

## Salt Control Program and P&O Study Update

**Purpose:** Provide a brief description of the P&O Study context, goals, regulatory framework, activities, timeline, and progress to date.

**Target Audiences:** **New participants** in Salt Control Program (e.g., alternate salinity approach permittees and others new to Exec Comm discussions), **CVSC member boards and members**, and **other stakeholder organizations** that may be engaged in the future for substantive input, mobilization of resources, or constructive partnerships.

## Second Draft Text

### Introduction

The Central Valley (Valley) is the epicenter of California's economy—encompassing 40% of the land in the state and providing water for people, agriculture, industry, and other businesses from San Francisco to San Diego, as well as food for California, the nation, and the world. Over the last 150 years, increased agricultural, industrial, and municipal activities, coupled with population growth, have resulted in significant increases in salts in soils, groundwater, and surface waters.

The CV-SALTS Prioritization and Optimization (P&O) Study is a long-term effort to develop, plan and implement solutions for managing and controlling salt accumulation in the Valley. High levels of salt can impair water quality, reduce crop production, affect drinking water supplies, and alter ecological functions and habitats. Salt accumulations have resulted in approximately 250,000 acres being taken out of production and 1.5 million acres have been declared salinity impaired in the Valley. If not addressed, the economic impacts of salts on the Valley are estimated to exceed \$3 billion per year.

Normal activities in all homes, farms, businesses, cities, and towns contribute to the salt problem by adding or concentrating salts. Irrigation, food processing, municipal wastewater treatment and water management practices are just some of the water uses that increase the salt problem in the Central Valley. Salts are also added to or concentrated in parts of the Valley from importing and exporting water supplies.

### Salt Control Program

#### Purpose and Goals

The goals of the Salt Control Program were developed through the collaborative CV-SALTS Program (see sidebar) and adopted into the Central Valley Basin Plans:

- Control the rate of degradation through a “managed degradation” program.
- Protect beneficial uses by applying appropriate antidegradation requirements for high quality waters.
  - Implement salinity management activities to achieve long-term sustainability and prevent continued impacts to salt sensitive areas.
  - Protect beneficial uses by maintaining water quality that meets applicable water quality objectives.
  - Pursue long-term managed restoration where reasonable, feasible and practicable.

To achieve these goals, the Basin Plans establish a planning process to characterize the salt conditions and trends in the Valley, identify salt management needs and mechanisms, evaluate

**Commented [CG1]:** This language is verbatim from the Basin plans, but it is grammatically challenged, has poor formatting, and isn't plain language. The purpose section here should be rewritten for this piece, but likely needs a team to develop language that effectively bridges between the Basin Plans and the public (Daniel, Anne, and Tess?).

## CV-SALTS

## Prioritization & Optimization Study

the feasibility of potential solutions, prepare an implementation plan, and review and revise salinity regulations as necessary. These steps are key elements of the P&O Study.

### Funding Mechanisms

From its inception in 2008 through 2121, Central Valley Salinity Coalition (CVSC) members have contributed more than \$5.6 million to the development of the CV-SALTS program. The CVSC will raise \$1.5 million or more per year for ten or more years to develop and manage the P&O Study. All regulated dischargers in the Central Valley who select the alternative salinity permitting approach pay a fee to support completion of study activities. CVSC receives fund payments and administers the study under an MOU with the Central Valley Regional Water Quality Control Board (Central Valley Water Board) and State Water Resources Control Board (State Water Board). As of November 2021, more than 850 coalitions and regulated dischargers have joined the P&O Study and paid fees to support it. A list of study participants is located here <<https://www.cvsalinity.org/po-fee-directory>>. Learn more about joining the study [here](#) or contact [CVSC](#).

#### Sidebar:

What is CV-SALTS?

Mission and Vision

Participants

Approach

Programs

Learn more at website

### Study Governance Arrangements

**Regulated Dischargers.** The CVSC was formed in 2008 as a nonprofit to support the CV-SALTS development and represents its members who are cities, counties, special districts, industry associations and other permittees that are concerned with the impacts of salt and its regulation in the Central Valley. The CVSC Board of Directors supervises the study and business aspects of CV-SALTS. Together CVSC and Executive Committee make decisions about the program and recommend policy changes to the Central Valley Water Board and State Water Board.

**CV-SALTS Executive Committee.** The CV-SALTS Executive Committee is a representative forum for CV-SALTS policy dialogue and stakeholder input on all CV-SALTS Program related efforts including the P&O Study. Regulated dischargers, discharger coalitions and associations, State and Federal agencies, environmental and environmental justice interests, and other interested parties participate along with Central Valley Water Board and State Water Board staff to make decisions about the study and potential Basin Plan Amendments. The Executive Committee meets ten times per year. Information on the meetings can be found [here](#).

#### Sidebar:

Executive Committee membership

### Regulatory Context

**Regional.** The Central Valley Water Board has regulatory authority for surface and ground water quality in the Valley. Two Basin Plans (Sacramento/San Joaquin and Tulare Lake Basins) are the governing regulations implemented by the Central Valley Water Board under the authority of the Porter-Cologne Water Quality Control Act.

**State.** The State Water Board sets policy guidance and reviews and approves Basin Plan amendments approved by the Central Valley Water Board. The State Water Board also regulates water rights and manages funding programs.

**Federal.** The U.S. Environmental Protection Agency reviews and approves any State-approved Basin Plan amendments that arise from the surface water quality requirements of the federal Clean Water Act that have been delegated to the State.

## Prioritization & Optimization Study

### Purpose

The P&O Study is developing the technical information and roadmap to describe and address the long-term problem of salt accumulation in the Valley: how to meet the needs for water uses and users—where, in what sequence, at what cost, funded by what agencies and responsible parties, and under what organizational or governance structure?

### Activities

Over the next four years, CVSC will direct studies to update the understanding of salt conditions across the Valley, identify salt management regions and salinity targets, and develop initial alternatives for managing salt to close the gap between current conditions and the salinity targets. From the studies, the CVSC and the Executive Committee will formulate recommendations for review and adoption by the Central Valley Water Board.

In subsequent years of the P&O Study, CVSC will oversee studies of projects and management actions to achieve the Salt Control Program goals. These studies will identify the location, feasibility, and cost for regional and subregional projects such as de-salters, a regulated brine line, and other groundwater recharge and management actions.

These studies will lead to development of proposed changes in salinity regulations to incorporate the findings of the P&O Study and define the responsibility, accountability, requirements, and costs to implement salt control actions.

### Major Decisions and Timeline <develop as graphic>

Near-term decisions and recommendations:

- Data management system to house P&O Study data and findings.
- Selection of modeling approaches and tools.
- Approval of archetypes to serve as representative study areas to support development of potential salinity targets.
- Basin characterization and identification of salt management regions for the Valley.
- Recommendations for salt management targets in archetype areas.
- Recommendations for salt management targets for salt management regions.

Long-term decisions and milestones:

- Initial alternatives to address salt accumulation in each salt management region.
- Feasibility evaluation of alternatives and management actions.
- Selection of an optimized suite of salt management projects and actions.
- Development of management and governance structures to oversee implementation.
- Recommendations for revised salt control regulations.

### Major Challenges

Implementing the P&O Study is complex and challenging. The following are some of the important challenges to address:

- The salt accumulation problem in the Valley is broad and far-reaching—touching on virtually all human activities—yet the Central Valley Water Board’s authority to require actions is limited.
- The Valley is highly diverse, with varied water supply and salt conditions, so water quality targets and solutions will need to be tailored to regional conditions.

- The salt problem is a long-term, slow-moving impact that unchecked will have substantial impacts on the economic sustainability of the Valley. Steady, persistent funding and solutions will be required to avoid these impacts.

The P&O Study will also consider important external factors, such as:

- Related resource planning initiatives, including surface water use changes and ground water management under the Sustainable Groundwater Management Act, land use planning efforts, and environmental factors and restoration efforts.
- Changing climatic conditions affecting long-term salt accumulation, rainfall patterns, and temperature.
- Competing regulation and funding priorities for federal, state, and local governments.

#### **Relationship to Other Programs**

Valley-wide efforts to address salt accumulation touch on all aspects of water quality and water management. Coordination with these related programs is a core function of the CVSC activities, beginning with these programs:

- The Central Valley Water Board **Irrigated Lands Regulatory Program**, which established water quality requirements for irrigated agriculture and led to formation of ## irrigated lands coalitions in the Central Valley.
- The **Dairy Representative Monitoring Program**, which is implemented by a coalition of more than 1,000 dairies to support and assist its members in complying with water quality requirements.
- The **Sustainable Groundwater Management Act**, which is a package of laws that established local Groundwater Sustainability Agencies (GSAs) to plan and manage groundwater use sustainably to avoid undesirable impacts on groundwater supplies and quality. There are ## GSAs in the Central Valley.

As the Salt Control Program proceeds, additional local and Valley-wide coordination will be important to gather information, solicit input, and develop implementation partnerships.

#### **For More Information**

Learn more about the Salt Control Program and the P&O Study at the project website, [www.cvsalinity.org](http://www.cvsalinity.org). To sign up and pay your salt control program fees or see a list of P&O Study participants, visit [link](#). Contact the program at [info@cvsalinity.org](mailto:info@cvsalinity.org).