

MEETING SUMMARY

STATE WATER BOARD: CV-SALTS WORKSHOP – JULY 2, 2019

PREPARED FOR: Kern River Watershed Coalition Authority (KRWCA)

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INTRODUCTION

The purpose of this meeting summary is to document the presentation and discussion items from the July 2, 2019 State Water Resources Control Board's Public Workshop on the Central Valley-wide Salt and Nitrate Control Program. The main purpose of this workshop was to receive information from the Regional Board staff and oral comments from interested parties. The workshop is for informational purposes only and no formal action was taken.

BACKGROUND

Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) is a collaborative stakeholder driven and managed program to develop sustainable salinity and nitrate management planning for the Central Valley. The goals of CV-SALTS are as follows:

- Sustain the Valley's lifestyle
- Support regional economic growth
- Retain a world-class agricultural economy
- Maintain a reliable, high-quality urban water supply
- Protect and enhance the environment

CV-SALTS includes four working groups:

1. Technical
2. Public Education and Outreach
3. Economic Social Cost
4. Other (CEQA, policy development, etc.)

ACRONYMS

AID – Alta Irrigation District Archetype	NIMS – Nitrate Implementation Measures Study
ACP – Alternative Compliance Program	P&O Study – Prioritization and Optimization Study
BP – Basin Plan	SGMA – Sustainable Groundwater Management Act
BPTC – Best Practicable Treatment and Control	SMCL – Secondary Maximum Contaminant Level
GSA – Groundwater Sustainability Agency	SNMP – Salt and Nutrient Management Plan
IAZ – Initial Analysis Zone	SSALTS – Strategic Salt Accumulation Land and Transport Study
ICM – Initial Conceptual Model	WQO – Water Quality Objective
ILRP – Irrigated Lands Regulatory Program	
LSJR – Lower San Joaquin River	
MUN – Municipal beneficial use	

SUMMARY

Regional Board staff and other CV-SALTS representatives presented the main strategies and policies of the salt and nitrate control programs of the Basin Plan. There was time allowed for public comment, stakeholder panels, and Board questions and discussion.

PRESENTATIONS

Regional Water Board: Patrick Pulupa, Ann Littlejohn, Jessica Yara, Adam Laputz, Board Chair Karl Longley and former Vice Chair Denise Kadara

- Program overview:
 - Program began as a salt control program with an estimated \$1.5B/yr in direct annual costs with statewide impacts of \$3B/yr. Main impacts were to agriculture and drinking water.
 - Nitrate came to the forefront quickly, as a combination of legacy issues and existing conditions: fertilizer, sewer, septic, food processors, feedlots and other industries.
 - Permitting options to address the issues are fairly limited with the current regulations having unattainable standards for many operations, thus a program was needed.
 - Mandate to replace water under cleanup and abatement orders
 - Nitrogen Management challenges: under current best practices – 80% crop recovery of applied nitrogen, making it difficult to achieve 10 mg/L nitrate
 - The development of the program has been a long process that was stakeholder driven, starting in 2006, with agency oversight and public input.
 - Stakeholders determined there were two measures of success: Safe Drinking Water & Agricultural Sustainability as it relates to ecological impacts. To get there the program would:
 - Provide replacement drinking water
 - Require permitting to limit degradation and groundwater impacts

- Tam Dudoc (State Board): Was the intent that this would be the only solution for providing safe drinking water? Patrick: Absolutely not, there are other issues impacting safe drinking water (arsenic, 123 TCP) that will be addressed through other programs. Lots of legacy contamination, bacterial contamination that would need to be addressed from other programs.
- Tam: Is this program in lieu of other activities to address salt and nitrate (i.e. enforcement actions)? This program goes beyond the current enforcement actions. So this would be more comprehensive approach? Patrick: Yes. Tam: Timelines, requirements, etc. are important for enforcement. Patrick: Agreed.
- Tam: Is the determination of unattainable standards made on case by case, permit basis? Patrick: Unattainability isn't part of basin plan, just a look at current conditions. The reference in the slide was to bring to your attention the fact that with current technology, it is hard to meet the standard.
- Tam: Seems like the amendments focus a lot on managing degradation over the course of 50 yrs or more. Was there discussion on when these objectives would be achieved? Patrick: Recognizes that 50 yrs is a long time, but it is not practical to put a hard deadline with the varied conditions.
- Dorene D'Adamo (DeeDee, State Board) – To clarify, specific details on timelines are included within the management zones planning depending on what is practical. Patrick: Yes.
- Basin Plan Amendments
 - The implementation elements included in the BPAs are as follows:
 - Salt Control Program
 - Nitrate Control Program
 - Conditional Prohibition
 - Surveillance and Monitoring
 - Program Specific Definitions
 - New or Revised Policies included:
 - Variances and Exceptions
 - Drought and Conservation
 - Offsets
 - Secondary Maximum Contaminant Levels
 - Management Goals - Safe Drinking Water Supplies (Short & Long Term)
 - Goal 1: Safe Drinking Water Supplies
 - Short term – whatever it takes to get clean water
 - Long term – infrastructure
 - Goal 2: Balance salt and nitrate loading
 - Balanced loading
 - Aquifer response dependent on how or where N/salt is removed
 - Intended to complement Goal 3
 - Goal 3: Long Term Aquifer Restoration
 - Reasonable, Practicable & Feasible
 - Requested by stakeholders
 - Policy already in water code
 - Reminds regional board that they have discretion as appropriate
 - Example: Alta Irrigation District Restoration

- Pump and treat works best for localized areas of concern, however even for localized issues, could take decades for restoration
 - Large scale pump and treat was not feasible
 - Solutions will need to consider local needs/limitations
 - Important to use of all three goals to get to long-term solutions
 - Prioritized and Phased Strategy
 - Nitrate: Individual Permits or Management Zone Permits
 - Salt: Conservative Permitting or Alternative Permitting Approach
 - Nitrate Control Program:
 - Priority 1 Areas: Notice to Comply within 1 yr of effective date – 232 permittees
 - Priority 2 Areas: Notice to Comply within 2-4 yrs of effective date – approx. 300 permittees
 - Remaining Areas: As necessary – approx. 300 permittees
- Tam: Was there a deliberate action to distinguish between petition (communities to look at a basin) or request (permittees request deferment)? Patrick: No deliberate distinction between the two. The request to defer is a very high bar to achieve.
 - Pathways for compliance:
 - Path A – Individual Discharges – hard to meet compliance requirements
 - Individual compliance
 - Receiving water – based upon the shallow zone
 - 5 nitrate categories based on threat to that part of the aquifer
 - Must develop Early Action Plan to provide safe drinking water
 - Alternative Compliance Project if 75% nitrate objective
 - Path B – Management Zones (MZ)
 - Work Collectively
 - Receiving water – based upon the upper zone
 - Early Action Plan to provide safe drinking water
 - Preliminary MZ Proposal
 - Proposal is due 270 days after Notice to Comply
 - Includes items such as boundaries, identification of dischargers, summary of current control efforts and management practices, survey pan for affected users, early action plan (initiate in 60 days)
 - Final MZ Proposal
 - Proposal is due 180 days after board comments on preliminary MZ proposal
 - Includes items such as governance structure, compliance approach, coordination with GSAs and others, documentation of actions take to implement early action plan
 - MZ Implementation Plan (goes into permit)
 - Plan is due 6 mos after EO accepts final management zone proposal
 - Identifies emergency, interim and permanent drinking water needs
 - Includes items such as water quality conditions report, plan for balancing nitrate loading, aquifer restoration, nitrate control measures to be implemented, time line, cost sharing, surveillance and monitoring program,

responsibility of various dischargers, integration into WDRs for all dischargers in MA.

- Three vetting stages – staff review, community engagement, board review (public process), incorporation into orders
- Early Action Plan
 - Outreach
 - Coordination
 - Funding
 - Implementation Schedule
- Sean Maguire (State Board): Understands that replacement water could last a long time. Are there any performance standards for the replacement water? Patrick: No, positions vary a lot across the valley. Would have loved to see performance metrics, but know that community needs vary. Sean: Hoping that there is an ability to address and adapt to change as needed.
- Tam: What is the timeline for those who choose Path A? Ann Littlejohn: 330 days
- Tam: Are the deadlines fixed or is there the ability to request extensions? Patrick: Believes it is fixed.

- Exception Policy
 - Adds nitrate and boron
 - Must ensure safe drinking water supplies
 - Renewable term
 - Required to submit status reports
 - Maximum length is 50 years
- Offset Policy
 - Addresses groundwater and must be located in same basin or MA as discharge
 - Substantially same pollutant
 - Net effect = equivalent or better
 - No assimilation capacity = offset ration must be 1:1
 - Offsets cannot result in unmitigated localized impairment or have a disproportionate impact on disadvantaged communities
- Conditional Prohibition
 - Applies upon receiving Notice to Comply
 - Nitrate discharges prohibited unless permittee implements Nitrate Control Program requirements
 - Applies until WDR/Waiver is updated or amended
 - Exception: IRLP (will revise Orders)
- Secondary MCLS
 - Incorporates Title 22 Contextual language
 - Upper, Short term and Recommended
 - Clarifies compliance periods
 - Surface: Annual
 - Groundwater: Annual and long-term average
 - Clarifies sampling and analysis
 - Filter sample size

- Analyze for total levels
 - Appendix G – Factors to consider
- Salt Control Program
 - Strategy – includes both surface and groundwater discharges of salt
 - Basin-wide approach and looks to long term sustainability to maintain good water quality and improve poor water quality.
 - Two compliance pathways, where the permittee elects their compliance path at each phase
 - Conservative Permitting
 - Alternative Compliance
 - Phase 1: P&O Study
 - Expanded evaluations of hydrologic regions
 - Physical (infrastructure)/Non-physical (modeling, policy) projects
 - Governance/Funding
- Tam: How does de-designating areas of beneficial use work? Ann: An example would be areas that have potential salt sinks. Tam: What comes first? P&O or de-designation? Ann: Begin with P&O, de-designation would be an example of a non-physical project within the P&O.
 - Participation: permitted dischargers, entities that benefit from import/export of Central Valley water
 - Management: 3rd party entities
 - Variances: only applies to salinity water quality standards, 15 yr extension, requires participation in P&O study
 - Drought & Conservation Policy
 - Interim limits (concentration or loading)
 - No downstream/downgradient impacts
 - Consistent with historic load
 - Phase 2: Project Development
 - Funding, permits, non-physical projects
 - Phase 3: Project Implementation
- Ongoing Controversies
 - Environmental Justice Concerns
 - No comprehensive well testing program
 - Uneven benefits of the program (not everyone is made whole)
 - Communities are not fully able to participate in development of EAPs
 - Compliance timelines too lengthy
 - Deemed “In compliance” while dischargers are working to fix the problem
 - Possible gerrymandering of MZ boundaries to exclude impacted communities
 - Horizontal averaging and offsets result in “hot spots”
 - No real technical justification for averaging in groundwater
 - Reasonable, Feasible, Practicable places undue discretion in RB hands
 - De facto/ de designation if aquifer problems are not rectified
 - Balance and other terms are vaguely defined
 - Violates Non-Point Source Policy

- Violates Anti-Degradation Policy
 - Concerned Salinity hot spots could impact aquatic life
 - Drinking water purveyors
 - Secondary MCLs language relaxes and does not clarify existing regulation
 - US EPA
 - Working with EPA, have had staff turnover but confident be able to resolve
- Tam: Reasonable, Practical & Feasibility – it seems that these concepts are being applied at the backend of the policy? Patrick: Disagrees, position is that it is entirely within the authority of the Board. Means you work with the discharge community to get to objectives.
- Tam: Exception Policy – Timeline maximum over 50 years – was there any discussion on setting an initial goal? Patrick: Yes.
- Tam: Without some parameter, don't exceptions become a permanent waiver? Patrick: Non-point source policy gives some parameters for time.
- Tam: In regards to Salt Control Program, had hoped managing degradation would mean NOT increasing the level of degradation, however it seems that there is the potential for salt levels to increase. Patrick: There will always be salt in the system as long as you have the water system we have in CA.

Stakeholder Group - Management Zone Pilot Study: Parry Klassen (East San Joaquin Water Quality Coalition), Charlotte Gallock (Kings River Water Quality Coalition), Paul Boyer (Self Help Enterprises)

- Goals
 - Create templates for the management zones so they can hit the ground running once the BPA is adopted.
 - Provide immediate replacement water delivery in areas of need.
 - Move quickly as practicable to be ready to submit plans to the Regional Board for the 6 priority sub basins in 2020.
- Organizational Structure
 - Established steering committees with the following tasks:
 - Identify stakeholders/invite to participate
 - Develop MZ boundary
 - Characterize existing groundwater quality
 - Identify potentially impacted domestic wells
 - Create Early Action Plans (EAP)
 - Participants include Agriculture Water Quality, Environmental Stakeholders, Surface and Groundwater Agencies
- Progress
 - Kicked off project in December
 - Implemented monthly steering committee meetings with 20-30 participants
 - Have identified boundaries
 - Provided a draft EAP to steering committees
- Kings Subbasin
 - Have identified some gap areas and plan on testing to see where they fall. Don't want to assume because they are close to a "green" area, they are indeed green.

- Turlock Subbasin
 - Identified approx. 2600 well sites for testing. Working on an outreach method for those well owners.
- Commitment needed by those involved
 - Are finding the importance of successful EAPs and MZ Implementation
 - Early conversations on governance and financing are important
- DeeDee – How are the MZ committees interacting with GSAs? Turlock – represented at the meetings, unknown if they will play a direct role. Regulated by two different entities, each with their own deliverables. Kings – GSA is actively involved, in addition to Alta Irrigation District. Truly dependent on subbasin, there is a real opportunity to collaborate.
- DeeDee – Understanding that one size doesn't fit all, what are you doing to incorporate long term plans within the water community? Turlock – in regards to fill stations, need to work with public water systems, recharge efforts will help long term, but in regards to permit activities still in discussion with cities on how they are involved. Kings – City of Dinuba in process of establishing a project, strategic recharge that benefits the city.
- Paul Boyer – Self Help Enterprises
 - Current pilot project in the Porterville area with funding from Central Valley Salinity Coalition began in August 2016
 - Target vulnerable populations (women, infants, children) with help from the WIC office
 - Offered sampling of wells and replacement water
 - Sampled over 100 wells
 - 49 wells exceeded the nitrate standard (eligible for interim assistance), 24 have received bottled water, 15 point of use systems, some have transitioned from water to a point of use system.
 - Having a trusted location was key to getting people signed up to test wells.
 - Ongoing education key.
 - Long term program important.
 - Worked with Culligan on an “all inclusive” treatment solution.
 - Changing filter is key, need to educate families.

PUBLIC COMMENTS

Tim Johnson, CA Rice Commission

- CA Rice Commission is in strong support, even coming from areas that are mostly “green” for salt and nitrate.
- The 10 year process was collaborative in nature and tried to address all issues.
- This represents a far better solution than individual enforcement.
- Process paved the way for working with colleagues in the EJ community to make headway on drinking water solutions.

Rebecca Franklin, Sacramento Regional Sanitation District

- Sacramento Regional Sanitation District has been an active participant since 2006 and offers their support.
- Committed to protecting water quality and truly believes this is the best path forward due to the collaborative process.

Stakeholder Group - Environmental Justice Community: Jennifer Cleary (Clean Water Action), Michael Claiborne (Leadership Council), Erica Hernandez, Nathaniel Kane

- The Environmental Justice Community became engaged in process for 1) Need clean drinking water paid for by responsible parties instead of tax payers and 2) Communities falling out of compliance.
 - The EJ Community appreciates the effort but it is still not enough – 10,000 wells are going to fall out of compliance and because the program is open ended we don't know when it will stop.
- Tam: Fall out of compliance with what? Jennifer: Safe Drinking Water Act
- EJ Community wants to know how this BPA changes things? Contamination continues and gets worse and cost of providing drinking water alternatives increases.
 - Don't have a clear understanding of when or how there will be compliance
 - More communities will be impacted and the SJ Valley water will become unusable
- Tam: Strong statements, what is there to back these up? Jennifer: The fact that this program is open ended, no deadlines, "in compliance" while still degrading.
- Nat Kane addressed the belief that the program violates Non-Point Source Policy: There is no argument that bringing restoration will take a long time, however reduction in loading can be addressed on a particular timeline. This allows dischargers to continue to discharge with no timeline. Seems that CV-SALTS makes it not a privilege but a right to discharge into waters. Also concern with no definition of reasonable, feasible and practicable.
 - Michael Claiborne addressed the belief that the water quality objectives fail to protect beneficial uses. Averaging water quality across horizontal areas – Community of Delhi in the Turlock subbasin for example is high on the west side and not on the east side, thus averaging.
 - Erica Fernandez addressed the access to safe drinking water. Wants to ensure the burden is on the dischargers.
- Tam: Isn't replacement water a better solution while working towards a long-term solution? Understanding it will take decades to get there. Jennifer: Looking at ILRP, what happens when ten years are up and there are no solutions? If you put this in place, you have a poor solution that is in place for a long time. Michael: Does not agree it's better than the status quo. Need timelines for compliance and need a solution for averaging water quality. Sees it as a step back.
- Tam: What do you need? Timelines for compliance, solution for averaging, want best efforts and significant investment in the process.
- Tam: Averaging has come up, let's talk about it. Patrick: Regardless of averaging or not, the requirement to provide drinking water alternatives remain.

- DeeDee: How do you prevent gaming the system? Patrick: Boundaries – Board has a review. Management Zones don't override what is going on in ILRP. It does change the 10-year compliance, but many of the coalitions will tell you 10 years is hard to achieve. Is there a point at which a basin would be de-designated? If people are drinking that water, there is a beneficial use.
- Sean: What type of discretion is preserved for Regional Board to determine the type of replacement water? Doesn't think there is a one-way solution – understands that there needs to be additional methods to getting water. No bottled water everywhere or kiosks everywhere are not solutions.

Adam Borchert, Association of California Water Agencies

- In general, in support.

Lisa Hunt, River Restoration Science – American Rivers

- Realizes this is a complicated problem that will take time to resolve. However, solutions will take much longer to develop without a timeline. And in the meantime, further degradation will continue. Doesn't do much for people of color or those in disadvantaged communities. Understands a lot of work has gone into it and it shouldn't go to waste but there are some simple things that can be done.

Ben King, King Orchards

- This is great opportunity to collaborate with CDFA and healthy soils program and solve nitrate issues. It is important to understand we have unique systems and the possibility of salt water intrusion.

Stakeholder Group – Drinking Water Panel: Contra Costa Water District, City of Sacramento

- Contra Costa Water District's main concern is source water protection. They have participated in CV-SALTS through California Urban Water Agencies (CUWA).
- Appreciate collaboration but have concerns:
 - Drought & Conservation Policy: Short term salinity maximum contaminant level is inappropriate for drought and conservation conditions
 - Salt Control Program – growth increment should not be an exemption for discharges with higher salinity
- Tam: Doesn't it say an exemption only when no downstream impacts? Patrick: Yes
 - Recommendation for Implementation to Other Agencies – this chapter should be removed. Cost of protecting source water quality from effects for dischargers should not be shifted to other priorities.
- Joaquin Esquivel (State Board): What is your recommendation? Opposed
- Sacramento River Source Water Protection Program values protecting source water quality and has participated in the CV-SALTS process through formal, internal comments, participated in CV-SALTS Exec Committee.

- Main concern is the importance of secondary MCLs for human welfare and health
 - Chapter 3: Should be just secondary MCLs
 - Chapter 4: Pre filtering – remove color and turbidity, change filter size to 2 micron, add analysis for total recoverable concentrations.

- Seth: You mention that these have been brought up in the past. What was the response? Chapter 3: Context of the paragraph was about secondary MCLs although they read it different. Chapter 4: prefilter size was an improvement in previous versions.
- Joaquin: What is your recommendation, opposed? Not necessarily, don't have salt or nitrate issues. No position.

Stephanie Heistand, City of Tracy

- Support and commitment to BPA for waste water and WDR NPDS permits
- Participated since 2009, went kicking and screaming
- No one has gotten everything they wanted and based on compromise
- Committed to finding solutions and improving water quality

Aisha Meysa, America Rivers

- Communities most impacted have come out in firm opposition
- Not a rejection of process, however key positions that need addressed
- Appreciate localized solutions however Water Board does have a responsibility to make sure the underlining right to water is guaranteed for all
- The EJ community has laid out clear direction

Josie Tellers, City of Davis

- Have been a member since 2013
- Committed to continuing to support CV-SALTS and request the Board adopt.