



Publicly Owned Treatment Works: Water Quality Regulations Moving Towards More Flexibility

Protecting California's Water Quality is Critical

Many Central Valley drinking water supplies have been impacted or are at risk of impacts due to **water quality concerns**. **Ensuring a safe, reliable drinking water supply** is now the highest priority of the Central Valley Water Board when managing nitrates and salts throughout the Central Valley. Existing and on-going nitrate and salt accumulations are impacting drinking water supplies, making them unsafe in some locations.

The CV-SALTS initiative and the recent release of the ***Salt & Nitrate Management Plan*** (SNMP, January 2017) is a crucial milestone towards achieving better overall water quality through new compliance strategies and solutions for all Central Valley dischargers – whether municipal, agricultural, or industrial. The SNMP contains policy recommendations that, once incorporated into the Central Valley Water Board's Basin Plans in 2018, will allow **significant improvements** in the way **Publicly Owned Treatment Works** (POTWs) (i.e. wastewater treatment plants) and others are regulated, primarily allowing for more local collaboration among all dischargers and more flexibility in meeting discharge requirements.

POTW Regulation Today

POTWs provide wastewater (sewage) treatment services to the communities they serve. POTWs are charged with protecting public health and the receiving waters where the treated effluent is discharged such as a river, stream, land or groundwater aquifer.

Municipal wastewater effluent from POTWs is **highly regulated** by the Central Valley Water Board and the US Environmental Protection Agency. Municipal wastewater, whether treated or untreated, contains salt and nitrogen (ammonia, nitrate, etc.) which can be difficult and very expensive to remove. When wastewater effluent is discharged, it must meet permit requirements based on the receiving water's **beneficial uses** (e.g drinking water, agriculture, aquatic life, etc.), typically at the point of discharge. This regulatory approach is conservative and constrains options for permit compliance which often leads to expensive treatment with only localized benefits.

New, Flexible, Localized Regulations with New Solutions Being Finalized

The importance of protecting surface and groundwater quality, whether for aquatic life, or municipal 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 – and the SNMP provides just that. The regulatory policy changes and new options recommended in the SNMP, once adopted and amended into the Central Valley Water Board Basin Plans, will offer greater local flexibility for compliance by all regulated dischargers, including POTWs, while ensuring safe drinking water.

High Nitrate Concentration Areas will be Addressed First

Due to the high nitrate concentrations in specific areas, the **first focus areas for implementation of nitrate management actions identified in the SNMP as high-priority** are the Kaweah, Turlock, Chowchilla, Tule, Modesto, and Kings groundwater sub-basins and basins. All areas of the Central Valley will ultimately benefit from the implementation of new SNMP recommended policies.



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Long-Term Solutions Are Needed for Salt Accumulations

In the Central Valley, the next step in identifying long-term solutions for salinity management 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).

Benefits with New Regulatory Process

The following are some of the key benefits that POTWs will experience once the SNMP recommended policies are amended into the Central Valley Water Board's Basin Plans in 2018.

- Under the new SNMP regulatory options, **all dischargers**, can continue to comply individually or collaboratively by joining a local **management zone** and/or participating in a Central Valley-wide salinity optimization study. Both short- and long-term solutions will be available.
- In a **management zone**, POTWs will work together with other dischargers to implement local solutions to meet water quality standards, provide safe drinking water, and share the costs of compliance.
- POTWs will be able to use public funds more effectively for more cost-effective and workable solutions that ultimately result in permit compliance and improved public health and environmental benefits.
- POTWs will no longer have to be regulated individually by what is coming out of the end of the pipe, but rather can as part of a local area or watershed compliance group.

The 2014 Sustainable Groundwater Management Act (SGMA) provides a framework for **water quantity**, through sustainable, local groundwater management. Going forward, there will be coordination between SGMA-based water quantity strategies and CV-SALTS SNMP-based water quality management.

Get Involved Now

To meet the water quality challenges of the future, all dischargers must be proactive in protecting water quality within the new SNMP regulatory framework. The future economic sustainability of the region depends on this. Participation now 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 any aspects of POTWs are encouraged to participate and get involved today! Visit www.cvsalinity.org to learn more about getting involved.

Conceptual Relationship of Water Use Areas to a Management Zone

