

# ALTERNATIVE FOR LONG-TERM SUSTAINABILITY

WRITTEN BY MICHAEL A. CAMPOS, LOREN J. HARLOW, & LEE N. SMITH

Water experts have long recognized that increasing salinity is the major long-term quality impairment to groundwater and surface water in the Central Valley, and unless it is addressed comprehensively, it will ultimately turn the Central Valley into a desert. To address this critical problem, the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-Salts) was launched in 2006. CV-Salts is a joint effort of the nonprofit Central Valley Coalition, the State Water Resources Control Board (State Board), and the California Regional Water Quality Control Board, Central Valley Region (Central Valley Board). Their goal is to develop salt and nitrate management plans that will be implemented through Basin Plan Amendments administered by the Central Valley Board for the entire Central Valley.

Salt is more than simple table salt or sodium chloride; it includes anions and cations resulting from the neutralization reaction of an acid and a base. The major ionic substances in wa-

ter are calcium, magnesium, sodium, potassium, bicarbonate, sulfate, chloride and nitrate. It is these constituents in high concentrations that can adversely affect crop productivity as well as public water supply.

Water acquires salt in many ways. When rain falls and percolates into the ground and becomes part of our groundwater, it leaches or dissolves minerals from the soil. Surface water delivered through the Central Valley Project and State Water Project mixes with estuarine water in the Delta and carries a salt load with it. Everyday life activity adds salt to our water. The consumptive use of water, e.g., crop irrigation, further concentrates salt.

A March 2009 UC Davis report predicted significant financial impacts to the Central Valley if salinity increases continue unabated at current rates through 2030. Those impacts include direct annual costs up to \$1.5 billion and the loss of up to 53,000 jobs.

After adoption of the federal Clean Water Act (CWA) in 1972, grants were provided to California to

develop water quality plans, which resulted in the first plans for the Central Valley. Both federal and state laws require that the Central Valley Board conduct triennial reviews of its plans. The Central Valley Board is required to address water quality issues in the basin and propose a plan to investigate and resolve water quality issues. Due to limited resources, the plans adopted in the mid-1970s have not been significantly revised.

The water quality objectives contained in the Central Valley Basin Plans are not self-implementing. The Central Valley Board, through its regulatory program, waste discharge requirements, waivers, or prohibitions, imposes limitations or waste discharge specifications that are intended to ensure water quality objectives are met.

For the first 20 years after the CWA, the regulatory effort was concentrated on traditional point sources. In 1998, California adopted a Nonpoint Source Pollution Control Program to address the most serious nonpoint pollution, such as agricultural operations, mining and timber harvesting activities, erosion from land development and pollution from septic tanks. The Central Valley Board now has regulatory programs covering irrigated lands, timber harvest, mining, storm water and confined animal facilities. All water users are now regulated, including agriculture.

Through the efforts of Dr. Karl Longley, Central Valley Board member, and others, the CV-Salts initiative was launched. The Central Valley Salinity Coalition (Coalition) was formed, comprising stakeholders representing various water users in the Central Val-

ley. In December 2009, a memorandum of understanding was executed with the Coalition, State Board, and Central Valley Board. In March 2009, the Central Valley Board acquired \$1.2 million from the cleanup and abatement account to assist in salinity management. This allocation supplemented funds provided by the stakeholders; however, additional resources will be required to accomplish the goal set forth by the Coalition.

The CV-Salts initiative has set an aggressive agenda and time schedule. Its goal is to develop salt and nitrate management plans to be implemented through Plan Amendments. The initiative has conducted extensive public outreach efforts, developed a comprehensive work plan and coordinated its efforts with UC Davis to define the economic impacts of salts on the Central Valley. A study was recently completed in pilot areas of the Central Valley to explain the net salt balance. Efforts are under way to determine appropriate basin-beneficial uses.

As Pamela C. Creedon, Executive Officer, stated at the 2010 ACWA conference: "The time to act is now, the train has left the station, and a new program will be developed with or without stakeholder groups." The question that remains is, will the train arrive at its destination? Clearly a comprehensive plan needs to be developed to address salinity in the Central Valley. All water users will be impacted either directly through permitting or by economic impairment. In turn, all water-use sectors need to closely follow the efforts of CV Salts. If you have any questions, please contact the authors via [www.stoel.com](http://www.stoel.com).



Campos

**Michael A. Campos**, a senior partner based in the Sacramento office of Stoel Rives LLP, has been advising Central Valley clients on water law and regulatory compliance issues for more than 35 years. Established in 1907, Stoel Rives has nearly 400 attorneys operating out of 11 offices in seven states. With 30 attorneys in California serving clients from locations in Sacramento, Fresno, Lake Tahoe, San Francisco, and San Diego, Stoel Rives is regarded as a leader in corporate, energy, environmental, green building, intellectual property, labor and employment, land use and construction, litigation, natural resources, and renewable energy law. [www.stoel.com](http://www.stoel.com)