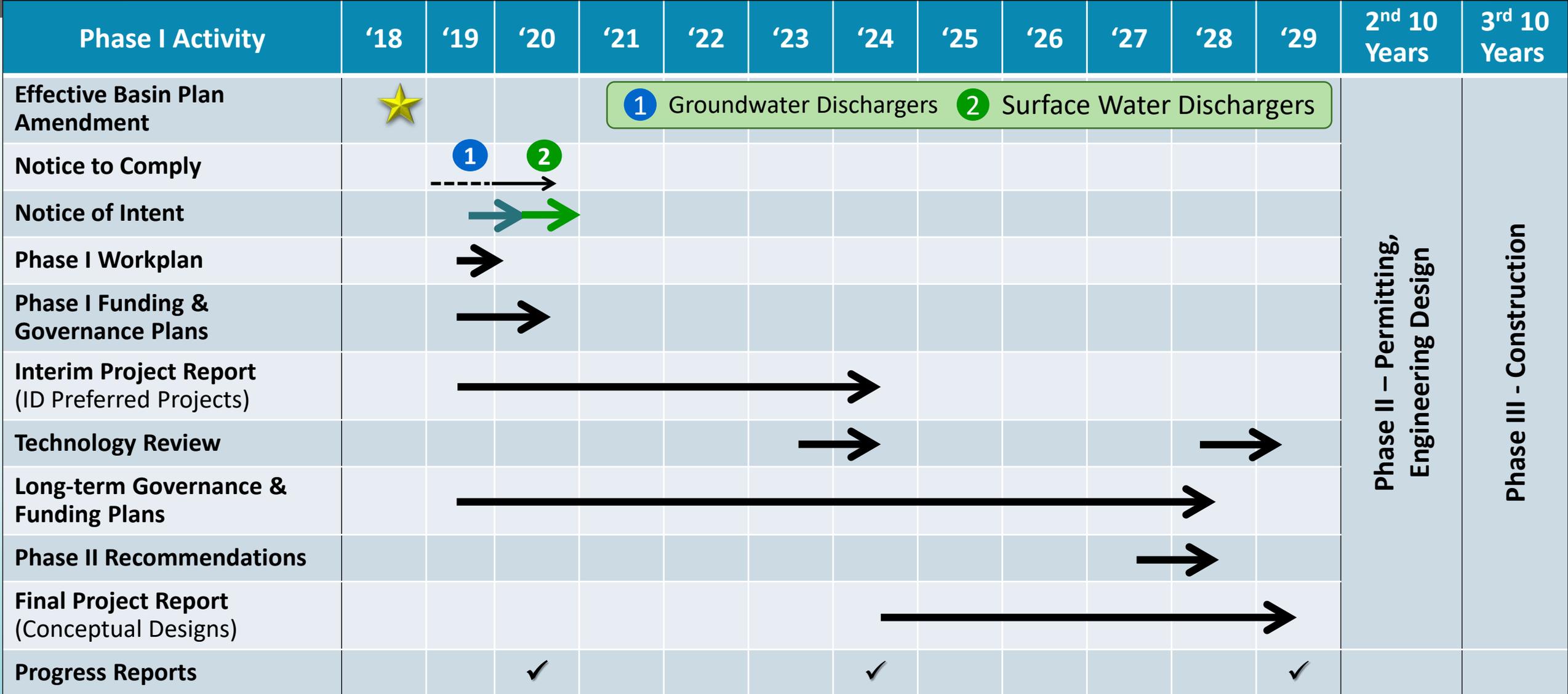


NITRATE/SALT MANAGEMENT STRATEGY: GENERAL TIMELINE/MILESTONES FOR EXISTING DISCHARGERS

Activity	'18	'19	'20	'21	'22	'23	'24	'25	'26	'27	2 nd 10 Years	3 rd 10 Years
Effective Basin Plan amendment	★											
Nitrate – Priority 1 Areas		1		3	4							
Nitrate – Priority 2 Areas				2		3	4					
Nitrate – Remaining Areas								5				
Salinity Management	Phase I Prioritization and Optimization Study (further define short and long-term projects to manage salt in the Central Valley)										Phase II – Permitting, Engineering Design	Phase III – Project Construction

- 1 Notice to Comply (NTC) (within 1 year of BPA effective date)
- 2 NTC (within 2-4 years of BPA effective date)
- 3 Initial planning (w/in ~15 months of NTC), including develop/implement Early Action Plan to address drinking water concerns
- 4 ~180 days to complete Management Zone Implementation Plan; per Board review, process to revise existing WDRs/Waivers with discharger-specific nitrate management requirements initiated
- 5 For remaining areas, the time to a NTC to be determined

SALT MANAGEMENT STRATEGY: GENERAL TIMELINE FOR PHASED PROGRAM IMPLEMENTATION





CONDITIONAL PROHIBITION



CONDITIONAL PROHIBITION OF SALT AND NITRATE DISCHARGES

Permittees that discharge salt and/or nitrate and are not regulated under the Irrigated Lands Regulatory Program (ILRP):

- Applies upon receiving a Notice to Comply
- Salt and/or nitrate discharges prohibited unless permittee implements Salt and Nitrate Control Program requirements
- Prohibition applies until WDR/Waiver updated or amended
- ***Irrigated Lands Regulatory Program (ILRP)***
 - *Amend ILRP General Orders within 18-months effective date*



No substantive change have been made to this policy since the January Workshop



SURVEILLANCE & MONITORING PROGRAM



SURVEILLANCE AND MONITORING PROGRAM

Program Goals (Salt and Nitrate)

- Assess progress
- Statistically-representative ambient/trends Surface Water and Groundwater (Upper, Lower, and Production Zones)
- **Maximize the use of existing monitoring programs**

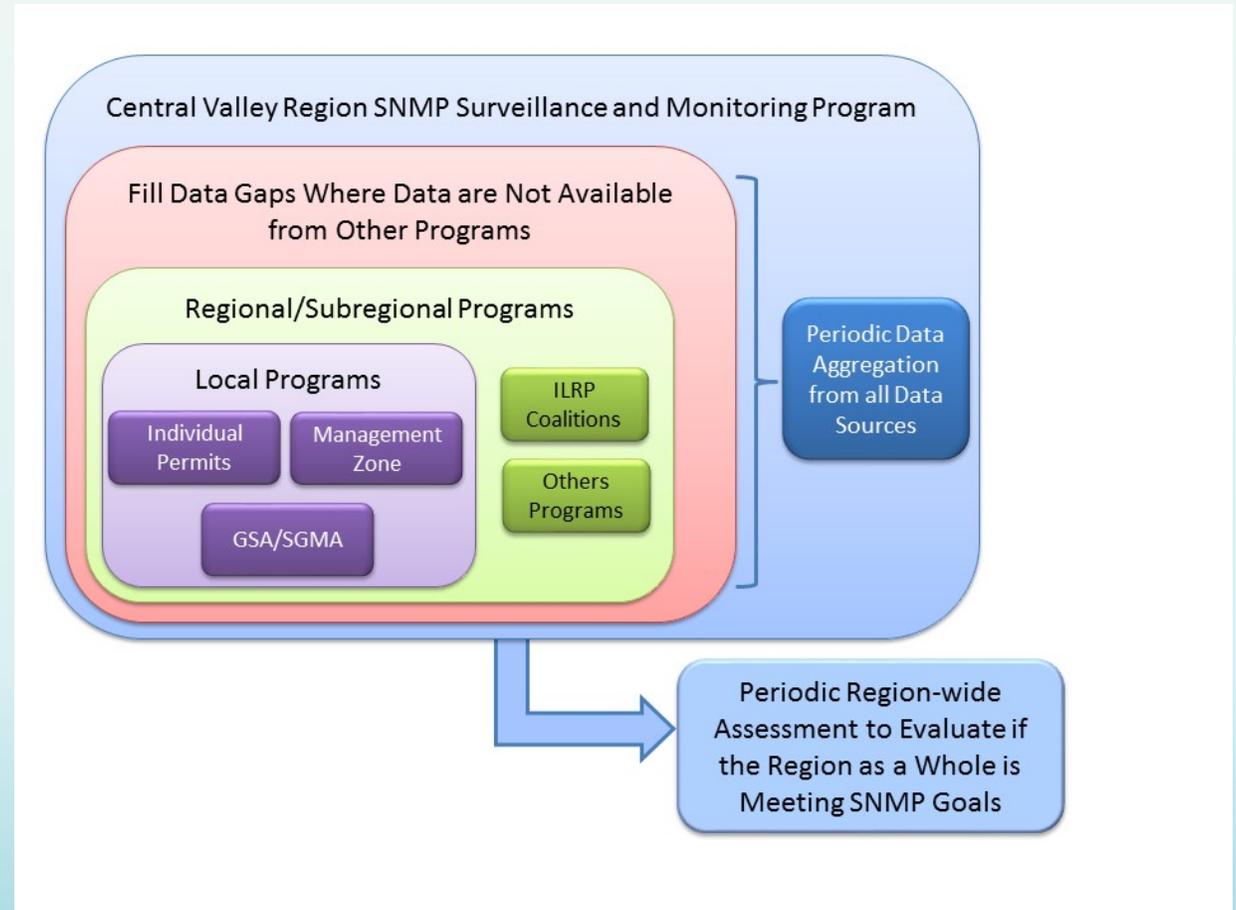
General Requirements:

- Lead Entity: Gather, consolidate and evaluate data
- Work Plan and a Quality Assurance Project Plan (within 2 years)
- Assessment Report every 5 years (unless alternative schedule EO approved)
- Permittees must provide confirmation of program support through Lead Entity

SURVEILLANCE AND MONITORING PROGRAM

Utilize Chapter 5 CV-SALTS SNMP as Guidance

- Responsible entities
- Groundwater monitoring wells
- Governance and funding
- Review and revision process
- QAPP
 - Well/Surface water site characteristics
 - Collection requirements
 - Data reporting and management
 - Assessment approach
 - Approach to evaluate progress



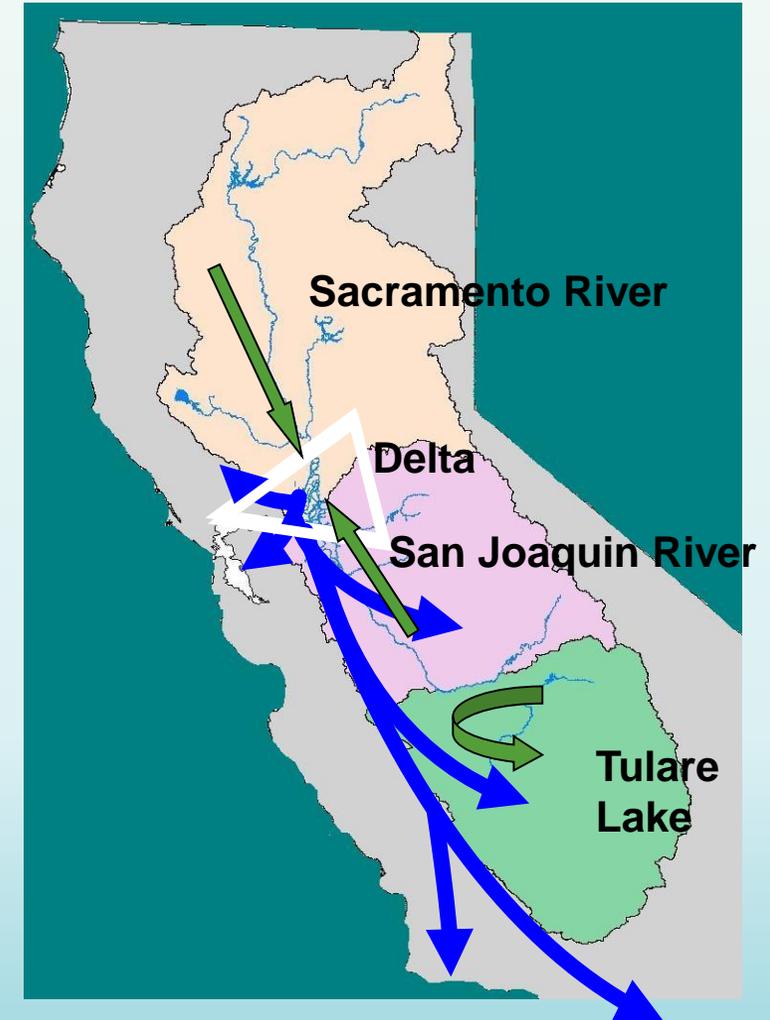


RECOMMENDATIONS TO OTHER AGENCIES



RECOMMENDATIONS TO OTHER AGENCIES

- All users of Central Valley waters are considered stakeholders
 - *Within and outside of the Board's jurisdictional area*
- Success will require significant participation and actions by all entities that use or transport Central Valley's waters



RECOMMENDATIONS TO OTHER AGENCIES

- Establish a Central Valley Salinity Control Act
- Budget line item or other funding mechanisms for P&O Study and implementation
- Conditioning water right permits
- Actively participate by providing financial, technical and policy support to the P&O Study
- Land use and planning coordination



SUPPORTING POLICIES AND GUIDANCE



- Variance
- Exceptions
- Drought and Conservation
- Offsets
- Secondary Maximum Contaminant Levels (SMCLs)

VARIANCE AND EXCEPTION POLICIES

Variance Policy

- *Salt only*
- *15-year Extension*
- *Participation in P&O Study*

Exceptions Policy

- *Adds Nitrate and Boron*
- *Separate Application for Salt Exception NOT required for Phase 1 P&O participants*
- *Status Reports*
- *Renewable Term*

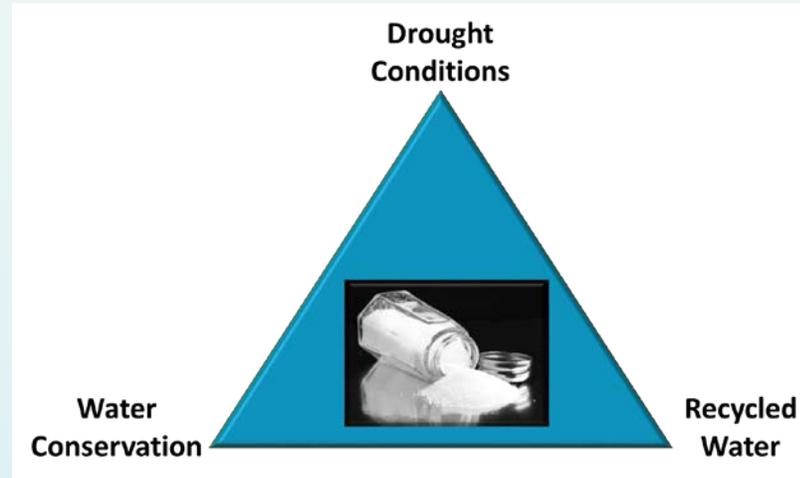
MODIFICATIONS TO EXCEPTIONS POLICY

Topic	January Workshop Discussion	Current Proposal
Length of an Exception	Maximum Length – 50 years	Maximum length > 50 years <u>if</u> <i>“... the management practices under the exception are resulting in significant, measurable and continuing improvements in water quality.”</i>

DROUGHT AND CONSERVATION POLICY

Criteria

- Drought and/or local emergency
- Conservation and/or Recycling



Provisions

- Interim Limits
 - Concentration
 - Loading
- No downstream/downgradient impacts
- Consistent with historic load

No substantive changes have been made to this policy since the January Workshop

OFFSET POLICY - KEY PROJECT ELEMENTS

- Groundwater
- Located in same Basin or Management Zone as discharge
- Substantially Same Pollutant
- **Net effect = equivalent or better**
- **No assimilative capacity = offset ratio must be > 1:1**
- **Offsets can not:**
 - *Result in unmitigated localized impairments to sensitive areas with drinking water wells*
 - *Have a disproportionate impact on disadvantaged communities*

No substantive change have been made to this policy since the January Workshop

SMCLS - 22 CALIFORNIA CODE OF REGULATIONS

§64449

Table A

Constituents	Maximum Contaminant Levels/Units
Aluminum	0.2 mg/L
Color	15 Units
Copper	1.0 mg/L
Foaming Agents (MBAS)	0.5 mg/L
Iron	0.3 mg/L
Manganese	0.05 mg/L
Methyl-tert-butyl ether(MTBE)	0.005 mg/L
Odor – Threshold	3 Units
Silver	0.1 mg/L
Thiobencarb	0.001 mg/L
Turbidity	5 Units
Zinc	5.0 mg/L

Table B

Constituents, Units	Recommended	Upper	Short Term
Total Dissolved Solids, mg/L, or Specific Conductance, µS/cm	500	1,000	1,500
	--	--	--
Chloride, mg/L	900	1,600	2,200
Sulfate, mg/L	250	500	600
	250	500	600

Tables included in Chapter 3
Under Chemical Constituents as
Water Quality Objectives to Protect MUN

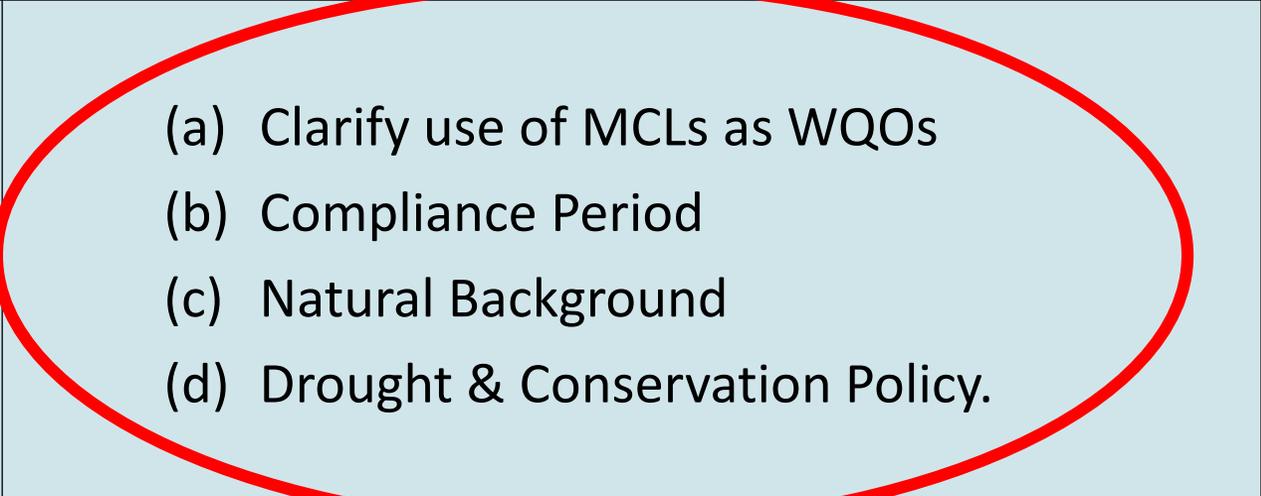
PROPOSAL CLARIFIES USE OF SMCLS AS WATER QUALITY OBJECTIVES

Chapter 3 - Water Quality Objectives

- Incorporate Title 22 Contextual Language
 - “Upper” level
 - “Short-term” level
 - “Recommended” level
- Compliance with Table A & B parameters:
 - Surface Water: Annual Averages
 - Groundwater:
 - Discharge Limits: Annual Average
 - Ambient Groundwater: Long-term average



MODIFICATIONS TO SMCL PROPOSAL

Topic	January Workshop Discussion	Current Proposal
Basin Plan - Chapter 3	Discussion: <ul style="list-style-type: none">• Title 22 Contextual Language• Secondary MCLs vs. Primary MCLs	 <ul style="list-style-type: none">(a) Clarify use of MCLs as WQOs(b) Compliance Period(c) Natural Background(d) Drought & Conservation Policy.

PROPOSAL CLARIFIES USE OF SMCLS AS WATER QUALITY OBJECTIVES

Chapter 4 – Implementation (*Revised*)

- Sample and Analysis
 - Filter Sample Using 1.5-micron filter
 - Alternate filter size may be considered
 - Analyze sample for total levels
- Factors to Consider - Staff Report Appendix G



MODIFICATIONS TO SMCL PROPOSAL

Topic	January Workshop Discussion	Current Proposal
Basin Plan - Chapter 4	<ul style="list-style-type: none">• Factors to consider – include in Basin Plan• March 2018: Use of Dissolved fractions with 10 years to develop translators	<ul style="list-style-type: none">(a) Factors to consider – include in Appendix(b) Filter sample with 1.5-micron filter before analyzing for total fraction(c) Alternative filter requirements – consult with Division of Drinking Water and public notice



AGRICULTURAL COSTS



COSTS TO AGRICULTURE (2016 DOLLARS)

- Salt Control Program
 - Phase I (P&O Study): \$357,000 to \$696,000 per year
 - Phases II and III – Costs speculative
- Nitrate Control Program
 - Short-term safe drinking /Management Zones (Priority 1 and 2) – \$24.1 million to \$35.9 million per year
 - Long-term restoration – Costs speculative
- Surveillance and Monitoring Program
 - \$70,000 to \$130,000 per year

COSTS TO AGRICULTURE

Basis

- Economic Analysis (Larry Walker Associates, 2016)
- SSALTS (Strategic Salt Accumulation Land and Transport Study)
- NIMS (Nitrate Implementation Measures Study)
- Aggressive Restoration Study (Nitrate)
- Surveillance and Monitoring Program

COSTS TO AGRICULTURE

Assumptions

- First 10 years (Phase I)
 - *Later more speculative*
- Salt Control Program
 - *P&O Study*
 - *Percent Land Area Valley Floor (53%)*
- Nitrate Control Program
 - *Priority 1 and 2 Basins*
 - *ILRP Coalitions leads for Management Zones (10-ILRP Coalitions)*
 - *Short and initiation of long-term drinking water supply*
 - *90% Ag based on UCD Study (Tomich, 2016)*



FINDINGS



- Scientific Peer Review
- CEQA/Environmental Analysis
- Antidegradation Analysis

INDEPENDENT SCIENTIFIC PEER REVIEW

Scientific Conclusions

- 1) Annual Salt Accumulation must be addressed with an out-of-valley solution
 - a) Modeling Tools (WARMF and CVHM)
 - b) Management Options
 - c) Regulated Brine Line

INDEPENDENT SCIENTIFIC PEER REVIEW

Scientific Conclusions

- 2) Nitrate contamination may not reasonably be treated to drinking water quality in some locations
 - Dependent on Geological Conditions
 - Restoration possible – 40 to 70+ years

INDEPENDENT SCIENTIFIC PEER REVIEW

Reviewers

- 1) Dr. Vijay Singh, Distinguished Professor, Department of Biological and Agricultural Engineering, Texas A&M University
- 2) Dr. Thomas Harmon, Professor, School of Engineering, University of California Merced

SCIENTIFIC PEER REVIEW



“This conclusion is very reasonable and is based on sound geological considerations and can be accepted without dispute.”

ENVIRONMENTAL ANALYSIS

Will Indirectly Result In Significant and Unavoidable Impacts

- ***Aesthetics*** may be impacted because of construction of capital projects
- ***Agricultural and Forestry Resources*** potentially impacted because lands taken out of production to facilitate construction of capital projects
- ***Hydrology and Water Quality*** time-limited impacts during project implementation

Overriding Considerations

- Allow limited resources to focus on health risks in the short-term
- Long implementation timelines essential to achieve goals of Salt and Nitrate Management Plan
- Impacts reasonable considering long-term viability of Central Valley

ANTIDEGRADATION ANALYSIS – STATE

Proposed Amendments Consistent with the State Antidegradation Policy

- Although limited degradation allowed, uses ultimately protected
- Permits will still require best practicable treatment and control to limit degradation of high-quality waters
- Board can make “maximum benefit” finding because of User Protections, Nitrogen load balancing and Phased Salt Control Program, & Aquifer Restoration (where reasonable, feasible, practicable)

ANTIDEGRADATION ANALYSIS – FEDERAL

Proposed Amendments Consistent with federal Antidegradation Policy

- Existing instream water uses protected
- Limited short-term degradation necessary to accommodate important economic or social development
- Sources required to implement all cost-effective and reasonable best management practices



WRITTEN PUBLIC COMMENTS



PUBLIC COMMENTS ON DRAFT STAFF REPORT

27 COMMENT LETTERS RECEIVED

- California Stormwater Quality Association
- Environmental Compliance Management Services
- California Independent Petroleum Association
- United States Environmental Protection Agency
- Alameda County Flood Control & Water Conservation District, Zone 7 and Contra Costa Water District
- Tulare Lake Drainage District and Tulare Lake Basin Water Storage District
- Residents of North Davis Meadows and Estates at North Davis Meadows (4 letters)
- San Joaquin Valley Drainage Authority
- California Association of Sanitation Agencies
- Natural Resources Defense Council and Defenders of Wildlife
- California League of Food Producers
- Central Valley Salinity Coalition
- Sacramento River Source Water Protection Program
- Contra Costa County

27 COMMENT LETTERS

- Arvin-Edison Water Storage District
- The Wonderful Company
- Valley Water Management Company
- Northern California Water Association and Sacramento Valley Water Quality Coalition
- Buena Vista Coalition, Cawelo Water District Coalition, Kaweah Basin Water Quality Association, Kern River Watershed Coalition Authority, Kings River Watershed Coalition Authority, Tule Basin Water Quality Coalition, and Westside Water Quality Coalition
- Sacramento Regional County Sanitation District
- California Farm Bureau Federation
- South Delta Water Agency
- Central Valley Clean Water Association
- Joe DiGiorgio, Nexgenum
- Leadership Counsel for Justice & Accountability, Clean Water Fund, Community Water Center, and Environmental Law Foundation
- Kern County Water Agency
- Almond Alliance of California

PUBLIC COMMENTS – CHANGES MADE

Changes made in response to comments:

- Nitrate Control Program
 - *Will be reviewed with Salt Control Program*
 - *Process for requesting different priority treatment*
- Salt Control Program
 - *In Phase I, still applies where AGR and MUN have been de-designated*
 - *Stormwater under Salt Control Program*
- Boron
 - *Limits in Tulare Lake Basin Plan removed; replaced with reference to beneficial use protections*

PUBLIC COMMENTS – REMAINING CONTROVERSIES

Water Purveyors (primarily Salt)

- *Potential Degradation of Source Waters including Delta*
- *Secondary MCL Provisions inadequate, despite clarifications*

Environmental Justice Advocates (primarily Nitrate)

- *Inadequate process, too little outreach*
- *Board “abandoning restoration of contaminated groundwater”*
- *Doesn’t comply with various laws and policies*
- *Amendments simply allow degradation in exchange for provision of replacement water.*
- *CEQA analysis inadequate*

PUBLIC COMMENTS – WATER PURVEYORS

Comment: Concerns about potential negative impacts on Delta water quality. The Board should not allow continued use of assimilative capacity, nor consider salinity in source water or potential for growth.

Response: Staff disagrees. Proposed amendments do not alter, revise or supersede Bay-Delta requirements. Requirements for anti-degradation analyses, evaluation of downstream impacts, and protection of water quality remain. Board retains discretion to determine allocation of assimilative capacity and consider factors such as salinity in source water and growth.

PUBLIC COMMENTS – WATER PURVEYORS

Comment: The Board is allowing degradation to continue for decades. Recommend setting one salinity objective (between recommended and upper) for both pathways. Meet recommended level by end of Salt Control Program. The short-term value is not protective of MUN.

Response: *This is a long-term effort that will take decades. Amendments prevent degradation in conservative pathway and manage degradation in alternative pathway. Separate goals, so same process and/or limit would be inappropriate. Title 22 provides flexibility between recommended and upper salinity limits, and authorizes use of the short-term limit on a temporary basis.*

PUBLIC COMMENTS – WATER PURVEYORS

Comment: The Amendments are not consistent with Porter-Cologne. Dischargers alone are responsible for any impacts from their discharges. Remove recommendations to other agencies.

Response: Staff disagree. Proposed amendments make no changes to existing water quality objectives nor remove requirements for the Board to conduct anti-degradation analysis, evaluate downstream impacts and protect water quality. Permittees continue to be responsible for impacts from their discharge.

However, many entities within and outside of the Central Valley benefit from imports and exports of Central Valley water and should be part of a long-term solution

PUBLIC COMMENTS – WATER PURVEYORS

Comment: Amendments should be consistent with drainage agreements. Regulated brine-line is a loophole around existing/pending agreements (i.e. Grassland Bypass Project).

Response: The Board does not regulate/approve the transfer/diversion of water, and any solution involving diversion of surface water would need coordination with multiple agencies and a permit.

Current drainage agreement with Grassland prevents drainage from impacting surface water bodies but does not require that the salt remain in the Central Valley indefinitely.

PUBLIC COMMENTS – WATER PURVEYORS

Comment: Seek to maintain high quality of drinking water supply. Proposal may result in unintended consequences.

Response: The Amendments are designed to protect water quality, and the vetting process has worked hard to avoid unintended consequences.

The Amendments will implement more stringent permitting practices while maintaining compliance with anti-degradations policy and applicable laws and regulations.

PUBLIC COMMENTS – WATER PURVEYORS

Comment: Strongly opposes use of dissolved analysis for secondary MCLs. Use of dissolved analysis does not represent treated drinking water.

Response: Revisions were made to the Amendments to remove “dissolved” references, switching to “filtered” samples to remove suspended sediment. Approved EPA methodology using 1.5-micron filter, and filtered sample analyzed for total fraction. This better represents treated drinking water.

PUBLIC COMMENTS – WATER PURVEYORS

Comment: Revise proposal to require secondary MCLs to address public health beneficial uses.

Response: No revisions made. **Secondary** MCLs protect public welfare uses – **Primary** MCLs and other objectives protect public health uses. The Amendments would not alter Board practice to protect all uses.

PUBLIC COMMENTS – WATER PURVEYORS

Comment: Turbidity and color concerns were summarily dismissed.

Response: No revisions made. The Amendments address compliance evaluations for turbidity and color as Secondary MCLs. Specific turbidity and color objectives remain intact and enforceable, but not linked to Secondary MCLs.

PUBLIC COMMENTS – WATER PURVEYORS

Comment: Proposal revises existing water quality objectives for secondary MCLs. This has not been justified with either adequate scientific and environmental review or peer review.

Response: Revisions made to clarify that Amendments would not revise water quality objectives. Secondary MCLs are still expressed as “total recoverable.” The Amendments simply clarify how compliance with secondary MCLs will be determined.

Peer review not required, as no new science being relied upon. Environmental review adequately covers potential impacts of Amendments.

PUBLIC COMMENTS – WATER PURVEYORS

Comment: Proposed SAMP inadequate. It is focused only on nitrate and salt, fails to address non-salinity constituents, does not have a strategy for cumulative and long-term surveillance, and does not fully evaluate impacts.

Response: *Salt and nitrate not the exclusive focus of the SAMP. The monitoring workplan references evaluation of secondary MCLs, and the SAMP is still under development.*

PUBLIC COMMENTS – EJ ADVOCATES

Comment: Process was inadequate, too little outreach

Response: The Board has been committed, for over a decade, to a protracted stakeholder process. Numerous discussion forums were attended by affected persons and their representatives.

PUBLIC COMMENTS – EJ ADVOCATES

Comment: “Reasonable, feasible, and practicable” should not be terms associated with aquifer restoration. The Board is abandoning restoration of contaminated groundwater basins.

Response: The Water Code gives the Board with the authority to consider reasonableness, feasibility, and practicability when adopting Basin Plan Amendments.

De-designation of the MUN beneficial use is a last resort, and would be considered in a separate action and would be subject to additional public process.

PUBLIC COMMENTS – EJ ADVOCATES

Comment: The Nitrate Control Program is simply, “a regulatory program that allows degradation of Central Valley groundwater basins in exchange for provision of replacement water.”

Response: *The Nitrate Control Program places many conditions on discharges to ensure that nitrate loading will be reduced in a significant and meaningful manner. Replacement drinking water is only one facet of the program.*

PUBLIC COMMENTS – EJ ADVOCATES

Comment: Communities who have been paying for replacement water should be made whole, not just communities that still face nitrate problems.

Response: Under the proposed Amendments, communities that have been paying for replacement water will participate in the development of drinking water solutions. Those with currently-impacted supplies are a priority, however.

PUBLIC COMMENTS – EJ ADVOCATES

Comment: Timelines are too long. Ten years should be the maximum timeline for compliance.

Response: Provisions that authorize lengthy timelines are reasonable, given the extent of the nitrate impacts in the region. Even under aggressive restoration scenarios, restoration can take 70+ years.

The Board has broad legal discretion to set long timelines, provided that such timelines are as short as practicable. These requirements are met by the Amendments.

PUBLIC COMMENTS – EJ ADVOCATES

Comment: Amendments violate the Nonpoint Source Policy because nitrate discharges will continue indefinitely at illegal levels. The Nonpoint Source Policy requires a high likelihood of success.

Response: The Amendments will result in significant and meaningful reductions in nitrate loading to groundwater. Monitoring programs will be imposed to ensure that progress will be made.

PUBLIC COMMENTS – EJ ADVOCATES

Comment: There should be no “de minimis” category of nitrate dischargers.

Response: “De minimis” refers to a degradation threshold – permittees that fall under this threshold will not be required to conduct a detailed hydrogeologic analysis. However, they will still be regulated under waste discharge requirements that will require the protection of beneficial uses.

PUBLIC COMMENTS – EJ ADVOCATES

Comment: Any averaging is improper, whether in shallow groundwater or in a Management Zone. Averaging does not comply with the Water Code.

Response: The Board has a lot of discretion in developing Basin Plans to ensure the reasonable protection of beneficial uses. Averaging, as proposed in the Amendments, will ensure the reasonable protection of beneficial uses.

PUBLIC COMMENTS – EJ ADVOCATES

Comment: Concerns related to drawing Management Zone boundaries and how dischargers will seek out impacted wells.

Response: Drawing of Management Zone boundaries will be a challenge. However, such boundaries will be subject to a public process that will allow communities to participate and will be subject to Board oversight.

Under the Amendments, permittees will have an obligation to identify, “public water supply and domestic wells that exceed nitrate water quality objectives” and that are affected by their discharges. Replacement drinking water will be provided to those affected.

PUBLIC COMMENTS – EJ ADVOCATES

Comment: Exceptions are illegal.

Response: The Porter-Cologne Water Quality Control Act, the State Antidegradation Policy, and the Nonpoint Source Policy all allow compliance timelines as authorized under the proposed Exceptions Policy, provided that those timelines are “as short as practicable.”

PUBLIC COMMENTS – EJ ADVOCATES

Comment: Offsets must ensure that water quality objectives are met at the point of discharge.

Response: This definition of “offset” would not allow the Board to authorize actions to reduce overall nitrate loading, if such actions were not employed at the precise place where a discharge was occurring. These actions are beneficial and should be encouraged, especially because local impacts will still be addressed under the Amendments.

PUBLIC COMMENTS – EJ ADVOCATES

Comment: The Nitrate Control Program does not comply with the State Antidegradation Policy.

Response: The Amendments are consistent with the State Antidegradation Policy because although limited degradation is allowed, uses will be protected, permits will still require best practicable treatment and control to limit degradation of high-quality waters, and the Board can make a “maximum benefit” finding based on the discussions in the Staff Report.

PUBLIC COMMENTS – EJ ADVOCATES

Comment: The Nitrate Control Program does not comply with the federal Antidegradation Policy because there is a connection between groundwater and surface waters that is not addressed.

Response: The Amendments are consistent with the federal Antidegradation Policy because existing instream water uses protected, any limited short-term degradation is necessary to accommodate important economic or social development, and sources will be required to implement all cost-effective and reasonable best management practices

PUBLIC COMMENTS – EJ ADVOCATES

Comment: The Nitrate Control Program violates the public trust doctrine because nitrate degradation will impair surface water users.

Response: No surface waters within the scope of the Amendments are currently impacted due to nitrates. Analysis performed under CV-SALTS did not find any additional impacts due to nitrates in surface waters. The Nitrate Control Program does not violate the public trust doctrine.

PUBLIC COMMENTS – EJ ADVOCATES

Comment: The Substitute Environmental Document does not contain a reasonable range of alternatives.

Response: *The alternatives discussion is sufficient to satisfy applicable regulatory requirements for this certified regulatory program.*

The Staff Report provides a discussion about numerous alternatives considered throughout the 12 year development of the proposed Amendments.

PUBLIC COMMENTS – EJ ADVOCATES

Comment: The Environmental Analysis engages in speculation and conjecture.

Response: *The SED is more akin to a “Program EIR” and does not engage in speculation or conjecture about the details of subsequent projects that may require environmental review.*

As with a Programmatic EIR, “[s]ubsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.”

PUBLIC COMMENTS – EJ ADVOCATES

Comment: The Environmental Analysis does not adequately discuss enforceable and feasible mitigation measures.

Response: Much of the discussions during the development of the Amendments concerned defining and mitigating potentially adverse impacts. Mitigation measures, as discussed during 12 years of meetings, are incorporated into the project proposal itself.

PUBLIC COMMENTS – EJ ADVOCATES

Comment: The Amendments will have a disparate negative impact on protected classes, in violation of equal protection laws.

Response: The Amendments will apply equally throughout the Central Valley, and were crafted with specific provisions, including terms in the Nitrate Control Program, to find and address nitrate-impacted wells, including domestic wells and unregulated small systems.

*The Amendments will **not** have a disparate negative impact on any protected class of persons.*

PUBLIC COMMENTS – EJ ADVOCATES

Comment: “[T]he failure to adequately protect groundwater violates California's Fair Employment and Housing Act ... which guarantees all Californians the right to hold and enjoy housing without discrimination based on race, color or national origin.”

Response: *The adoption of the proposed Amendments does not fall within any category of unlawful practices defined by the California Fair Employment and Housing Act.*



STAKEHOLDER PANELS

**WATER PURVEYORS
ENVIRONMENTAL JUSTICE REPRESENTATIVES
CENTRAL VALLEY SALINITY COALITION**

PUBLIC COMMENT



QUESTIONS



FINAL STEPS AND STAFF RECOMMENDATION



LATE REVISIONS

Late Revisions Provided in Handouts

- Provide editorial clarifications
- Update Appendices I (Salt) and J (Nitrate) with additional examples
- Update Resolution to accept late revisions

NEXT STEPS & TIMELINE

Anticipated Date	Deliverable/Action
May 31 – June 1, 2018	Today’s Hearing
June 2019	State Water Board Consideration
September 2019	Office Administrative Law Consideration - Groundwater Components Effective Upon Approval
December 2019	USEPA Consideration - Surface Water Components Effective Upon Approval
September 2020	Initiate Notice to Comply Mailings

STAFF RECOMMENDATION

- Adopt Resolution to:
 - Approve the Staff Report and its supporting environmental documentation
 - Adopt the Basin Plan Amendments into the Central Valley Basin Plans with approved late revisions
 - Direct the Executive Officer to forward the amendments to State Water Board, Office of Administrative Law and USEPA (as appropriate) for approval.

An aerial photograph of a rural landscape. In the foreground, there is a large area of green trees and vegetation, possibly a forest or a large farm. A road or path runs through this area. In the middle ground, a winding river flows through the landscape. Beyond the river, there are large, flat fields, some of which are brown and some are green. In the background, there are more fields and some buildings, possibly a farm or a small town. The overall scene is a mix of natural and agricultural land.

Thank You