



Sacramento Valley Agriculture: Water Quality Regulations Moving Towards More Flexibility

Protecting Our Water Quality is Critical

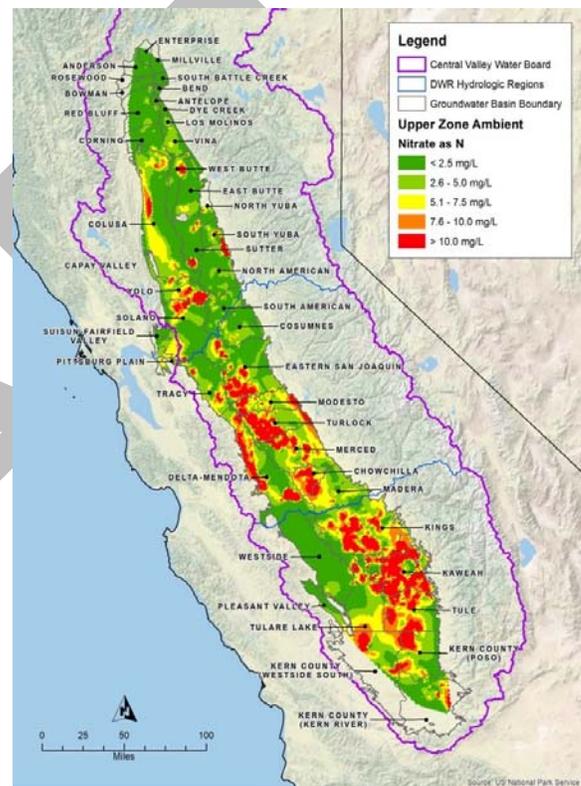
Ensuring a safe, reliable drinking water supply is the highest priority for managing nitrates and salts throughout the Central Valley. Depending on local conditions, discharges from irrigated lands potentially contain pesticides, sediments, salts, nitrates, heavy metals, and pathogens. These pollutants can be carried into surface waters via irrigation drainage or storm season runoff or by leaching into groundwater. At high enough concentrations, these pollutants can harm aquatic life in surface water or make groundwater unusable for drinking water or agricultural uses.

Limited Localized Areas of High Nitrate Concentrations

In the Sacramento River Basin, there are limited localized high-concentrations of nitrates in groundwater (see red areas on map shown right). These areas have nitrate concentrations at levels that make groundwater unsafe to drink unless treated. Conversely, in the central (San Joaquin) and southern (Tulare Lake) portions of the Central Valley, areas with high-concentrations of nitrates are more numerous.

Regulation: The Way It Works Now

Since 2003, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has regulated irrigated agriculture through the **Irrigated Lands Regulatory Program (ILRP)**. The ILRP was developed to control and prevent waste discharges from irrigated lands from polluting surface waters and, beginning in 2012, groundwater. Groundwater monitoring shows there are **no widespread major water quality issues in the Sacramento River Basin**. In some localized areas, nitrate impacts on groundwater quality and naturally occurring sources of groundwater salinity may require additional management actions.



Nitrate Concentrations in Upper Groundwater Zone

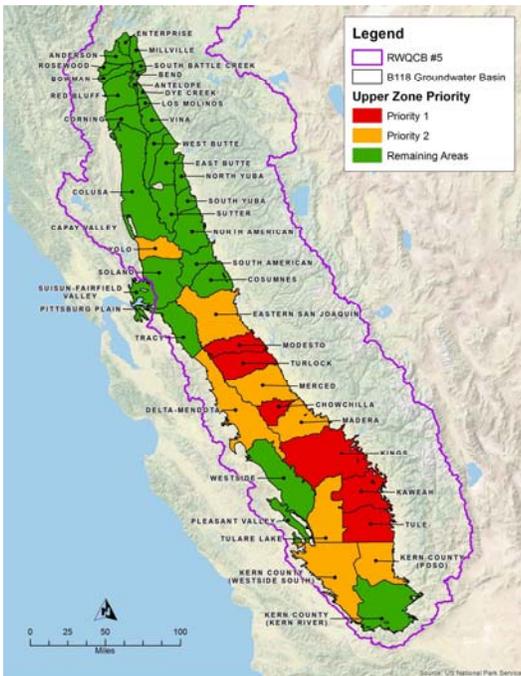
New, Flexible, Localized Regulations with New Solutions Are Being Finalized Now

The importance of protecting surface and groundwater quality, whether for aquatic life, drinking water, or agricultural supply, has become a significant public policy issue. Because not all areas of the Central Valley are impacted similarly, a tool box of actions is needed.

The regulatory options recommended in the *Salt and Nitrate Management Plan (SNMP)* will offer greater local flexibility for compliance by all dischargers, including agricultural interests, while ensuring safe drinking water. The new regulations will first be implemented in areas identified as **high-priority** in the Kaweah, Turlock, Chowchilla, Tule, Modesto, and Kings sub-basins and basins (see red areas on map shown on next page).



Sacramento Valley Agriculture: Water Quality Regulations Moving Towards More Flexibility



Priority Basins for Nitrate Management

Local Collaboration is Key

Under the new CV-SALTS SNMP regulatory options, all dischargers, including agriculture, will be asked to collaborate locally to implement necessary solutions to meet water quality standards. Similarly, the 2014 Sustainable Groundwater Management Act (SGMA) provides a framework for sustainable, local groundwater management. Where SGMA basins must address undesirable results related to water quality plans there will be close coordination with the CV-SALTS management and monitoring activities.

Benefits with New Regulatory Process for Nitrates and Groundwater Monitoring

Under the new, flexible and localized regulations, all dischargers will have two choices for nitrate compliance: Pathway A – Maintain traditional permitting or Pathway B – Follow the new management zone permitting option. In the northern portion of the Central Valley, most agricultural

dischargers will select Pathway A and maintain traditional permitting. Under this option, a discharger may opt to comply under the traditional permit requirements established either as an individual (e.g., a food processing plant) or as a third party (e.g., growers and farmers represented by a third party such as an irrigated lands coalition).

Long-Term Solutions Are Needed for Salt Accumulations

The next step in the long-term solutions for salinity in the Central Valley will be to perform a *Prioritization and Optimization Study* that defines potential regional and sub-regional projects (e.g., de-salters or a regulated brine line) and practices (e.g., new treatment controls or development of new water supplies).

Get Involved Now

To meet the water quality challenges of the future, agricultural interests must be proactive in protecting water quality within the new SNMP regulatory framework. The future economic sustainability of agriculture is dependent on this. Northern agricultural interests must also take note of the impairments to surface and groundwater quality resulting from increased nitrate and salt accumulations in other portions of the Central Valley and take heed to avoid further impairment of water supplies. Participation now by all agricultural interests is important to be certain that the needed flexibility and localization of future regulations governing discharges of salt and nitrate to surface and groundwater are accomplished for the entire Central Valley. Those who work in all aspects of irrigated agriculture are encouraged to participate and get involved today! Visit www.cvsalinity.org to learn more about getting involved.