

New Water Quality Regulations Provide Options for Flexibility Publicly Owned Treatment Works

Protecting 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 all wastewater discharge, whether municipal, agricultural or industrial, is critical in protecting public health and environmental quality.

The CV-SALTS initiative and its January 2017 Salt & Nitrate Management Plan (SNMP) is a crucial component for all Central Valley dischargers whether municipal, agricultural, or industrial. The SNMP includes recommended policy changes for regulating salts and nitrates. Once these changes are incorporated into the Central Valley Regional Water Quality Control Board (Regional Board) Basin Plans, they will allow improvements in the way Publicly Owned Treatment Works (POTWs) and other dischargers are regulated.

Regulation: How it Works Now

POTWs, also known as wastewater treatment plants, provide wastewater treatment services for municipalities. Municipal wastewater contains sewage that is treated before being discharged. POTWs must protect public health <u>and</u> protect the beneficial uses of the receiving waters at the end of the line where the treated sewage or effluent is discharged into a lake, river, stream, or groundwater aquifer. The treated effluent that is discharged must meet permit requirements based on the beneficial uses of the receiving waters.

Municipal wastewater discharge from POTWs is highly regulated by the Regional Board and, if discharged to surface water, the United States Environmental Protection Agency. POTWS are often faced with implementing expensive, sometimes unnecessary, treatments that result in limited benefit to the quality of the environment or to public health.

Salts and nitrates are both found in municipal wastewater. They are difficult and expensive to remove from municipal wastewater discharges making the work undertaken by CV-SALTS even more important for POTWs.

Today, nitrate levels in drinking water are a chief concern. Municipal discharges primarily contain nitrogen in one of two forms - nitrate and ammonia. And, 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 Regulations Provide More Flexible Solutions to Comply

The importance of protecting surface and groundwater quality from salts and nitrates, whether for aquatic life, safe drinking water, or municipal or agricultural supply, is 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 recommended in the SNMP will offer greater local flexibility for compliance by all regulated dischargers, including POTWs, agricultural and industrial interests, while also ensuring safe drinking water.

Due to the high nitrate concentrations in specific areas, the new nitrate regulations will first be implemented in the SNMP identified high-priority areas. These areas are in the Kaweah, Turlock, Chowchilla, Tule, Modesto, and Kings sub-basins and basins.

Salinity regulations are anticipated to be implemented by permits. Permits may be revised as they are renewed, or they may be amended through special orders or resolutions adopted by the Regional Board.



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Key Benefits of New Regulatory Options

The entire Central Valley and beyond will ultimately benefit from the implementation of new SNMP recommended policies for managing salts and nitrates.

The following highlights a few of the benefits that POTWs will experience once the SNMP recommended policies are amended into the Regional Board Basin Plans in 2018.

- ➤ All dischargers can continue to comply individually or they can join a local area management zone. Both short- and long-term solutions will be available for implementation.
- ➤ In a local management zone (see graphic below), POTWs will work together with other dischargers to implement solutions <u>locally</u> to better meet water quality standards, provide safe drinking water, and share the costs of compliance.



POTWs participating in a management zone 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 participating in a management zone 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 for Salts

To identify long-term solutions for salinity management, a *Prioritization and Optimization Study* will define potential regional and subregional projects (e.g., de-salters or a regulated brine line) and practices (e.g., new treatment controls or development of new water supplies). POTW's may elect to participate in the study instead of meeting strict salinity limits in discharge permits.

CV-SALTS and SGMA Collaboration

The 2014 Sustainable Groundwater Management Act (SGMA) provides a framework for water quantity, through sustainable, <u>local</u> groundwater management. The CV-SALTS initiative is focused on water quality impacts from salts and nitrates.

Going forward, there will be coordination between SGMA-based water <u>quantity</u> strategies and CV-SALTS SNMP-based water <u>quality</u> management.

Get Involved, Shape the Future

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 Central Valley depends on these new approaches. Your participation now is important to be certain that the needed flexibility and localization of future regulations for discharges of salt and nitrate to surface and ground waters are accomplished for the entire Central Valley. Those who work in any aspect of the POTWs community are encouraged to participate and get involved today! Visit www.cvsalinity.org to learn more about getting involved.