



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

Protecting California's Water Quality is Critical

Ensuring a safe, reliable drinking water supply is now the highest priority 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 quality of wastewater discharges, whether municipal, agricultural or industrial is critical in protecting public health and environmental quality.

The CV-SALTS initiative and its recently released (January 2017) *Salt & Nitrate Management Plan* (SNMP) is a crucial component for all Central Valley discharges – whether municipal, agricultural, or industrial. The SNMP contains policy change recommendations that, once incorporated into the Central Valley Water Board's Basin Plans in 2018, will allow **significant improvements** in the way **Publically Owned Treatment Works** (POTWs) and others are regulated, primarily allowing for more local collaboration among all dischargers and more flexibility in meeting discharge requirements.

POTW Regulation Today

POTWs are in the business of providing wastewater treatment services. Municipal wastewater contains sewage and gray water (e.g., water from sinks and showers). POTWs are charged with protecting public health and protecting the beneficial uses of the receiving waters the end of the line where the treated effluent is discharged such a lake, river, stream, or groundwater aquifer. The wastewater effluent must meet permit requirements based on the receiving water **beneficial uses**.

Municipal wastewater effluent from POTWs (aka wastewater treatment plants) is **highly regulated** by the Central Valley Water Board and the Environmental Protection Agency. POTWs are frequently faced with implementing expensive and unnecessary treatment requirements that result in limited benefit to the environment or to public health. Salts and nitrates are difficult and expensive to remove from municipal wastewater effluent making the work undertaken by CV-SALTS even more important for POTWs. As nitrate levels are a drinking water concern and municipal effluents primarily contain nitrogen in one of two forms: either nitrate or ammonia, the transformation of nitrogen from ammonia to nitrate is also a concern. The currently available regulatory options are constrained and often not locally applicable.

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

The importance of protecting surface and groundwater quality, whether for aquatic life, safe drinking water, 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 amended into the Central Valley Water Boards Basin Plans, will offer greater local flexibility for compliance by all regulated dischargers, including POTWs, agricultural and industrial interests, while ensuring safe drinking water.

Due to the high nitrate concentrations in specific areas, the new regulations will **first be implemented in areas identified in the SNMP as high-priority** in the Kaweah, Turlock, Chowchilla, Tule, Modesto, and Kings sub-basins and basins. All areas of the Central Valley and beyond will ultimately benefit from the implementation of new SNMP recommended policies.



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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 join a local area Management Zone. And, both short- and long-term solutions will be available.
- In a management zone, POTWs will work together with other dischargers to locally implement solutions to better 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 local solutions that ultimately result in improved public health benefits.
- POTWs will no longer be regulated by what is coming out of the end of the pipe, but rather as part of a local area or local watershed.



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).

CV-SALTS is About Water Quality and SGMA is about Water Quantity

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-SALT 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 agriculture is dependent 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.