



CVCWA

Central Valley Clean Water Association

Representing Over Fifty Wastewater Agencies

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Via Email Only

April 14, 2017

Mr. James Brownell
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670
james.brownell@waterboards.ca.gov

SUBJECT: Comment Letter — Water Quality Control Plan for the Sacramento River and San Joaquin River Basins to Establish Salinity Water Quality Objectives in the Lower San Joaquin River

Dear Mr. Brownell:

The Central Valley Clean Water Association (CVCWA) appreciates the opportunity to comment on the proposed amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins to Establish Salinity Water Quality Objectives in the Lower San Joaquin River (LSJR Basin Plan Amendment). CVCWA is a nonprofit association of public agencies located within the Central Valley region that provide wastewater collection, treatment, and water recycling services to millions of Central Valley residents and businesses. We approach these matters with the perspective of balancing environmental and economic interests consistent with state and federal law. CVCWA appreciates the opportunity to comment on the LSJR Basin Plan Amendment and to offer language similar to that which has been developed for the State Water Resources Control Board's (State Board) Bay-Delta Plan.

CVCWA has actively participated in the Lower San Joaquin River Committee and thanks the Central Valley Regional Water Quality Control Board (Regional Board) for the opportunity to participate in this stakeholder process. CVCWA supports the proposed

electrical conductivity (EC)¹ water quality objective of 1,550 micro-Siemens per centimeter ($\mu\text{S}/\text{cm}$) and the performance goal for EC of 1,350 $\mu\text{S}/\text{cm}$. CVCWA also supports the use of an EC objective of 2,450 $\mu\text{S}/\text{cm}$ as a 30-day running average and a 2,200 $\mu\text{S}/\text{cm}$ annual average in Extended Dry Periods.

With respect to application of the objectives to publically owned treatment works (POTWs), CVCWA appreciates the Regional Board's proposed implementation language for use in National Pollutant Discharge Elimination System (NPDES) permits. However, CVCWA offers this comment letter to suggest further revisions to the implementation language to ensure that POTWs are not held to expensive and unreasonable standards in order to comply with the Lower San Joaquin salinity objectives. The language and comments provided here are consistent with those that CVCWA provided to the State Board in regard to southern Delta salinity objectives and implementation thereof in POTW NPDES permits.

Available information from modeling and source analysis developed to support the proposed Basin Plan amendment indicates that POTWs are a *de minimis* source of salinity loadings to surface water in the Lower San Joaquin River. The two POTWs that discharge to the LSJR—the cities of Turlock and Modesto—do not discharge into surface water year-round, but recycle their treated effluent for portions of the year. This further reduces the contribution of these POTWs to the ambient salinity levels in the Lower San Joaquin River. Additionally, these POTWs have taken steps in recent years to reduce salinity in their discharges, including obtaining lower-salinity surface water supplies and implementing salinity source control programs. The only action remaining for POTWs to use to reduce EC in their effluent would be desalination. It is acknowledged that a significant amount of resources and energy would be required to construct and operate desalination (also known as reverse osmosis (RO)) facilities. In the context of the SWRCB's Bay-Delta Plan, the expenditure of such funds has been recognized to be significant. It would be unreasonable for Modesto and Turlock to incur such costs, considering the very minor impact these discharges have on ambient salinity in the Lower San Joaquin River. Accordingly, CVCWA strongly supports incorporation of implementation language that will ensure that compliance for POTWs considers dilution and other factors, similar to considerations applied to other dischargers. CVCWA also seeks to ensure that stringent, end-of-pipe application of the proposed water quality objectives as effluent limitations are not imposed on these POTWs in NPDES permits.

¹ Salinity in the LSJ Basin Plan Amendment is calculated using EC units, including the equivalent $\mu\text{S}/\text{cm}$ and $\mu\text{mhos}/\text{cm}$.

1. Additional Language to Assist in Implementation of the Reasonable Potential Analysis for the Salinity Objective

CVCWA, in consultation with State Board and Regional Board staff, crafted suggested implementation language within the context of the Bay-Delta Plan Amendments' salinity objectives proposed for the southern Delta (Bay Delta Plan). CVCWA proposes adapting that implementation language to fit the LSJR Basin Plan Amendment.

With respect to the determination of reasonable potential, CVCWA recommends that in addition to the proposed "consideration" of dilution for calculating reasonable potential (RP), two other provisions or considerations should be added to address situations in which: (1) the cause of the exceedance is due to uncontrollable factors; and (2) there is insufficient data to conduct a reasonable potential analysis (RPA).

Controllable factors are those actions, conditions, or circumstances resulting from human activities that may influence the quality of the waters of the state, that are subject to the authority of the State Board or Regional Board, and that may be reasonably controlled. Where the facility's discharge exceeds the Lower San Joaquin salinity water quality objective, but where sampling or modeling show that the facility's discharge will not cause any meaningful change or degradation of the receiving water (i.e., downstream salinity is determined by upstream conditions), it is reasonable to conclude that the facility is not meaningfully or "reasonably" causing or contributing to an exceedance of the Lower San Joaquin salinity objective. In such a situation, ceasing the facility's discharge would not meaningfully impact downstream receiving water conditions. This implies that the discharge would not have reasonable potential to cause or contribute to an exceedance of the Lower San Joaquin salinity objective, and water quality-based effluent limitations would not be required.

If there is insufficient data available for the Regional Board to conduct the RPA, the Regional Board should require additional monitoring at the applicable compliance location (in the proposed language, at the first downstream agricultural diversion). The additional monitoring requirement could be satisfied through participation in a regional monitoring program. Additionally, to ensure that salinity discharges are minimized during the data collection phase, the Regional Board may consider including: (1) a performance-based effluent limitation; (2) a salinity evaluation and minimization plan; or (3) participation in the Regional Board's Salinity Management Strategy for the 2017 Central Valley Salinity and Nitrate Management Plan (SNMP) or a similar program.

2. Proposed Language for Development of Water Quality-Based Effluent Limitations for EC

When developing EC water quality-based effluent limitations for those dischargers who have been determined to have reasonable potential to cause or contribute to an in-stream excursion above the proposed Lower San Joaquin salinity objective, based on the above-described methods, CVCWA encourages the use of mass-based load allocations developed through a watershed loading analysis and facility-specific water quality modeling analysis to derive an appropriate effluent limitation. This process is akin to the waste load allocation (WLA) process used with total maximum daily loads (TMDLs), as described in USEPA regulations and NPDES permit guidance. (See USEPA, *Technical Support Document for Water Quality-Based Toxics Control* (1991), p. 69.) This mass-based wasteload allocation derived through a watershed loading analysis consistent with the U.S. Environmental Protection Agency's (USEPA) *Technical Support Document for Water Quality-Based Toxics Control* (1991) (USEPA TSD), should be used as the final water-quality based effluent limitation. The watershed loading analysis would provide information to determine whether further reduction of point-source loadings would result in meaningful—or measurable—changes in ambient salinity conditions. This would also help demonstrate the minimal impact POTW discharges have on ambient salinity conditions.

While CVCWA recommends the above described approach, CVCWA also recommends that, if requested by the discharger, the Regional Board may: (1) calculate a final water quality-based effluent limitation by using a steady state model to determine critical ambient conditions as an annual average concentration at the applicable compliance location, and apply appropriate dilution factors determined through salinity modeling; or (2) use a dynamic model as described in the USEPA TSD to calculate appropriate effluent limitations.

3. Determining Compliance with Water Quality-Based Effluent Limitations

CVCWA believes that the above actions pertaining to reasonable potential determination and effluent limit derivation will resolve compliance difficulties for the POTWs discharging to Reach 83 of the LSJR. If for some reason a POTW cannot comply with its final water-quality based effluent limitations related to the Lower San Joaquin salinity objective, the implementation language should state that the Regional Board may use the following options: (1) issue a variance pursuant to Regional Board Resolution R5-2014-0074, or pursuant to any other salinity variance adopted by the Regional Board; (2) issue an in-permit compliance schedule for a period of up to 50 years to allow time for implementation of the Regional Board's Salinity Management Strategy; (3) adopt a narrative or best-management practice-based effluent limitation;

(4) require participation in efforts to implement the Salinity Management Strategy; and/or (5) implement other actions consistent with Regional Board policies, such as offsets and alternative compliance projects.

Again, CVCWA thanks the Regional Board for the opportunity to participate in the development of the LSJ Basin Plan Amendment. CVCWA supports the salinity objective and performance goal, and is hopeful that the Basin Plan will incorporate the necessary implementation language recommended here to ensure that POTWs will be able to comply with the salinity objective without incurring unreasonable expense.

CVCWA appreciates the opportunity to provide comments on the salinity objectives proposed in the LSJ Basin Plan Amendment. If you have any questions, or if CVCWA can be of any further assistance, please contact me at (530) 268-1338 or eeofficer@cvcwa.org.

Sincerely,



Debbie Webster,
Executive Officer

cc: Jeanne Chilcott
David Cory