



CENTRAL VALLEY WATER BOARD PUBLIC WORKSHOP

Central Valley-wide Salt and Nitrate Control Programs

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



January 19, 2018



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INTRODUCTION



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PUBLIC WORKSHOP PURPOSE

We are here for:

- Open Discussion of Salt & Nitrate Control Programs and Supporting Components
 - *Overview*
 - *Clarifications/Additions since January 2017*
- Public Input
- Summarize Next Steps



We are NOT here to:

- Take Action on Proposed Programs or Policies

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PUBLIC WORKSHOP SCHEDULE

Morning

- Introduction
- Control Program Overview
- Nitrate Control Program
 - *Management Zones*
 - *Alternative Compliance*
- Salt Control Program
- Lunch

Afternoon

- Ensuring Implementation
 - *Conditional Prohibition of Discharge*
- Supporting Policies
 - *Variance and Exceptions Policy*
 - *Drought and Conservation Policy*
 - *Offsets Policy*
 - *Secondary Maximum Contaminant Level Policy*
- Definitions and Terminology
- Stakeholder Panels
- Public Comment
- Next Steps

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CONTROL PROGRAM DEVELOPMENT PROCESS

- Stakeholder-driven
- Multi-year effort – initiated in 2006
 - *Multiple Meetings*
 - >140 Policy
 - >50 Technical (+52 for LSJR)
 - >45 Misc. + Education/Outreach Committee
- Agency Oversight/Public Input
 - *Annual State Water Board Public Reports*
 - *Annual Regional Water Board Workshops*
- Materials posted at:
 - www.cvsalinity.org



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CONTROL PROGRAM OVERVIEW



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CENTRAL VALLEY SALT & NITRATE ISSUES

| | |
|--|--|
| <p>Nitrate Issues</p> <p><u>Human Health</u></p> <ul style="list-style-type: none"> • Legacy and existing conditions • Direct impacts to drinking water supplies • Significant economic costs <ul style="list-style-type: none"> – Treatment – Alternate supply • Diverse sources of nitrate to manage | <p>Salt Issues</p> <p><u>Long-term Sustainability</u></p> <ul style="list-style-type: none"> • More salt enters the Central Valley Region than leaves <ul style="list-style-type: none"> – Impacts (current/legacy) <ul style="list-style-type: none"> ▪ <i>Agricultural Production</i> ▪ <i>Drinking Water Supplies</i> – Economic Cost <ul style="list-style-type: none"> ▪ <i>Direct Annual: \$1.5 Billion</i> ▪ <i>Statewide Annual Income Impact: \$3.0 Billion</i> – Diverse Sources |
|--|--|

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CONTROL PROGRAMS FRAMED AROUND THREE PRIORITIZED MANAGEMENT GOALS

Management Goal 1

- Safe a Drinking Water Supply
 - Short & Long Term Solutions

Management Goal 2

- Balanced Salt & Nitrate Loadings
 - Ongoing and Expanding Efforts

Management Goal 3

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

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MEASURES OF SUCCESS

*Assure Safe Drinking Water
and
Sustain the Agricultural
Economy*

Basin Plan Amendments will establish:

- ✓ Mechanism to provide alternative water supplies
- ✓ Means to legally authorize discharges from modern farming practices
- ✓ Strategy to prevent further water quality degradation
- ✓ Implementable plan to restore degraded groundwater where it is reasonably feasible and practicable to do so
- ✓ An approach that recognizes diversity of conditions across the Central Valley

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SALT & NITRATE MANAGEMENT STRATEGY – BROAD PERSPECTIVE

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graph TD
    A[Nitrate & Salinity Control Programs] --> B(Prioritized Program)
    A --> C(Phased Program)
    B --> D[Nitrate Compliance Pathways]
    C --> E[Salinity Compliance Pathways]
    D --> F(Generally Maintain Traditional Permitting Approach)
    D --> G(Management Zone Permitting Approach)
    E --> H(Conservative Permitting Approach)
    E --> I(Alternative Permitting Approach)
    
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KEY ELEMENTS FOR PROGRAM OF IMPLEMENTATION

- **Concepts**
 - Management Zones
 - *Coordinated management for nitrate*
 - Requirements for allocating use of Assimilative Capacity
 - *Salts and nitrate*
 - Alternative Compliance Projects
 - *Prioritized focus on safe drinking water*
 - *Attention to Management Goals 2 & 3*
- **Control Programs**
 - Nitrate Control Program
 - Salt Control Program
- **Policies**
 - Variances and Exceptions
 - Drought and Conservation
 - Offsets
 - Secondary Maximum Contaminant Levels

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ISSUES/CLARIFICATIONS—WORKSHOP FOCUS

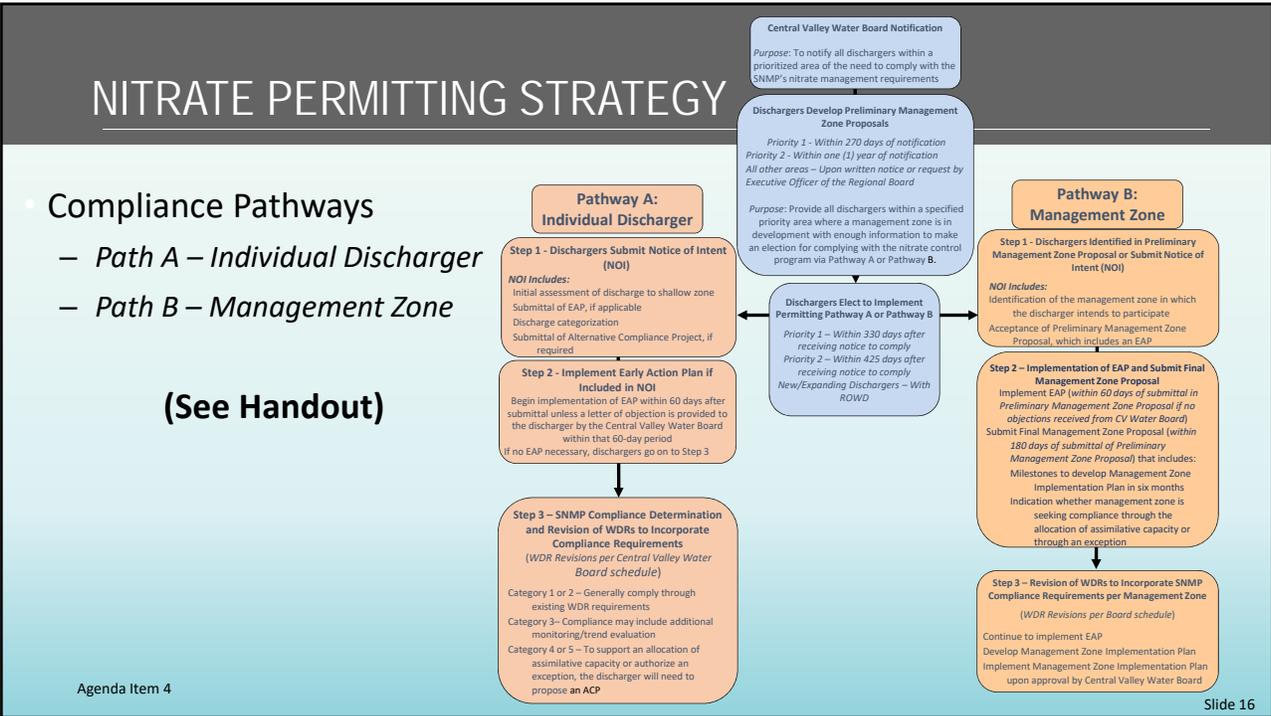
| Nitrate Control Program | Salinity Control Program | Others |
|---|--------------------------------|---|
| Re-define Shallow Zone | Phased Timeline | Ensuring Implementation |
| Timeframes for Implementation | • Notice to Comply | • Conditional Prohibition of Discharges |
| New/Expanding Dischargers | Pathway Selection Requirements | Policy Updates |
| Areas Outside of Valley Floor | • Use of Thresholds/Triggers | • Secondary MCLs |
| Early Action Plan Elements | • Definition of Shallow | Definitions |
| Collaboration with Communities | • Permit Requirements | |
| Coordination with Groundwater Sustainability Agencies | De-designation Requirements | |
| Alternative Compliance Project Requirements | | |

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PRIORITY GROUNDWATER BASINS/SUBBASINS

| Priority 1 | | Priority 2 | |
|------------|------------|------------|------------------------------|
| Basin No. | Basin Name | Basin No. | Basin Name |
| 5-22.11 | Kaweah | 5-21.67 | Yolo |
| 5-22.03 | Turlock | 5-22.04 | Merced |
| 5-22.05 | Chowchilla | 5-22.14 | Kern County (Westside South) |
| 5-22.13 | Tule | 5-22.12 | Tulare Lake |
| 5-22.02 | Modesto | 5-22.14 | Kern County (Poso) |
| 5-22.08 | Kings | 5-22.07 | Delta-Mendota |
| | | 5-22.01 | Eastern San Joaquin |
| | | 5-22.06 | Madera |

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RE-DEFINING SHALLOW ZONE (PATH A)

Basin Plan Excerpt

“For basin planning and regulatory purposes, the term ‘ground water’ includes all subsurface waters that occur in fully saturated zones and fractures within soils and other geologic formations, whether or not these waters meet the definition of an aquifer or occur within identified ground water basins.”

Draft East San Joaquin State Water Board Order

“Shallow groundwater in this context refers to groundwater located less than 10 feet below the soil surface, which will exhibit a rapid response to deep percolation (below the root zone) water and nitrate flows.”

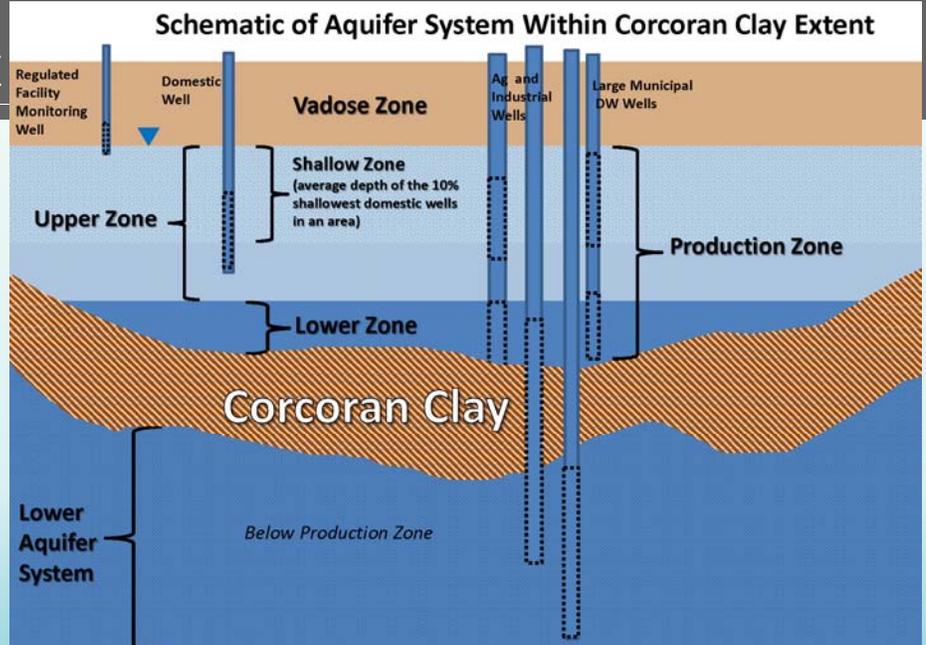
Draft Nitrate Control Program

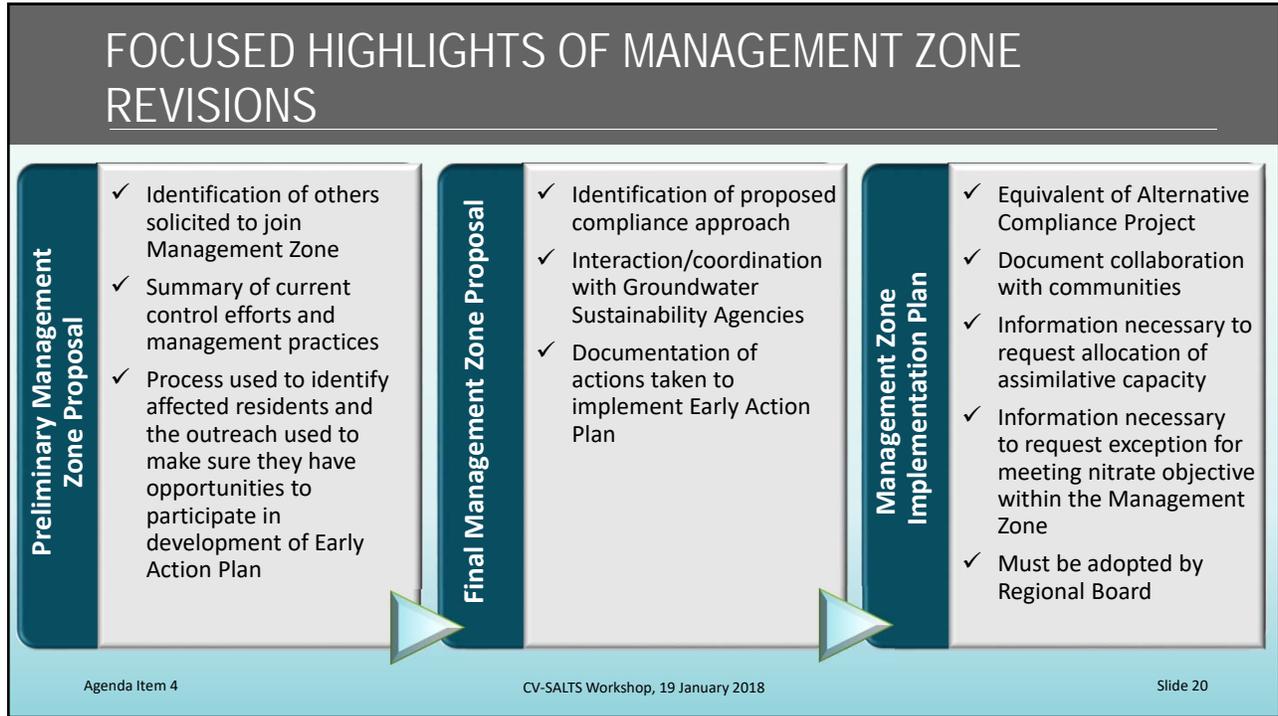
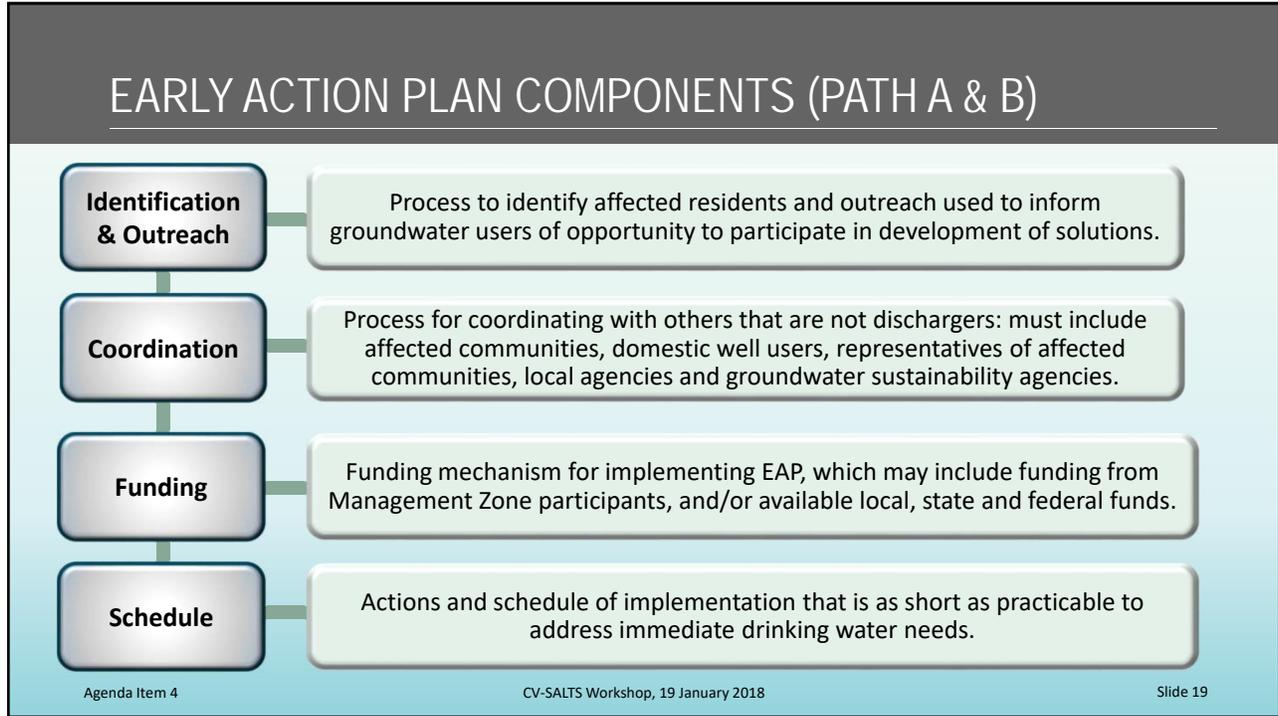
What constitutes the Shallow Zone in any given area may vary. To determine ambient nitrate concentrations in the Shallow Zone for purposes of Nitrate Control Program only, there are three options:

- (1) Shallowest 10% of the domestic water supply wells in the Upper Zone,
- (2) Site or area-specific evaluation, considering depth and age of domestic wells, groundwater table, etc.
- (3) Equivalent alternative approved by the Regional Water Board

SHALLOW ZONE

See Handout

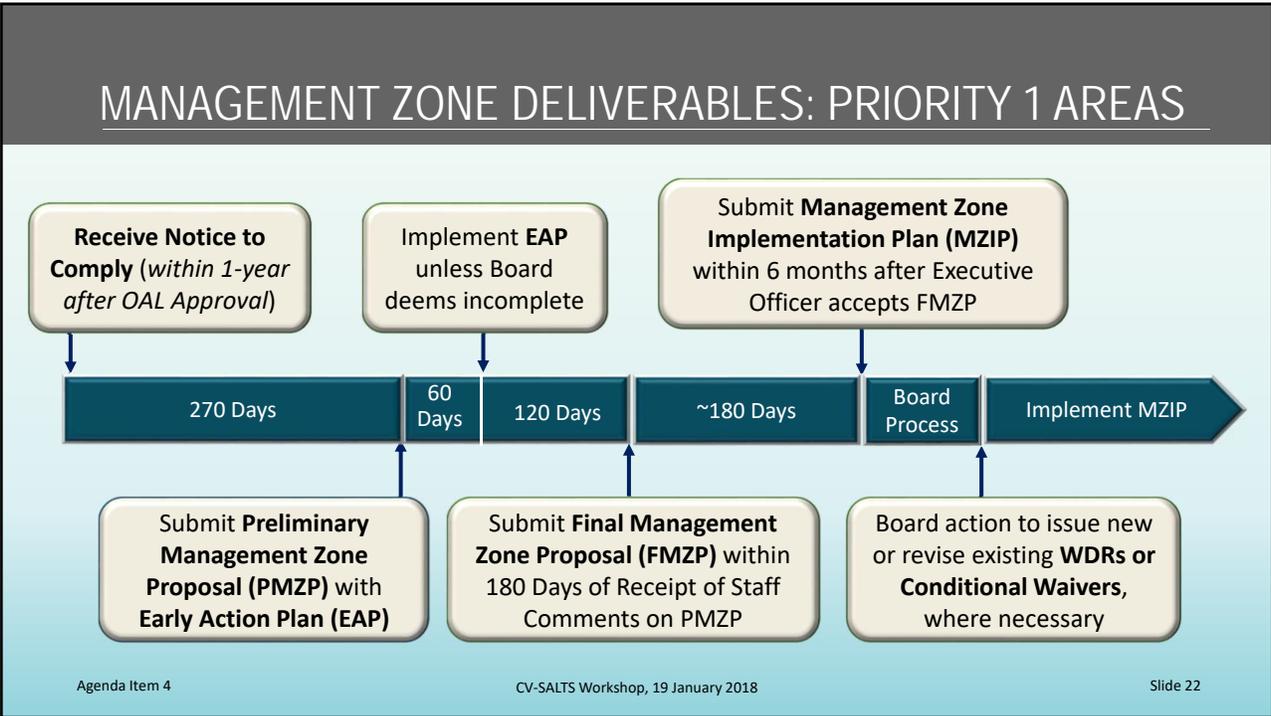


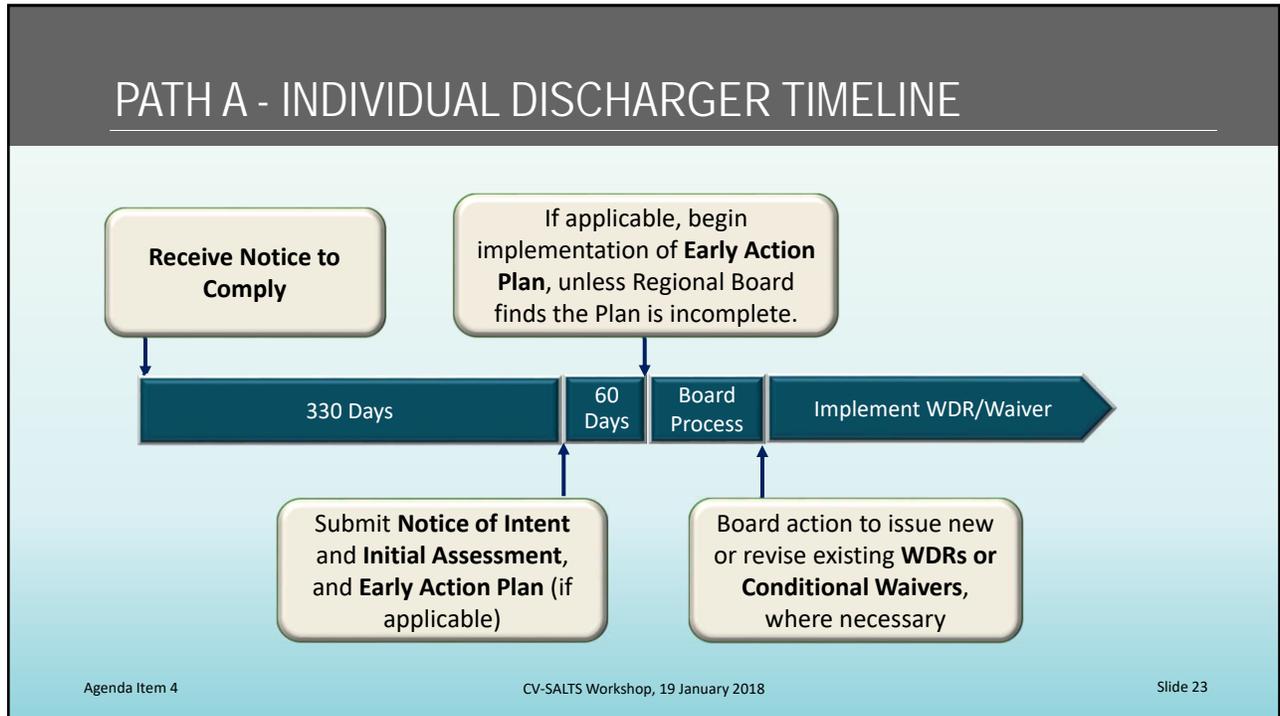


ALTERNATIVE COMPLIANCE PROJECT (ACP) REQUIREMENTS

| Element | Requirements |
|----------------------------|---|
| Reasons to Request an ACP | <ul style="list-style-type: none"> Support an allocation of assimilative capacity on a volume-weighted basis for a Management Zone Support an allocation of assimilative capacity request where nitrate is above a trigger level Support authorization for an Exception |
| Schedule to Request an ACP | <ul style="list-style-type: none"> Path A, Individual Approach – Submit with Notice of Intent Path B, Management Zone Approach – Submit with Management Zone Implementation Plan |
| Minimum Requirements | <ul style="list-style-type: none"> Identification of public water supply and domestic wells contaminated by nitrates within a discharge area’s zone of concern Schedule with milestones for addressing nitrate drinking water issues Identification of steps to be taken to meet SNMP Management Goals 2 and 3 |

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NITRATE CONTROL PROGRAM SCHEDULE

| Regulatory Actions (Current Estimate) | | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|--|--|------|--|------|------------------------------------|-----------------------------|-------------------------------|---------------------------------------|
| Central Valley Board Consideration | | ★ | | | | | | |
| State Water Board Consideration | | ★ | | | | | | |
| OAL Consideration | | ★ | <i>Trigger to Initiate Nitrate Control Program</i> | | | | | |
| Priority No. 1 | Receive Notice to Comply (NTC) | | → | | <i>w/in 1-year of OAL approval</i> | | | |
| | Notice of Intent – Select Path A or Path B | | | → | | <i>w/in 330 days of NTC</i> | | |
| Priority No. 2 | Notice to Comply | | | | → | | | <i>w/in 2-4 years of OAL approval</i> |
| | Notice of Intent – Select Path A or Path B | | | | → | | <i>w/in ~15 months of NTC</i> | |



SALINITY CONTROL PROGRAM

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SALINITY CONTROL PROGRAM

- **Phased Approach**
 - Basin-Wide
 - Long-term Sustainability
 - Maintain Good Water Quality
 - Improve Poor Water Quality
- **Management Goals**
 - “Managed Degradation”
 - Sustainability and Protect Salt Sensitive Areas
 - Meet Water Quality Objectives/Long-Term Restoration where reasonable, feasible and practicable
 - Protect High Quality Water (anti-degradation)

Legend

- Central Valley Water Board
- DWR Hydrologic Regions
- Groundwater Basin Boundary

Production Zone Ambient Total Dissolved Solids (TDS)

- < 250 mg/L
- 251 - 500 mg/L
- 501 - 750 mg/L
- 751 - 1,000 mg/L
- > 1,000 mg/L

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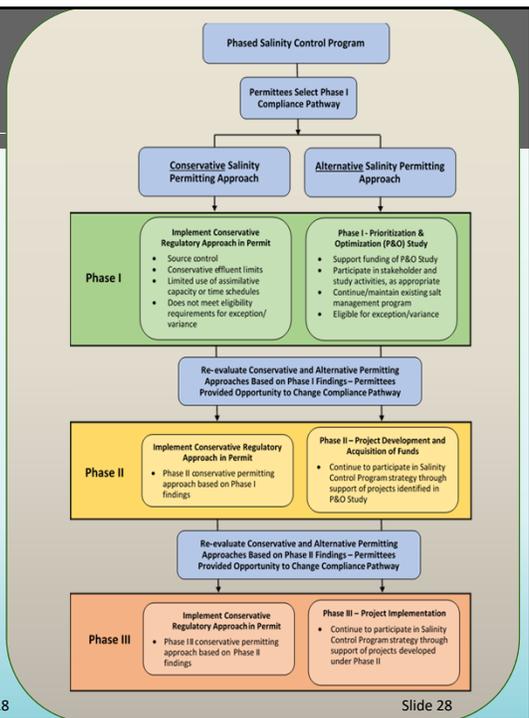
PHASED PROGRAM ALLOWS ADDITIONAL STUDY AND PRIORITIZATION OF REGIONAL RESOURCES

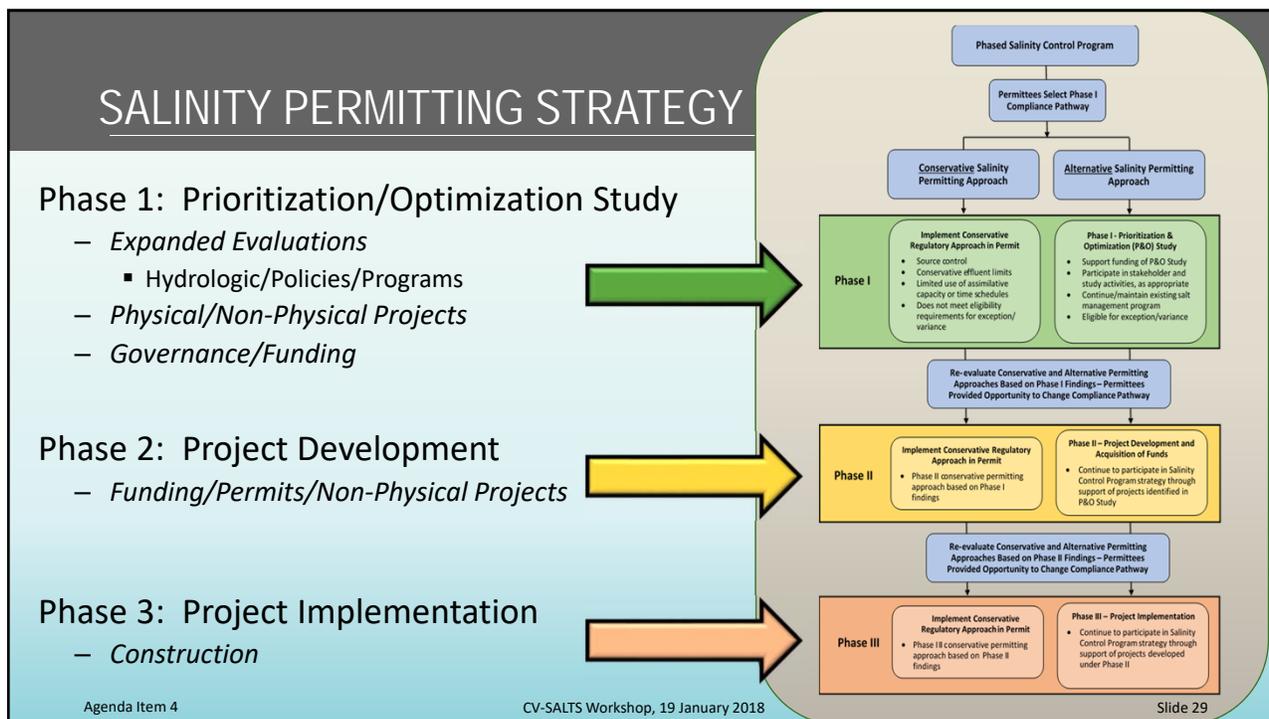
- Need more information to develop a long-term management strategy that considers:
 - Differences across hydrologic regions
 - Potential local or sub-regional solutions vs. a broad region-wide solution
 - Other relevant programs such as GSAs
 - Impacts of existing policies/programs that impact salt management
- Resource allocation must be prioritized to focus first and foremost on addressing nitrate drinking water issues
- Stepwise, adaptive process allows time to determine how best to manage salt

SALINITY PERMITTING STRATEGY

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

(See Handout)





| PHASE 1 | |
|--|--|
| Conservative | Alternative |
| <p><u>All Discharges</u></p> <ul style="list-style-type: none"> 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 <p><u>Groundwater Discharge and Non-NPDES Discharge</u></p> <ul style="list-style-type: none"> 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 <p><u>NPDES Surface Water Discharge</u></p> <ul style="list-style-type: none"> 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 | <p><u>All Discharges</u></p> <ul style="list-style-type: none"> Participate in the Phase I Prioritization and Optimization Study throughout its duration Continue implementing reasonable, feasible and practicable efforts to control salinity using performance-based limits, including: <ul style="list-style-type: none"> - Salinity management practices - Existing pollution prevention, watershed, and/or salt reduction plans - Monitoring - Maintenance of existing discharge concentration or loading levels of salinity <p><u>Groundwater and Non-NPDES Discharges</u></p> <ul style="list-style-type: none"> Deemed in compliance with salinity limits/eligible for a salinity exception <p><u>NPDES Surface Water Discharges</u></p> <ul style="list-style-type: none"> Eligible for a salinity variance |

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PHASE 1 CONSERVATIVE PATHWAY CONSIDERATIONS

Conservative Thresholds: AGR — 700 $\mu\text{S}/\text{cm EC}$ (30-day running average)
 MUN — 900 $\mu\text{S}/\text{cm EC}$ (monthly average)

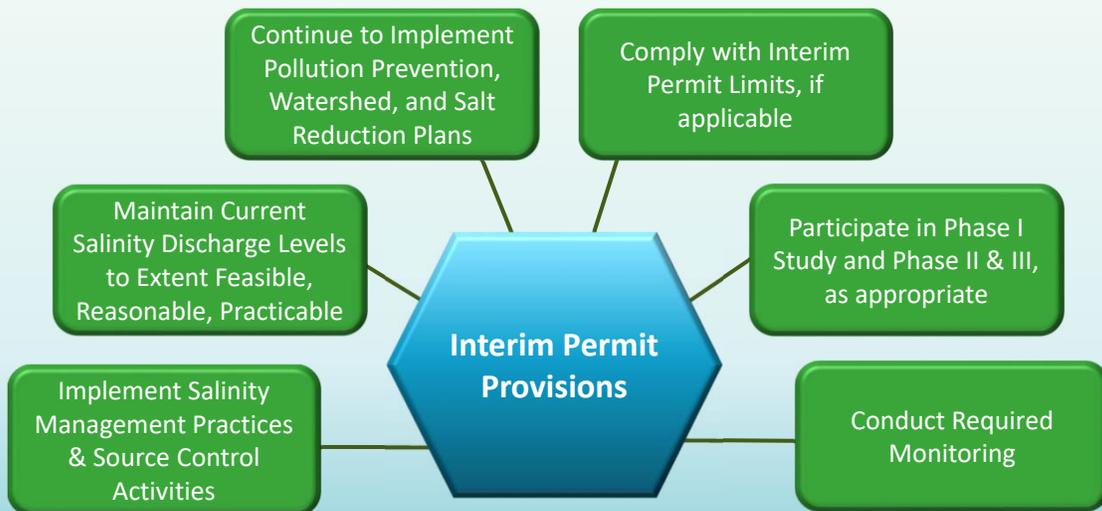
| Current Recommendation | Clarification Alternatives | Potential Alternatives |
|---|--|---|
| <ul style="list-style-type: none"> ➤ All Permittees <ul style="list-style-type: none"> ✓ Cannot cause or contribute to exceedance in receiving water ✓ Limit use of assimilative capacity ✓ Limit use of time schedules ➤ NPDES <ul style="list-style-type: none"> ✓ Reasonable Potential Analyses ✓ Not eligible for variance ➤ WDR/Non-NPDES <ul style="list-style-type: none"> ✓ Shallow groundwater ✓ Not eligible for exception | <ul style="list-style-type: none"> ➤ Shallow Groundwater <ol style="list-style-type: none"> 1. Consistent with Nitrate Control Program <ul style="list-style-type: none"> -- 10% shallow domestic or appropriate option 2. Utilize current Basin Plan Definition of Groundwater 3. Specify default criteria <ul style="list-style-type: none"> -- e.g. 20-ft screening depth initiated 5-ft above groundwater surface | <ul style="list-style-type: none"> ➤ Compliance measured in Effluent <ol style="list-style-type: none"> 1. Utilize 700/900 $\mu\text{S}/\text{cm EC}$ <p>Limit degradation high quality water</p> <p><u>Goals:</u></p> <ul style="list-style-type: none"> ➤ Streamline evaluation during Phase 1 ➤ Incentivize support of P&O Study |

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SALINITY ALTERNATIVE PERMITTING APPROACH



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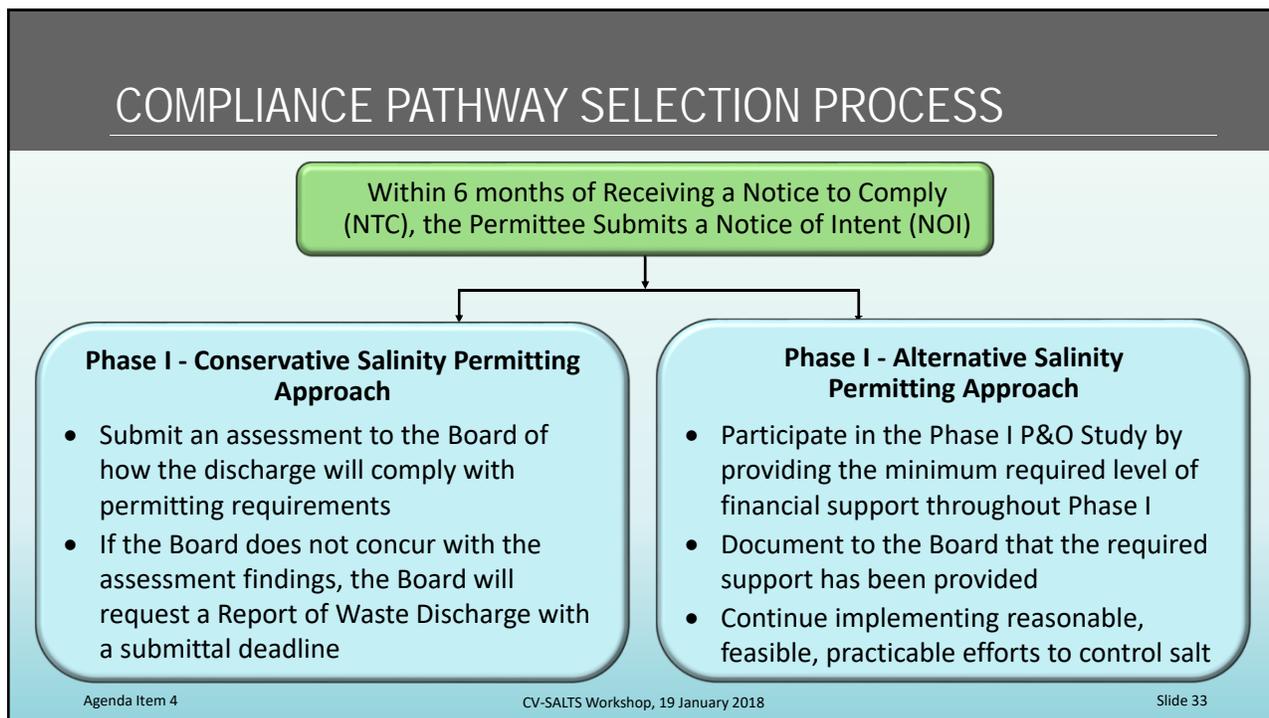
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PHASE I – PRIORITIZATION AND OPTIMIZATION STUDY

| Category | Year of Implementation | | | | | | | | | |
|---|---|---|----------------------|---|----------------|---|----------------------|---------------------------------------|---|----------------------|
| | 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) | | | | | | | | | |
| Strategic Planning | Regulatory and Policy Evaluations | | | | | | | Phase II Planning | | |
| Governance | Governance Plan – Formation and Structure | | | | | Implementation and Refinement of Governance Plan | | | | |
| Funding | Funding Plan and Financing Strategy | | | | | Implementation of the Funding Plan and Financing Strategy | | | | |
| Prioritization & Salinity Management Analyses | Prioritization/Salt Management Analyses to Support Identification of Salt Management Projects | | | | Interim Report | | | | | |
| Conceptual Design of Salt Management Project | | | | | | Concept Design for Subregional Salt Management Projects and Regional CVBL Project | | | | |
| Special Studies | | | | Groundwater Quality Trace Constituent Study | | | | | | |
| | | | Emerging Tech Update | | | | Emerging Tech Update | | | Emerging Tech Update |
| | | | | | | Recycled Water Imports Study | | | | |
| | | | | | | | | Stormwater Recharge Master Plan Study | | |

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PHASE I PRIORITIZATION & OPTIMIZATION STUDY IMPLEMENTATION

| Issue | Expectations |
|--|---|
| Who could potentially participate? | <ul style="list-style-type: none"> All (or almost all) permitted dischargers of salt (surface water or groundwater) Non-discharging entities that would benefit from Central Valley salinity management and control activities |
| Who will manage the Study? | <ul style="list-style-type: none"> Anticipated lead - Central Valley Salinity Coalition |
| How will the Study be implemented? | <ul style="list-style-type: none"> Activities to occur in an open stakeholder process Workplan (scope, budget, schedule) to be developed prior to implementation Meet milestones established in Phase I Salinity Control Program |
| How will required level of commitment be determined? | <ul style="list-style-type: none"> Anticipated to be determined based on a variety of factors, e.g., facility size/type; discharge volume, salt loading, others |

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PHASE I P&O STUDY - KEY MILESTONES

| Time From Notice to Comply | Milestone | Deliverables |
|----------------------------|---|--|
| 6 months | Phase I Workplan | Task descriptions, costs, schedule |
| 12 months | Phase I Funding & Governance Plan | Process/procedures for P&O Study governance; secure funding |
| Annually | Annual Progress Report | Workplan progress; funding/costs; participation |
| 5 years | Interim Project Report (by hydrologic region) | Preferred physical/non-physical projects; next steps/schedule for development |
| 9 years | Long-term Governance Plan | Implementation approach for Phases II & III; stakeholder roles and responsibilities |
| 9 years | Long-term Funding Plan for next phases | Long-term funding, equitable management approach for long-term, large-scale projects |
| 9 years | Basin Plan Amendment Recommendations | Facilitate implementation of Phase II; modify permitting approaches, if appropriate |
| 10 years | Final Project Report | Physical project conceptual designs, permitting requirements; non-physical project updates |

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CENTRAL VALLEY WATER BOARD PUBLIC WORKSHOP

Central Valley-wide Salt and Nitrate Control Programs

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



Lunch

January 19, 2018



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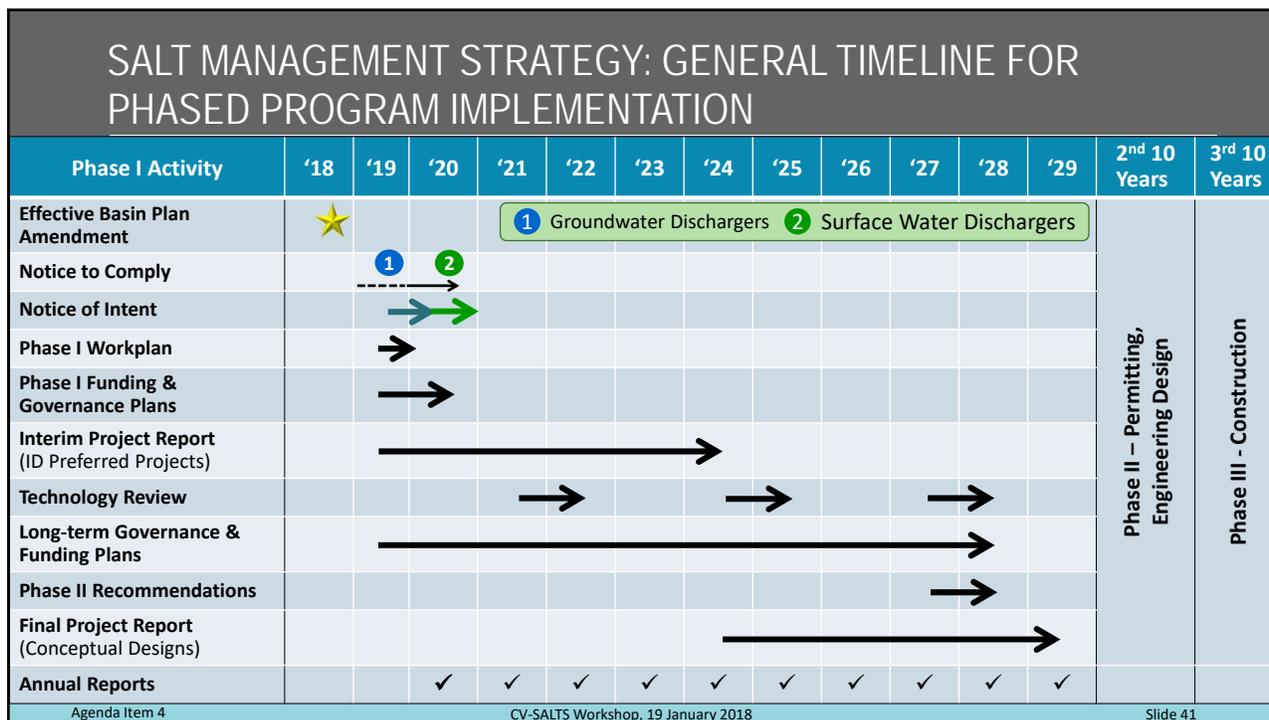
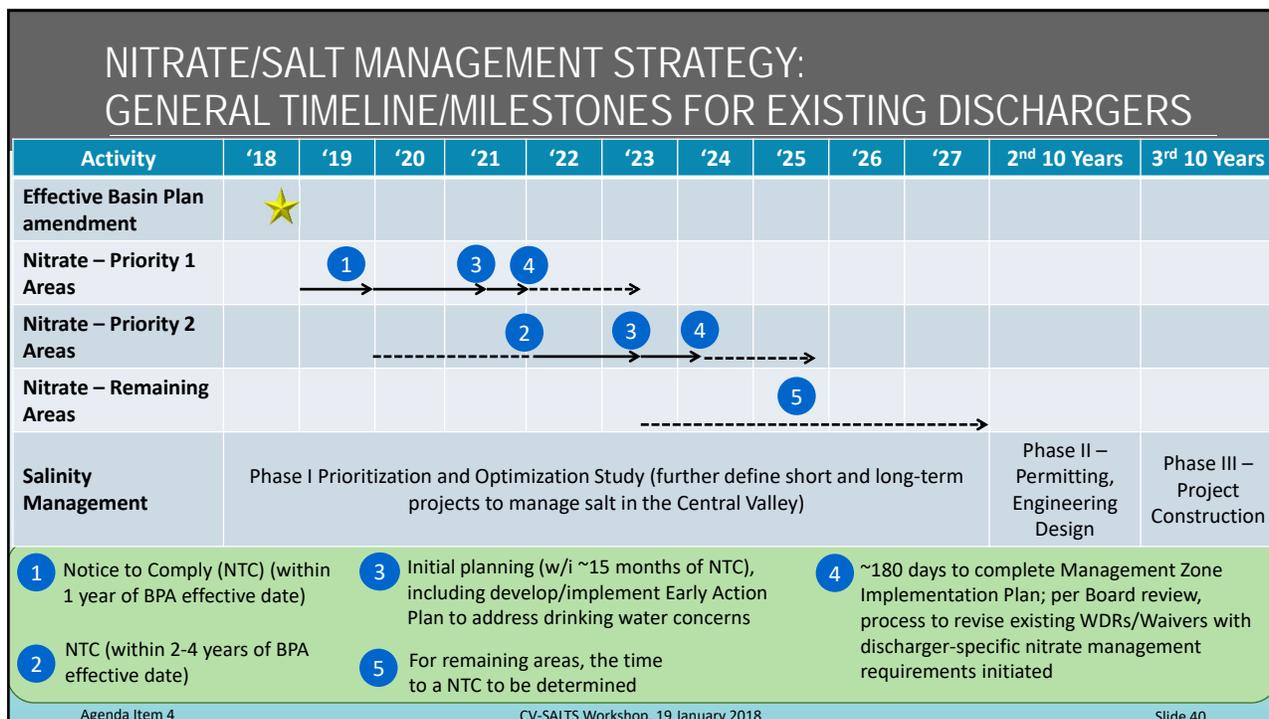
ENSURING IMPLEMENTATION



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OPTIONS TO REQUIRE EARLY PARTICIPATION/ACTIONS

Goals

- Initiate Action not Paperwork
 - *Staff and Permittees*
- Insure development and implementation of Early Action Plans
- Broad-based and timely participation in P&O Study
- Nimble regulatory response where needed
 - *Notices of Intent*
 - *Completion of Milestones*



OPTIONS TO REQUIRE EARLY PARTICIPATION / ACTIONS

- ★ 1. General Amendments to Existing WDRs
- ★ 2. Global Time Schedule Order (TSO)
3. Conditional Prohibition
4. Hybrid—Revise ILRP General Orders with Remainder under Conditional Prohibition
- ★ 5. “Elective” General Order to replace Nitrate/Salinity Terms in existing WDRs

****See Handout****

Pros/Cons

HYBRID--CONDITIONAL PROHIBITION OF SALT AND NITRATE DISCHARGES

- Permittees that discharge salt and/or nitrate pursuant to a WDR or Conditional Waiver and are not regulated under the Irrigated Lands Regulatory Program (ILRP):
 - Upon receiving a Notice to Comply, discharges of salt and/or nitrate are prohibited unless a discharger implements the requirements of the Salt and Nitrate Control Program
 - Prohibition applies until such time that the permittees' existing WDR or Waiver is updated or amended
- Timing for Permit Updates
 - Salinity: After receipt of Notice of Intent
 - Nitrate: Path A—After receipt of Notice of Intent
Path B—After receipt Management Zone Implementation Plan



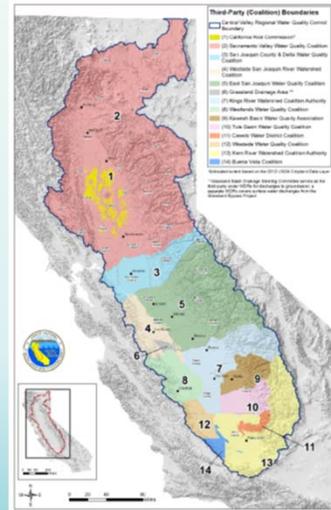
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HYBRID--CONDITIONAL PROHIBITION OF NITRATE DISCHARGES TO GROUNDWATER FOR AGRICULTURE

- Permittees regulated under the Irrigated Lands Regulatory Program (ILRP) will be required to comply with the Nitrate Control Program through an amendment to the ILRP General Orders
 - Amendment consideration within 18-months effective date of control program



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NOTICE TO COMPLY

- Needed for All Options
- Staff Reviewing ALL Permits
 - NPDES
 - WDRs
 - General Orders
- Identify
 - Dischargers
 - Permit Conditions



SUPPORTING POLICIES





VARIANCE & EXCEPTIONS POLICIES




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BACKGROUND

- Temporary, Conditional Exemption for Some Compliance Requirements
- Variances or Exceptions may be necessary when...
 - *The WQS is not appropriate and must be revised, or...*
 - *There is no reasonable or feasible means of compliance, and...*
 - *It is not reasonable or feasible to prohibit the discharge*
- The Central Valley Regional Board's Current Policy
 - *Adopted in June, 2014*
 - *Established streamlined variance program for salinity (Exp. 6/19)*
 - *SNMP recommends extending & expanding the variance/exception policy*



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
**Amendments to the
Water Quality Control Plan for the
Sacramento River and San Joaquin River
Basins and the
Water Quality Control Plan for the
Tulare Lake Basin**
To add
Policies for Variances from Surface Water Quality
Standards for Point Source Dischargers, Variance
Program for Salinity, and Exception from Implementation
of Water Quality Objectives for Salinity
Final Staff Report
June 2014


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REVISIONS TO THE CURRENT VARIANCE POLICY FOR SURFACE WATER DISCHARGES

- Extends sunset date for the Streamlined Salinity Variance Program (*expires 15 years after effective date of BPA*)
- Eligibility requires active participation in the Salinity Priority and Optimization Study
- Allows "Joint Applications" by dischargers (*w/ common permit or receiving water*)
- All other provisions of the current variance policy remain unchanged



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REVISIONS TO THE CURRENT EXCEPTIONS POLICY FOR DISCHARGES TO GROUNDWATER

- Removes the current sunset date (June 30, 2019)
- Expands exceptions policy to include Nitrate and Boron
- Nitrate exceptions require assurance of clean, safe, reliable & affordable drinking water
 - *Work plan to provide interim and permanent water supply*
 - *Schedule of milestones & description of financial commitments*
 - *Performance bonds may be required to assure implementation*
- Regional Board may require interim performance-based WDRs
- Requires mandatory status report and review every 5 years
- Limits exceptions to a maximum term length of 50 year



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DROUGHT AND CONSERVATION POLICY

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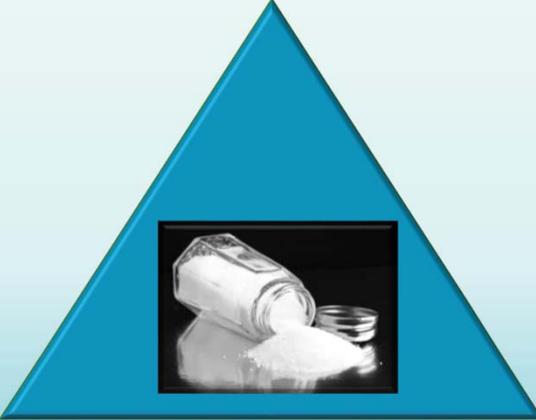
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NEED FOR A DROUGHT AND CONSERVATION POLICY

Drought Conditions

Water Conservation

Recycled Water



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IMPLEMENTATION APPROACH

- Eligibility Criteria
 - Available for discharges to surface water (variance) or groundwater (exception)
 - Declaration of a Drought Emergency consistent with California Emergency Services Act
 - Demonstration that water conservation and/or recycling is causing salinity to increase in the discharge or the receiving waters
- Primary focus will be on NPDES discharges during Phase I of the Salinity Control Program (P&O Study)
- May be refined or revised following the P&O Study

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INTERIM LIMITS

- No unreasonable impact to downstream/downgradient water quality
- WDRs consistent with historic loading while also considering:
 - Changes in source water quality
 - Reasonable increment-of-use
- May not exceed EC concentration of 2,200 $\mu\text{S}/\text{cm}$ (30-day running avg.)
- Regional Board may adjust WDRs based on site-specific considerations

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OFFSETS POLICY



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WHAT IS AN OFFSET?

Example #1

Salt Discharges



Groundwater

Desalters & Regulated Brine Line

Example #2

Salt Discharges



Groundwater

Stormwater Harvesting

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KEY ELEMENTS OF A PROPOSED OFFSET PROJECT

- Only available for discharges to groundwater
- Should be located in the same basin or management zone as the discharge(s)
- Net effect will be functionally-equivalent to or better than what would have occurred by requiring traditional compliance or by prohibiting the discharge
- For groundwater basins w/ 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*

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REVIEW AND APPROVAL PROCESS FOR OFFSET PROJECTS

- Offset projects are voluntarily proposed as an Alternative Compliance Project
- Requires Regional Board approval through the normal public process
- Must notify downgradient well owners of any proposed offset project
- Limited to a specific term, determined by the Board; can be renewed
- Must include verification in the Monitoring and Reporting Program
- All implementation obligations must be enforceable through a discharge permit or similar order

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SECONDARY MAXIMUM CONTAMINANT LEVEL POLICY




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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 | 250 | 500 | 600 |
| Sulfate, mg/L | 250 | 500 | 600 |

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MODIFICATIONS IN RESPONSE TO PUBLIC COMMENT

- Emphasize importance of consumer confidence and acceptance
- Encourage use of the “Recommended” concentrations where feasible
- Assure consistency with Title-22:
 - *“Short-term” concentrations can only be authorized temporarily under certain conditions*
 - *Compliance with Table A & B parameters should be assessed using annual averages*



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MODIFICATIONS IN RESPONSE TO PUBLIC COMMENT

- Highlight factors to consider:
 - *Potential impact & cost on downstream water agencies*
 - *Cumulative and collective impact of all discharges to the same waterbody*
 - *Source control strategies and waste treatment alternatives*
- Allows possible use of filtered samples
- Does not change how other State Board policies apply



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DEFINITIONS AND TERMINOLOGY



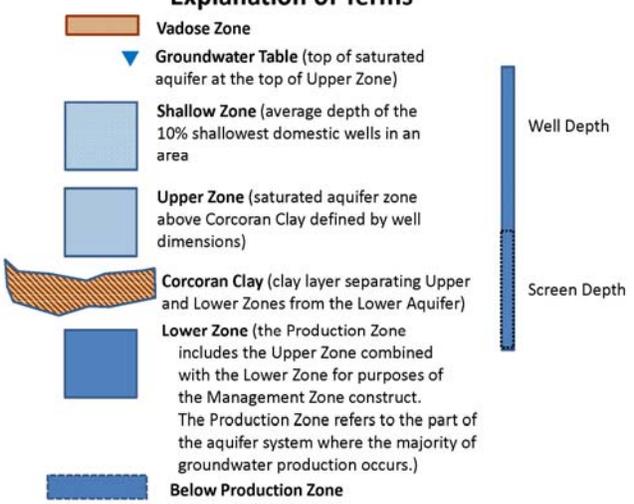

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DEFINITIONS SPECIFIC TO SALT AND NITRATE CONTROL PROGRAM

- Key Terms Discussed
 - *Alternate Compliance Program (ACP)*
 - *Early Action Plan (EAP)*
 - *Groundwater Zones (Shallow; Upper)*
 - *Exception/Variance*
 - *Offset*

- Additional Terms in Handout
 - *First Draft*

Explanation of Terms



- Vadose Zone**
- Groundwater Table** (top of saturated aquifer at the top of Upper Zone)
- Shallow Zone** (average depth of the 10% shallowest domestic wells in an area)
- Upper Zone** (saturated aquifer zone above Corcoran Clay defined by well dimensions)
- Corcoran Clay** (clay layer separating Upper and Lower Zones from the Lower Aquifer)
- Lower Zone** (the Production Zone includes the Upper Zone combined with the Lower Zone for purposes of the Management Zone construct. The Production Zone refers to the part of the aquifer system where the majority of groundwater production occurs.)
- Below Production Zone**

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NEXT STEPS




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SCHEDULE TO ADOPT BASIN PLAN AMENDMENTS AND INITIATE IMPLEMENTATION

| Date | Deliverable/Action |
|-----------------|--|
| 9 February 2018 | Draft Staff Report Released |
| 12 March 2018 | Public Hearing to Receive Oral Comments |
| 26 March 2018 | Written Comments Due |
| 30 April 2018 | Release Response to Comments/Revisions |
| 31 May 2018 | Public Hearing to Consider Adoption |
| 2018 | State Water Board Consideration |
| 2018 | Office Administrative Law Consideration - Groundwater Components Effective Upon Approval |
| 2019 | USEPA Consideration - Surface Water Components Effective Upon Approval |
| 2019 | Initiate Notice to Comply Mailings |

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CV-SALTS PUBLIC EDUCATION / OUTREACH COMMITTEE (PEOC)

26 Stakeholder Members

- *Industry, Agriculture, and Water Interests*

Outreach Documents

- *Bilingual General Brochure*
- *Four audience-specific outreach brochures*
- *Two SNMP fact sheets (one bilingual)*
- *Nine policy summaries*

Outreach Meetings during 2017

- *~50 targeted individuals and groups*
- *industry, agricultural interests, education, and the research community*

Planned Future Actions

- *Targeted meetings*
 - *Including Communities*
- *Two formal workshops*
- *Webinars*
- *Editorial board briefings*
- *Updating of outreach materials*



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STAKEHOLDER PANELS AND PUBLIC COMMENT PERIOD

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