

# CV-SALTS Basin Plan Needs & Issues - Version 6

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The CV-SALTS program will address the following areas related to basin planning for salt and nitrates. As these areas are addressed the following overarching considerations are essential to success.

- a. Public health impacts of contaminated drinking water sources by nitrates are a significant concern in many areas. As the Basin Plan is developed these areas will be a priority for programs developed. Areas where current supplies do not provide drinking water meeting nitrate standards should receive regulatory focus.
- b. It is essential that the CV-SALTS program develop a framework and process that encourages holistic beneficial use protection where control programs are developed holistically understanding the interrelation and interconnection rather than individually.
- c. The CV-SALTS programs will include the water supply and the salinity issues from recycled water supplies. The CV-SALTS programs will be developed as equivalent to the Salt and Nutrient Management Plan required by the Recycled Water Policy.

Identifications numbers (I or N) refer to the original summary.

## 1. Volume/Concentration Flow - Maximum Benefit/Anti Degradation

This area emphasizes the need to consider salinity under a variety of hydrologic conditions, including drought, and the interrelations between water supply/volume, concentrations of salts, and the protection of beneficial uses and to determine what is needed to support a “maximum benefit” case if lowering high quality water will occur under the Anti-degradation Policy.

- a. Develop a real-time management program with stakeholders addressing flow & quality issues and determine how it could be applied beyond the San Joaquin River, if appropriate. N-1
- b. Recognizing that Delta objectives impact quality and quantity of water delivered to San Joaquin Basin and beyond better link water quality & quantity in the basin plan. N-3
- c. Consider constraints on the system under a variety of hydrologic conditions, and define the range of conditions, including normal, wet, and drought periods. I-3
- d. Evaluate the need and define the process to comply with the State Anti-degradation Policy, as well as Federal policy where surface waters are degraded.

## 2. Beneficial Use

This area is focused on developing and improving the definitions and characterization of Beneficial Uses and identifying the science needed to refine or de-designate existing designations in surface and groundwater.

- a. Consider appropriate designation, or dedesignation, of existing, potential, beneficial uses including limited MUN and Ag uses. MUN is assigned to waters unsuitable for drinking or prohibited by DPH. N-18, I-13
- b. Review problematic beneficial uses established for surface and ground water via Sources of Drinking Water Policy or set based on the tributary rule. Review and revise beneficial uses to ensure they are reasonable and appropriate. Identify groundwater basins and their applicable beneficial uses in the S-SJR Basin Plan. Consider modifications or exceptions to the Sources of Drinking Water Policy in setting uses. For Ag drains with beneficial uses set by the Tributary Rule and Sources of Drinking Water

Policy, designate and/or dedesignate, beneficial uses based on sound scientifically information. (Live Oak ag drain example) N-19, I-1, I-6 and N-22

- c. Refine reaches and groundwater subbasins for selected water bodies. Ties to objectives. N-15

### 3. Objectives

The Objective area is closely linked to the Beneficial Use area and includes setting objectives, while accounting for background, averaging periods, and better defining the objectives measurement and monitoring. Additionally, this area includes improving guidelines for interpretation and implementation of objectives (including narrative objectives).

- a. Develop salinity objectives to protect beneficial uses for specific sub-regions based on sub-region specific conditions, including limited cropping patterns or use, or zones of protection. Develop appropriate criteria for site-specific salinity objectives to protect AGR beneficial uses. N-12, N-23
- b. Develop a process and framework for determining "naturally occurring background concentrations," coordinated with Waterboards ongoing efforts and expanding to groundwater. N-10
- c. Develop a process and framework for determining "Reasonable Protection" and what factors are to be considered as the basis for determining appropriate objectives and management tools. N-8
- d. Review and modify water quality objectives with appropriate averaging periods. N-13 and I-4
- e. For the TL Basin Plan, evaluate the current maximum average annual increase range of 1 to 6 uS/cm and develop the appropriate models to determine the optimum management of the TL Basin for the longest life possible. N-14
- f. Review the organic components of TDS/EC definition and if other measurements of salt should be used in lieu of TDS/EC. Table 1A #19
- g. Address inconsistencies between groundwater exception found in Basin Plans (TDS>3,000mg/l, EC>5,000 µS/cm) and secondary MCL standards. I-14
- h. Establish a process to determine objectives when all objectives cannot be simultaneously met based on beneficial use priorities. Consider changes, exceptions or variances under drought or other conditions. Ties to beneficial uses and implementation, links to water recycling. N-5
- i. Develop Basin Plan provisions for determining compliance with groundwater objectives, to reduce likelihood for effluent quality standards to be set to receiving water standards. Include guidelines for interpreting and applying narrative objectives and for the use of MCLs for MUN designation. I-2
- j. Determine a process for translating narrative objectives to enforceable numeric water quality limits. Ties to implementation. I-9
- k. Define criteria for "good quality ground waters" in the Basin Plan statement "Discharges to areas that may recharge good quality ground waters". I-15 and I-8 Page and IV-11 of Tulare Lake Basin Plan.

### 4. Program for Implementation - Variance, Offsets, Time Schedules/Compliance Schedules, Credits, Adaptive Management, Mixing Zones

This area of emphasis includes the largest by number of issues and suggested needs and activities. The program for implementation will likely be broader than changes to the Basin Plans and will identify actions needed to implement the "regulatory and non-regulatory" salt management strategies, which should include an adaptive management approach. This plan of implementation should include programs which are voluntary, program- or industry-membership governed or compulsory by regulation. The program for implementation could possibly include: credits, offsets, variances and time schedule/compliance schedules and other management alternatives. This area of emphasis also includes the need to identify long term

sustainable salt and nitrate balance or management programs consistent with the Anti-degradation policy findings in volume concentration and flow area.

- a. Develop short & long term strategies to achieve economically and environmentally sustainable salt balance, with steps needed to achieve the goal including adaptive management processes. This could include interim steps and a framework for implementation. N-6, I-11
- b. Develop Basin Plan section or other policy and process for reviewing, considering and approving best available scientific and information (attenuation, local soil conditions, criteria changes, etc.) when determining guidelines related to:
  - whether and to what degree discharges will affect or contribute to long term salt balance including:
    - groundwater quality
    - mixing zones for groundwater (and develop guidelines for application/use)
    - guidelines for site-specific studiesand when new information should supersede previous or less definitive/applicable information on guidelines or criteria. Additionally, the Program of Implementation should include feedback loops to ensure accurate interpretation of narrative objectives for permits. N-2, I-7 I-12 and N-4. This item links to objectives.
- c. Develop an offset policy for credit, trading with adequate accounting and monitoring processes to reduce costs and increase compliance. Table 2 A # 64
- d. Develop the Plan of Implementation section's timelines and triggers with the understanding that certain receiving waters will require many years to meet salinity and nutrient WQOs. N-9 and I-17.
- e. Ensure that if processes or programs are making adequate progress toward meeting objectives, these processes or programs can continue unless constrained by site specific parameters. #25, T2A
- f. Review and deter salt collection, aggregation and final disposal options (e.g. a valley-wide drain, several smaller drains, evaporation basins etc) are viable and the role of the SJR in elimination of salts while protecting beneficial uses. N-24 and I-5
- g. Address the mutual interdependence and tradeoffs among salt minimization and environmental issues and water supply impacts. Table 1-A #20
- h. Evaluate and determine the appropriate planning period (precedent for 20 years) for the Basin Plan. The implementation plan should address potential changes in the beneficial uses during at least that period; controlled vs. uncontrolled degradation. I-11
- i. Within the Plan of Implementation, provide a process and guidelines for determining "best economically achievable treatment practices" and the process updating the guidelines outside the BP.
- j. Evaluate potential to permit a specified salinity increase for consumptive use, up to a specified limit, including review of the (current) TL Basin Plan approach (500 EC over source water EC) for setting effluent limits. Develop consumptive use guidelines and process for revision, in conformance with salt balance definition usable in all BP Regions. Ties to objectives N-20
- k. Include appropriate regulatory programs which are interconnected with salt and nitrate, such as the Irrigated Lands program, as part of the program implementation. Table 1-A #33
- l. Clarify what defines "good quality ground waters" as use on page IV-11 of Tulare Lake Basin Plan - "Discharges to areas that may recharge good quality ground waters.....", N-21
- m. Assess flow records and pattern of use information to develop objectives and a basis for variance or modifications under low flow or other climatic conditions. N-7