

State of California
California Regional Water Quality Control Board, Los Angeles Region

RESOLUTION NO. R4-2008-012
December 11, 2008

**Amendment to the Water Quality Control Plan for the Los Angeles Region to Adopt
Site Specific Chloride Objectives and to Revise the Upper Santa Clara River
Chloride TMDL**

WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region, finds that:

1. The federal Clean Water Act (CWA) requires the California Regional Water Quality Control Board (Regional Board) to develop water quality standards that are sufficient to protect beneficial uses designated for each water body found within its region.
2. The elements of a TMDL are described in 40 CFR 130.2 and 130.7 and section 303(d) of the CWA, as well as in USEPA guidance documents (Report No. EPA/440/4-91/001). A TMDL is defined as the sum of the individual waste load allocations for point sources, load allocations for nonpoint sources and natural background (40 CFR 130.2). Regulations further stipulate that TMDLs must be set at levels necessary to attain and maintain the applicable narrative and numeric water quality objectives (WQOs), and protect beneficial uses, with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality (40 CFR 130.7(c)(1)).
3. Upon establishment of TMDLs by the State or USEPA, the State is required to incorporate the TMDLs along with appropriate implementation measures into the State Water Quality Management Plan (40 CFR 130.6(c)(1), 130.7). This Water Quality Control Plan for the Los Angeles Region (Basin Plan), and applicable statewide plans, serves as the State Water Quality Management Plans governing the watersheds under the jurisdiction of the Regional Board.
4. The Santa Clara River is the largest river system in southern California that remains in a relatively natural state. The River originates on the northern slope of the San Gabriel Mountains in Los Angeles County, traverses Ventura County, and flows into the Pacific Ocean between the cities of San Buenaventura (Ventura) and Oxnard. The predominant land uses in the Santa Clara River watershed include agriculture, open space, and residential uses. Revenue from the agricultural industry within the Santa Clara River watershed is estimated at over \$700 million annually, and residential use is increasing rapidly both in the upper and lower watershed.

5. The upper reaches of the Santa Clara River include Reaches 5 and 6 which are located upstream of the Blue Cut gauging station, west of the Los Angeles – Ventura County line between the cities of Fillmore and Santa Clarita. Reaches 5 and 6 of the Upper Santa Clara River (USCR) appear on the EPA 303d list of impaired waterbodies (designated on the 2002 EPA 303d list as Reaches 7 and 8, respectively). Several beneficial uses of the USCR, including agricultural supply water (AGR), groundwater recharge (GWR), and rare, threatened, or endangered species habitat (RARE), are listed as impaired due to excessive chloride concentration in the waters of the USCR. Valencia and Saugus Water Reclamation Plants (WRPs), which are owned and operated by the Santa Clarita Valley Sanitation District of Los Angeles County (SCVSD), are two major point sources that discharge to the USCR.
6. On October 24, 2002, the Regional Board adopted Resolution No. 02-018, amending the Basin Plan to include a TMDL for chloride in the USCR. Resolution 02-018 assigned waste load allocations (WLAs) to the Valencia and Saugus WRPs, minor point sources, and MS4s permittees, discharging to specified reaches of the Santa Clara River. The TMDL included interim WLAs for chloride for the WRPs. These interim WLAs provide the WRPs the necessary time to implement chloride source reduction, complete site-specific objective (SSO) studies, and make appropriate modifications to the WRP, as necessary, to meet the WQO for chloride. The interim waste load allocations proposed in the TMDL were based on a statistical evaluation of the WRPs' performance in the three years preceding October 2002.
7. On February 19, 2003 the State Water Resources Control Board (State Board) adopted State Board Resolution 2003-0014 (the "Remand Resolution") which remanded the TMDL to the Regional Board. The Remand Resolution directed the Regional Board to consider a phased implementation approach to allow SCVSD to complete special studies prior to planning and construction of advanced treatment technologies.
8. On July 10, 2003, in response to the Remand Resolution, the Regional Board adopted Resolution 03-008, revising the implementation Plan for the TMDL. The revised TMDL allowed 13 years to implement the TMDL.
9. On May 6, 2004, the Regional Board adopted Resolution 04-004 to revise the interim waste-load allocations and Implementation Plan for the chloride TMDL in the USCR. The revised Implementation Plan required the completion of several special studies that serve to characterize the sources, fate, transport, and specific impacts of chloride in the USCR, including impacts to downstream reaches and underlying groundwater basins.
10. The first of the special studies, an evaluation of the appropriate chloride threshold for the reasonable protection of salt-sensitive agriculture, was completed in September of 2005. This special study, entitled "Literature Review and Evaluation (LRE)," found that the best estimate of a chloride

hazard concentration for avocado crops falls within the range of 100 to 120 mg/L. A similar range of 100 to 117 mg/L was found by an independent technical advisory panel (TAP). An additional study completed in January 2008, entitled "Compliance Averaging Period for Chloride Threshold Guidelines in Avocado," found that a 3-month averaging period of the LRE guidelines would be protective of avocados. The TAP co-chairs reviewed this study and agreed that a 3-month averaging period is appropriate.

11. On August 3, 2006, the Regional Board revised the Implementation Schedule for the TMDL in Resolution No. 04-004 (Resolution No. 06-016). The revised TMDL accelerated the schedule from 13 years to 11 years based on findings from the LRE. The State Board approved the Regional Board amendment on May 22, 2007 (State Board Resolution No. 2007-0029). In approving the amendment, the State Board directed the Regional Board to consider variability in the SSO for chloride to account for the effects of drought on source water quality.
12. Prior to completion of the special studies, the presumed implementation plan included two options: advanced treatment of effluent from the Valencia and Saugus WRPs and disposal of brine in the ocean through an ocean outfall, or disposal of tertiary treatment effluent in the ocean through an ocean outfall. Both options entail construction of a pipeline from the Santa Clarita Valley WRPs to the ocean and an ocean outfall.
13. The second special study required by the Implementation Plan is the "Groundwater/Surface Water Interaction (GSWI) Model." The GSWI study model has been completed, reviewed and approved as an appropriate and adequate modeling tool by the stakeholders and an independent GSWI TAP. The GSWI model has been used to examine feasibility of various implementation alternatives. The GSWI study predicts that none of the alternatives, including the advanced treatment of WRP effluent and disposal of brine in a new ocean outfall or disposal of tertiary treatment effluent in an ocean outfall, would achieve compliance with the existing chloride WQO of 100 mg/L at all times and at all locations and that an alternative water resources management approach could achieve attainment for certain reaches.
14. The third special study required by the Implementation Plan is the "Evaluation of Appropriate Chloride Threshold for Endangered Species Protection (ESP)." This special study has been completed and found that the existing USEPA chloride criteria of 230 mg/L as a chronic threshold and 860 mg/L as an acute threshold are protective of aquatic life in the USCR, including Threatened and Endangered species. These conclusions indicate that endangered species can tolerate higher levels of chloride than salt-sensitive agricultural crops. The independent ESP TAP concurred with the study findings and conclusions.

15. The Santa Clarita Valley Sanitation District (SCVSD) has completed all of the necessary special studies required by the Chloride TMDL (TMDL Task Nos 3, 4, 5, 6, 7, 8, 9, 10b, and 10c). The completion of these TMDL special studies, all conducted in a facilitated stakeholder process in which stakeholders participated in scoping and reviewing the studies, has led to development of an alternative TMDL implementation plan that addresses chloride impairment of surface waters and degradation of groundwater. The alternative, termed the alternative water resources management approach (AWRM), develops site specific objectives (SSOs) for chloride while protecting beneficial uses. The AWRM provides water quality and water supply benefits in Los Angeles and Ventura Counties. The AWRM consists of chloride source reduction actions and chloride load reduction through advanced treatment (microfiltration and reverse osmosis) of a portion of the Valencia WRP effluent in conformance with SSOs.
16. To support the development of the AWRM compliance option by stakeholders, Regional Board adopted Resolution No. 07-018 on November 1, 2007. Resolution No. 07-018 modified the regulatory provisions of the Basin Plan by subdividing Reach 4 of the Santa Clara River (SCR) as two separate Reaches, Reach 4A between the confluence of Piru Creek and the A Street Bridge in the City of Fillmore and Reach 4B between the Blue Cut Gauging Station and the confluence of Piru Creek. The Regional Board stated that this action would allow the development of more geographically precise SSOs.
17. This amendment to the Basin Plan will incorporate SSOs for chloride in Reaches 4B, 5, and 6 of the Santa Clara River and the groundwater basins underlying those reaches. The SSOs are protective of beneficial uses of these waterbodies. The GSWI study found that the AWRM compliance alternative will result in timely attainment of the SSOs for Reaches 4B, 5, and 6 and reduce the chloride load to the USCR and underlying groundwater basins. The proposed implementation activities under AWRM, which will increase chloride export from the East Piru groundwater basin underlying Reach 4B, will offset any increases in chloride discharges.
18. This amendment to the Basin Plan will include implementation language, including minimum salt export requirements to ensure that excess salt loadings to the groundwater basin due to periods of elevated water supply concentrations are removed from the groundwater basin through pumping and export.
19. The adoption of SSOs for chloride is part of a comprehensive strategy for addressing the buildup of salts in the Santa Clara watershed, which includes development and implementation of Total Maximum Daily Loads and corresponding effluent and receiving water limitations in NPDES permits.

20. The TMDL numeric targets, WLAs, and Implementation Plan are based on the SSOs for chloride. The TMDL provides interim WLAs for chloride, as well as interim WLAs for sulfate and TDS to support the supplemental water and water recycling components of the AWRM.
21. The TMDL provides a ten-year schedule to attain compliance with the SSOs for chloride. The SSOs are conditioned on full and ongoing implementation of the AWRM program; if the AWRM system is not built and operated, the water quality objectives for chloride revert back to the current levels in the Basin Plan, which are 100 mg/L.
22. The SCVSD, Ventura County Agricultural Water Quality Coalition, the United Water Conservation District, and Upper Basin Water Purveyors, consisting of the Castaic Lake Water Agency (CLWA), Valencia Water Company, Newhall County Water District, Santa Clarita Water Division of the CLWA, and the Los Angeles County Waterworks District No. 36, herein referred to as the AWRM Stakeholders have entered into a memorandum of understanding (MOU), effective October 23, 2008 to implement the AWRM Program. The AWRM MOU specifies the agreed-upon responsibilities of AWRM Stakeholders for the implementation of ultra-violet light disinfection and advanced treatment facilities (i.e., microfiltration-reverse osmosis and brine disposal), salt management facilities (i.e., extraction wells and water supply conveyance pipelines), supplemental water (i.e., water transfers and related facilities), and alternative water supplies for the protection of beneficial uses. The AWRM MOU also specifies the various uses of desalinated recycled water, which include: (1) compliance with water quality objectives for Reaches 4A, 4B and 5; (2) protection of salt-sensitive agricultural beneficial uses; (3) removal of excess chloride load above 117 mg/L from the East Piru Basin; and (4) enhancement of water supplies in Ventura and Los Angeles Counties. In addition, the AWRM MOU will implement an extension of the GSWI model to assess the groundwater and surface water interactions and impacts to surface water and groundwater quality from the AWRM program to the Fillmore and Santa Paula basins.
23. Implementation actions to achieve SSOs in Reaches 4B, 5, and 6 and the TMDL must also result in compliance with downstream water quality objectives for chloride. Surface water chloride concentrations will comply with the existing water quality objective of 100 mg/L in Reach 4A.
24. Regional Board staff prepared a detailed technical document that analyzes and describes the specific necessity and rationale for the development of this amendment. The technical document entitled "Upper Santa Clara River Chloride TMDL Reconsideration and Conditional Site Specific Objectives" (Staff Report) is an integral part of this Regional Board action and was reviewed, considered, and accepted by the Regional Board before acting on December 11, 2008. The Staff Report relies upon the scientific background and data collection and analysis documented in the TMDL special studies.

The TMDL special studies are distinguished from the Regional Board's staff report in that they do not present the recommendations of Regional Board staff.

25. The public has had a reasonable opportunity to participate in the review of the amendment to the Basin Plan. Stakeholders have participated extensively in the special studies since 2005 through a facilitated process in which meetings are held monthly in the cities of Fillmore, Santa Paula, and Santa Clarita. Technical working groups (TWGs) have executed the implementation studies and stakeholder-selected TAPs have reviewed the studies. All meetings are open to the public, and agendas and minutes from meetings are published on the Santa Clara River Chloride TMDL website: www.santaclarariver.org. A draft of the amendment was released for public comment on September 30, 2008; a Notice of Hearing and Notice of Filing were published and circulated 45 days preceding Board action; a notice of hearing published in the Los Angeles Daily News, the Santa Clarita Signal, and the Ventura County Star on September 30, 2008; Regional Board staff responded to oral and written comments received from the public; and the Regional Board held a public hearing on December 11, 2008 to consider adoption of the amendment.
26. In amending the Basin Plan to establish SSOs and to revise this TMDL, the Regional Board considered the requirements set forth in Sections 13240, 13241, and 13242 of the California Water Code. The 13241 factors are set forth and considered in the staff report.
27. The amendment is consistent with the State Antidegradation Policy (State Board Resolution No. 68-16), in that the changes to water quality objectives (i) consider maximum benefits to the people of the state, (ii) will not unreasonably affect present and anticipated beneficial use of waters, and (iii) will not result in water quality less than that prescribed in policies. Likewise, the amendment is consistent with the federal Antidegradation Policy (40 CFR 131.12).
28. Pursuant to Public Resources Code section 21080.5, the Resources Agency has approved the Regional Water Boards' basin planning process as a "certified regulatory program" that adequately satisfies the California Environmental Quality Act (CEQA) (Public Resources Code, § 21000 et seq.) requirements for preparing environmental documents (14 Cal. Code Regs. § 15251(g); 23 Cal. Code Regs. § 3782.) The Regional Water Board staff has prepared "substitute environmental documents" for this project that contains the required environmental documentation under the State Water Board's CEQA regulations. (23 Cal. Code Regs. § 3777.) The substitute environmental documents include the TMDL staff report, the environmental checklist, the comments and responses to comments, the basin plan amendment language, and this resolution. While the Regional Board has no discretion to not establish a TMDL (the TMDL is required by federal law), the Board does exercise discretion in assigning waste load allocations and load allocations,

determining the program of implementation, and setting various milestones in achieving the water quality standards. The CEQA checklist and other portions of the substitute environmental documents contain significant analysis and numerous findings related to impacts and mitigation measures.

29. A CEQA Scoping hearing was conducted on July 29, 2008 at the Council Chamber of City of Fillmore – 250 Central Avenue, Fillmore, California. A notice of the CEQA Scoping hearing was sent to interested parties. The notice of CEQA Scoping hearing was also published in the Los Angeles Daily News on July 11, 2008 and Ventura County Star on July 11, 2008.
30. In preparing the accompanying CEQA substitute documents, the Regional Board has considered the requirements of Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187, and intends the substitute documents to serve as a tier 1 environmental review. Consistent with CEQA, the substitute documents do not engage in speculation or conjecture and only consider the reasonably foreseeable environmental impacts of the methods of compliance, the reasonably foreseeable feasible mitigation measures, and the reasonably foreseeable alternative means of compliance, which would avoid or eliminate the identified impacts. Nearly all of the compliance obligations will be undertaken by public agencies that will have their own obligations under CEQA. Project level impacts will need to be considered in any subsequent environmental analysis performed by other public agencies, pursuant to Public Resources Code section 21159.2.
31. The proposed amendment could have a potentially significant adverse effect on the environment. However, there are feasible alternatives, feasible mitigation measures, or both, that if employed, would substantially lessen the potentially significant adverse impacts identified in the substitute environmental documents; however such alternatives or mitigation measures are within the responsibility and jurisdiction of other public agencies, and not the Regional Board. Water Code section 13360 precludes the Regional Board from dictating the manner in which responsible agencies comply with any of the Regional Board's regulations or orders. When the agencies responsible for implementing this TMDL determine how they will proceed, the agencies responsible for those parts of the project can and should incorporate such alternatives and mitigation into any subsequent projects or project approvals. These feasible alternatives and mitigation measures are described in more detail in the substitute environmental documents. (14 Cal. Code Regs. § 15091(a)(2).)
32. From a program-level perspective, incorporation of the alternatives and mitigation measures outlined in the substitute environmental documents may not foreseeably reduce impacts to less than significant levels.

33. The substitute documents for this TMDL, and in particular the Environmental Checklist and staff's responses to comments, identify broad mitigation approaches that should be considered at the project level.
34. To the extent significant adverse environmental effects could occur, the Regional Board has balanced the economic, legal, social, technological, and other benefits of the TMDL against the unavoidable environmental risks and finds that specific economic, legal, social, technological, and other benefits of the TMDL outweigh the unavoidable adverse environmental effects, such that those effects are considered acceptable. The basis for this finding is more fully set forth in the substitute environmental documents. (14 Cal. Code Regs. § 15093.)
35. Considering the record as a whole, this Basin Plan amendment will result in no effect, either individually or cumulatively, on wildlife resources.
36. The regulatory action meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b).
37. The Basin Plan amendment incorporating SSOs and a revision of the Santa Clara River Chloride TMDL must be submitted for review and approval by the State Board, the State Office of Administrative Law (OAL), and the U.S. EPA. The Basin Plan amendment will become effective upon approval by OAL and U.S. EPA. A Notice of Decision will be filed following these approvals.
38. Occasionally during its approval process, Regional Board staff, the State Board or OAL determines that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency. Under such circumstances, the Executive Officer should be authorized to make such changes, provided she informs the Board of any such changes.

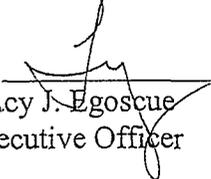
Therefore, be it resolved that:

1. Pursuant to sections 13240 and 13241 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendment to Chapter 3 of the Water Quality Control Plan for the Los Angeles Region as set forth in Attachment A hereto, to incorporate SSOs for chloride for Reaches 4B, 5, and 6 in the Santa Clara River watershed and underlying groundwater basins (as identified in Tables 3-8 and 3-10), which will replace the previously applicable water quality objectives in Reaches 4B, 5, and 6 of the Santa Clara River and underlying groundwater basins.
2. Pursuant to sections 13240 and 13241 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendment to Chapter 4 of the Water

Quality Control Plan for the Los Angeles Region as set forth in Attachment B hereto, to include USCR SSOs for chloride.

3. Pursuant to sections 13240 and 13242 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendment to Chapter 7 the Water Quality Control Plan for the Los Angeles Region as set forth in Attachment C hereto, to incorporate the revisions to the Upper Santa Clara River Chloride TMDL.
4. The Regional Board hereby approves and adopts the CEQA substitute environmental documentation, which was prepared in accordance with Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187, and directs the Executive Officer to sign the environmental checklist. To the extent significant adverse environmental effects could occur, the Regional Board has balanced the economic, legal, social, technological, and other benefits of the TMDL against the unavoidable environmental risks and finds that specific economic, legal, social, technological, and other benefits of the TMDL outweigh the unavoidable adverse environmental effects, such that those effects are considered acceptable. The basis for this finding is more fully set forth in the substitute environmental documents. (14 Cal. Code Regs. § 15093.)
5. The Executive Officer is authorized to request a "No Effect Determination" from the Department of Fish and Game, or transmit payment of the applicable fee as may be required to the Department of Fish and Game.
6. The Executive Officer is directed to forward copies of the Basin Plan amendment to the State Board in accordance with the requirements of section 13245 of the California Water Code.
7. The Regional Board requests that the State Board approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the California Water Code and forward it to the OAL and U.S. EPA.
8. If during its approval process Regional Board staff, State Board or OAL determines that minor, non-substantive corrections to the language of the amendment are needed for clarity, or for consistency, the Executive Officer may make such changes, and shall inform the Board of any such changes.

I, Tracy J. Egoscue, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on December 11, 2008.



Tracy J. Egoscue
Executive Officer

1/15/08

Date