



Fact Sheet

Central Valley Regional Water Quality Control Board Solutions to the Nitrate Problem

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) has had a comprehensive plan since 2006 to address nitrate contamination in groundwater improve water quality and protect public health. The infrastructure to approach nitrate contamination in the Central Valley has been established through four distinct efforts.

The Central Valley Water Board plan to address the nitrate problem is based on a four-pronged strategy consisting of 1) irrigated lands program, 2) a basin-wide salinity and nitrate management program, 3) groundwater quality protection strategy, and 4) dairy programs waste discharge requirements.

Irrigated Lands Program

Regional Board staff has been working on its irrigated lands program since 2003. Understanding that irrigated agriculture in the Central Valley provides valuable food and fiber products to communities worldwide, the overall goals of the ILRP are to (1) restored and/or maintain the highest reasonable quality of state waters considering all the demands being placed on the water; (2) minimize waste discharge from irrigated agricultural lands that could degrade the quality of state waters; (3) maintain the economic viability of agriculture in California's Central Valley; and (4) ensure that irrigated agricultural discharges do not impair access by Central Valley communities and residents to safe and reliable drinking water. The irrigated lands program is entering a new phase of its implementation and is being expanded to include a regulatory program to protect groundwater quality and will include the control of all pollutants including nitrates. High priority will be placed on those lands that are located within areas of known groundwater contamination. Approximately \$1.3 million in staff and contractual costs of that program have focused on nitrates.

Central Valley Salinity Alternatives for Long-Term Sustainability

In 2006, the Central Valley Water Board, the State Water Board, and stakeholders began a joint effort, Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS), to address salinity and nitrate problems in California's Central Valley and adopt long-term solutions that will lead to enhanced water quality and economic sustainability.

CV-SALTS is a collaborative basin planning effort aimed at developing and implementing a comprehensive salinity and nitrate management program. The Central Valley Water Board anticipates the adoption of the first phases in 2014 of a Salt and Nitrate management plan for the entire Central Valley.



The stakeholder-led initiative recognizes the need for representation of and participation by the environmental justice community. To facilitate participation from remote locations, CV-SALTS meetings are available via conference call. To address the many communities within the Central Valley Region that have been impacted by salts and nitrates, CV-SALTS has committed to early implementation efforts directed at safe drinking water supplies.

As a first step, CV-SALTS is developing a short term nitrate action plan. This action plan will use the collective expertise of stakeholders to assist economically disadvantaged communities through engineering assistance and/or grant writing for projects that would have a short-term and direct impact on access to safe drinking water. To date staff hour costs for the nitrates portion of the program are approximately \$1 million.

Groundwater Quality Protection Strategy

As a result of the 2006 special staff report, the Central Valley Water Board became very aware of the impacts of salts and nitrates to ground waters in the Central Valley, in an effort to demonstrate its commitment to addressing the problem; the Central Valley Water Board started developing a groundwater quality protection strategy in 2008. In 2010 the Board approved the strategy, which provides an overview of the current conditions of groundwater quality in the Valley and the groundwater regulatory programs being implemented by the Regional Board. The strategy will provide a roadmap for future regulatory and control activities. It is an overarching strategy that includes the development and implementation of the dairy and agricultural programs and CV-SALTS discussed in this fact sheet.

The roadmap focuses on actions that can be implemented within the next five to twenty years. Implementation of future actions is not limited to the Central Valley Water Board. Actions may be implemented by: the Central Valley Water Board; other agencies or organization; or through a partnership between agencies. To date, staff costs are at more than \$300,000 dealing specifically with nitrates.

Dairy Programs

On May 3, 2007, the Regional Board adopted Waste Discharge Requirements General Order for Existing Milk Cow Dairies (General Order). Permit development began in 2001. The requirements of the General Order are stringent with a key focus on the control and abatement of nitrates to groundwater. The General Order includes requirements for both the dairy production area and land application area, and requires each dairy to fully implement their Waste Management Plan by 2011 and Nutrient Management Plan by 2012. To date the program costs include \$8.5 million in staff time and \$1.3 million in contractual costs.

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