New Water Quality Regulations Provide Options for Flexibility
Sacramento Valley Agriculture

Protecting Water Quality is Critical

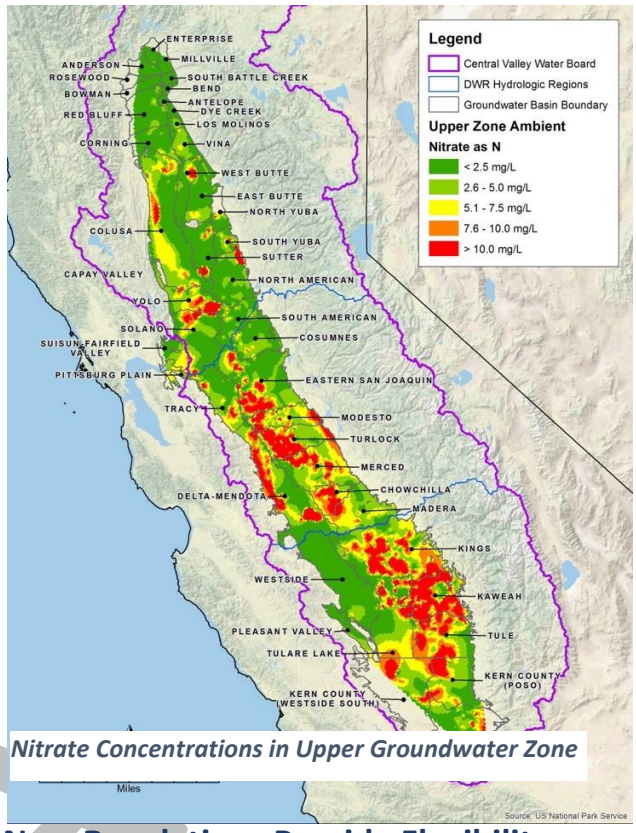
Ensuring a safe, reliable drinking water supply is the highest priority for managing nitrates and salts throughout the Central Valley. Depending on local conditions, discharges from irrigated lands potentially contain salts, nitrates, sediments, pesticides, heavy metals, and pathogens. These pollutants impact water quality 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.

In the Sacramento River Basin/Sacramento Valley, there are localized high-concentrations of nitrates in groundwater (red areas on map) that make groundwater unsafe to drink unless treated. In the San Joaquin Valley and Delta areas, high-concentrations of nitrates are more widespread.

Regulation: How it Works Now

Since 2003, the Central Valley Regional Water Quality Control Board (Regional Board) has regulated discharges from irrigated agricultural 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. The ILRP seeks to protect surface and groundwater resources and drinking water supplies, while maintaining a healthy, sustainable irrigated agricultural economy. Farmers may join an ILRP coalition that assists the members in complying with Waste Discharge Requirements (WDRs), or they may choose to comply under an individual WDRs.

In the Sacramento Valley, groundwater monitoring shows some localized impacts from nitrate on groundwater quality and naturally occurring sources of groundwater salinity, which may require additional management actions.



Nitrate Concentrations in Upper Groundwater Zone

New Regulations Provide Flexibility

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 the Regional Board currently has few options to regulate this issue, additional tools are needed. The new "toolbox" of 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 that address drinking water will first be implemented in areas identified as **high-priority** in the Kaweah, Turlock, Chowchilla, Tule, Modesto, and Kings sub-basins and basins.

Local Collaboration is Key

Under the new CV-SALTS SNMP regulatory options, all dischargers, including agriculture, will be asked to collaborate **locally** on necessary solutions to meet **water quality** standards. Similarly, the 2014 Sustainable Groundwater Management Act (SGMA) provides a framework for sustainable, **local** groundwater **quantity** management. There will be close coordination between the two programs.

Key Benefits of New Regulatory Options

Under the new regulations, **all dischargers** will have two choices for **nitrate** compliance: Pathway A – Maintain traditional permitting and Pathway B – Follow the Local Management Zone permitting or Exceptions Policy option.

In the Sacramento Valley, most agricultural dischargers will likely 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). In localized areas with high concentrations of nitrates, dischargers will likely opt for Pathway B, joining a management zone.

Here are a few of the new regulatory options and how they will work:

Local Management Zone. The formation of local or regional management zones will save time, money, and resources. Farmers or landowners who join a management zone can work collectively as part of a regulatory compliance unit. Members can pool resources and work together to provide safe drinking water. Members may be authorized for nitrate and salt discharges and given more time to comply with current Waste Discharge Requirements.

Exceptions Policy. When prohibiting a discharge does more harm than good, and allowing the discharge to continue is determined to be better for the public good, an "Exception" can be authorized that provides farmers or landowners more time to implement effective, site-specific solutions.

Assimilative Capacity. Assimilative capacity is the ability of a natural body of water (e.g., lake, river, or groundwater aquifer) to receive discharged waste without harmful effects. Within a management zone or a groundwater basin/sub-basin, using assimilative capacity along with localized management measures will be considered as a factor towards compliance.

Protection of Agricultural Beneficial Use. The current salinity requirements to protect agricultural beneficial water uses vary widely. With the new regulations, protecting agricultural beneficial uses will be tailored to reflect local and regional differences in agricultural water use.

Coordinating New Regulations and ILRP. It is too soon to know how the CV-SALTS SNMP-based regulations and the ILRP will be coordinated. With a common goal of controlling and protecting surface and ground waters from impairment by nitrates and salts, there will certainly be collaboration in meeting water quality objectives.

Compliance Cost. The costs associated with implementing the new regulatory options have yet to be determined. The approach of local management flexibility and collaborative action to address the highest priority needs first is expected to increase compliance efficiency. Growers are encouraged to be at the table now to help shape the future of the drinking water projects and alternative compliance projects in their area.

Get Involved, Shape the Future

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 depends on these new approaches. Sacramento Valley agricultural interests must continue to implement best practices and work to avoid further impairment of water supplies. If you work in any aspect of irrigated agriculture, you are encouraged to participate in CV-SALTS and get involved today. To learn more about getting involved, visit www.cvsalinity.org.