

CV-SALTS – Strategy and Framework Draft Version 2

CV-SALTS is developing a comprehensive regulatory and programmatic approach to the management of salt/nitrate (S/N) in the Central Valley that is consistent with the State Recycled Water Policy. This work is being done with the Central Valley Regional Water Quality Control Board, the State Water Resources Control Board, the Central Valley Salinity Coalition and Stakeholders. The strategy to achieve this outcome is to adopt a Salt Nutrient Management Plan (SNMP) and revise the Basin Plan to facilitate implementation of the SNMP. Combined, these actions will establish:

- A revised regulatory structure (Beneficial Uses [BU] and Water Quality Objectives [WQO]) in relation to salt and nitrate management;
- Procedures to evaluate compliance with Basin Plan uses and objectives and provide the regulatory flexibility needed to make salt and nitrate management decisions at the appropriate geographic or management scale; and
- The basis for short and long-term management of salt and nitrate across the Central Valley at appropriate geographic scales.

To implement the above strategy and achieve the required outcome, CV-SALTS is executing work at three levels. These levels comprise the CV-SALTS Framework:

1. *Regulatory Planning Level* - Establishes the regulatory structure within the Basin Plan to support basin-wide S/N management;
2. *SNMP Master Plan Level* – Creates the framework and procedures for a basin-wide and regional approach to S/N management through the adoption of a SNMP;
3. *SNMP Implementation Level* – Provides the opportunity for future development of regional or site-specific S/N management plans or future modification of BUs or WQOs consistent with the adopted regulatory structure.

Spatially, the scale or size of the geographic area at which S/N management occurs decreases from the Regulatory Planning to the SNMP Implementation Level. For example, at the Regulatory Planning Level the revised Basin Plan will use large-scale Management Areas (MAs), which describe the existing large scale differences in watershed characteristics across the Central Valley. In contrast, at the SNMP Implementation Level the spatial area covered by a regional or site-specific plan depends on specific S/N management needs of the area.

Temporally, the time frame associated with establishment of the Regulatory and SNMP Planning Levels is tied to the schedule imposed by the State Recycled Water Policy, which targets the adoption of the SNMP by May 2014 and revisions to the Basin Plan to support execution of the SNMP in the following year. The time frame associated with the SNMP Implementation Level extends well beyond the May 2014 date. While it is anticipated that the 2014-adopted SNMP will include one or more completed

Regional S/N Plans (which will serve as archetypes for future Regional S/N Plans), the SNMP will include mechanisms for the development and adoption of additional Regional S/N Plans well beyond the May 2014 date.

The following sections provide additional information regarding the CV-SALTS Framework. Table 1 provides a concise summary of each level of the framework.

Level 1 – Regulatory Planning Level

Description - At this level, CV-SALTS will establish the overarching regulatory structure facilitate implementation of the SNMP. Adoption of this structure, which is expected to require modifications to the Basin Plan, will focus on four key elements:

1. Revision of AGR, MUN and GWR BUs, where needed. Revision may include adoption of sub-categories of these uses.
2. Revision of WQOs applicable to each of the established BUs, where needed. The final WQOs may be numeric or narrative. If the latter, the regulatory structure will establish the basis for translating narrative WQOs into numeric values.
3. Basis for evaluating compliance with revised Basin Plan BUs and WQOs in surface water and groundwater.
4. Identification of MAs for implementation of the regulatory structure. MAs provide a framework that acknowledges the existence of significant differences across the basin in baseline water quality (e.g., receiving waters and source waters for agriculture/municipal uses), land use, climate conditions, soil characteristics, existing infrastructure (e.g., areas with extensive agriculture vs. areas relatively undeveloped), and short and long-term S/N management needs (e.g., areas where elevated nitrate or salt are already problematic).

Expected Outcomes: Adoption of a Basin Plan Amendment (BPA) that results in a revised Basin Plan that facilitates implementation of the SNMP.

Key Tasks (Note this list is only intended to describe the high level tasks):

1. Develop revised Basin Plan regulatory structure
 - a. Beneficial uses
 - b. Water quality objectives
 - c. Implementation policies and procedures
2. Identify high level MAs
3. Develop BPA to modify Basin Plan to facilitate implementation of the SNMP, including Staff Report with supporting attachments, CEQA Analysis, Antidegradation Analysis, and 13241 Analysis

Level 2 – SNMP Master Plan Level

Description - CV-SALTS will develop the SNMP under Level 2. The SNMP will have a two-tiered structure: (a) Basin-wide requirements or “master plan” for the S/N management in the Central Valley; and (b) placeholder for incorporation of area-specific Regional S/N Plans. The SNMP will include “proofs of concept” or archetypes to provide examples of SNMP implementation. SNMP development includes the following key elements:

1. Development of the SNMP, which establishes (a) basin-wide S/N management requirements for the Central Valley consistent with the State Recycled Water Policy requirements; and (b) short and long-term strategies to address areas not currently in compliance with WQOs (e.g., elevated nitrate or salt).
2. Completion of archetypes for modifications to BUs or WQOs that demonstrate application of the regulatory structure developed at the Regulatory Planning Level.
3. Completion of archetypes for establishment of Regional S/N Plans within the tiered SNMP structure.
4. Establishment of templates or methodologies based on the completed archetypes to provide guidance for SNMP implementation.

Expected Outcomes: (a) Adoption of a SNMP that complies with the State Recycled Water Policy; (b) completion of one or more archetypes for modifying BUs or WQOs relevant to S/N management in the Basin Plan; and (c) completion of one or more Regional S/N Plans that serve as archetypes for other Regional S/N Plans.

Key Tasks (Note this list is only intended to describe the high level tasks):

1. Develop SNMP, consistent with minimum requirements of State Recycled Water Policy, including:
 - a. Water recycling and stormwater management goals/objectives
 - b. High level source identification, assimilative capacity, loading estimates, etc.
 - c. Monitoring plan
 - d. Antidegradation analysis
 - e. Implementation methods, including templates for modifying BUs or WQOs and developing Regional S/N Plans
 - f. Management activities, that when implemented, provide reasonable assurance of compliance with State Recycled Water Policy requirements
2. Complete selected BU and WQO archetypes, using the policies and procedures developed under Level 1.
3. Complete selected Regional S/N Plan archetypes, using the *Framework for Identification of Salt/Nitrate Sources* as a basis for plan development
4. Establish templates/methodologies to support long term SNMP implementation

5. Complete studies that support development of management activities or implementation strategies for inclusion in the SNMP, e.g. SSALTS
6. Develop regulatory documentation, e.g., staff report, CEQA compliance, to support SNMP adoption by the Regional Board

Level 3 – SNMP Implementation Level

Description - Level 3 represents long-term implementation of the SNMP. At Level 2, the SNMP establishes a Master Plan for S/N management in the Central Valley which serves as the default management approach, unless a more site-specific or regional approach has been adopted in a Regional S/N Plan. The Master SNMP may be periodically updated to incorporate Regional S/N Plans developed under Level 3. These regional plans establish refined or area-specific S/N management activities within defined Study Areas. To support development of these regional plans, the SNMP will include one or more Regional S/N Plans (developed under Level 2) that serve as archetypes for development of future Regional Plans.

Regional S/N Plan development will be guided by the *Framework for Salt/Nitrate Source Identification Studies*. The information developed under this framework is expected to provide the basic information needed for any Regional Plan. An important consideration in the development of regional plans is the size or configuration of the area to be covered by each plan. As noted in the above-referenced document, regional Study Areas should be small enough to be effectively managed and modeled.

Development of a Regional S/N Plan would require, at a minimum, consistency with the SNMP Master Plan and completion of the following elements:

1. Delineation of the local planning area (or Study Area);
2. Data gathering and analysis to support plan development;
3. Development of implementation measures specific to the planning area; and
4. Participation in the regulatory process to incorporate a Regional S/N Plan into the SNMP.

Development of a Regional S/N Plan could also include completion of studies to support recommendations for waterbody specific changes in BUs or WQOs that would facilitate implementation of the regional plan.

Expected Outcomes: Long-term implementation of the SNMP that may result in (1) adoption of additional regional plans to address region-specific S/N management issues; it is anticipated that approximately 20-25 plans would ultimately be adopted; and (2) additional revisions to BUs or WQOs to facilitate SNMP implementation.

Key Tasks: Level 3 tasks are variable and dependent on the regulatory and planning issues applicable to a specific self delineated Study Area. Tasks could include the development of modified BUs, establishment of site-specific WQOs, refinement of S/N management objectives in the Study Area, or some combination of these activities appropriate to the area.

Framework Level	Primary Purpose	Expected Outcome	Spatial Dimension	Temporal Dimension	Key Tasks
Level 1 – Regulatory Planning Level	Establish the regulatory policies and Basin Plan structure to facilitate SNMP implementation	<ul style="list-style-type: none"> Revised BUs and WQOs, as needed Establishment of implementation procedures for evaluating compliance with S/N WQOs, considering differences across MAs Identification of MAs 	Entire Central Valley with identified MAs - MAs recognize basic differences in watershed characteristics across Central Valley	BPA for adoption of changes to the Basin Plan to facilitate SNMP implementation by May 2015	<ul style="list-style-type: none"> Develop revised Basin Plan regulatory structure (BUs, WQOs, implementation requirements) to facilitate SNMP implementation Identify MAs Develop BPA supporting documentation
Level 2 – SNMP Master Plan Level	Establish the overall basin-wide approach to salt/nitrate management and the mechanisms for establishment of regional approaches to S/N management	<ul style="list-style-type: none"> Adoption of SNMP that complies with State Water Recycled Policy Completion of archetypes of two types: BU/WQO modification; example Regional S/N Plan(s) Established templates for development of future Regional S/N Plans or studies to make additional revisions to BU/WQO 	Master SNMP applicable to entire Central Valley with select Regional S/N Plans applicable to smaller areas incorporated	Board adoption of SNMP by May 2014	<ul style="list-style-type: none"> Develop Master Plan Level SNMP with required elements Complete BU/WQO archetypes Complete Regional S/N Plan archetypes Establish templates for future efforts to modify uses or objectives or develop additional Regional S/N Plans Develop regulatory documentation to support Regional Board adoption of SNMP
Level 3 – SNMP Implementation Level	Establish Regional S/N plans within Central Valley consistent with basin-wide approach	<ul style="list-style-type: none"> Regional S/N Plans 	Regional S/N Plans for Study Areas delineated on a per project basis; size will vary, but maximum of 20-25 plans anticipated for the Central Valley	Long-term SNMP implementation (post SNMP adoption in 2014)	<ul style="list-style-type: none"> Variable – dependent on regional needs and purpose of studies, e.g., to establish a Regional S/N Plan, to develop recommended revisions to BUs or WQOs, or some combination of activities.