

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

RESOLUTION NO. R4-2006-012

June 8, 2006

**Amendment to the *Water Quality Control Plan for the Los Angeles Region* to
Incorporate a Total Maximum Daily Load for Metals for the
Calleguas Creek, its Tributaries, and Mugu Lagoon**

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, Los Angeles Region (Regional Board) to develop water quality objectives, which are sufficient to protect beneficial uses for each water body found within its region. Water bodies that do not meet water quality objectives or support beneficial uses are considered impaired.
2. A consent decree between the U.S. Environmental Protection Agency (U.S. EPA), Heal the Bay, Inc. and BayKeeper, Inc. was approved on March 22, 1999. This court order directs the U.S. EPA to complete Total Maximum Daily Loads (TMDLs) for all impaired waters within 13 years. A schedule was established in the consent decree for the completion of the first 29 TMDLs within 7 years, including completion of a TMDL to reduce metals in the Calleguas Creek, its tributaries, and Mugu Lagoon by U.S. EPA by March 22, 2007. The remaining TMDLs will be scheduled by Regional Board staff within the 13-year period.
3. 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 U.S. EPA 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 standards 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)). The regulations in 40 CFR 130.7 also state that TMDLs shall take into account critical conditions for stream flow, loading and water quality parameters.
4. The numeric targets in this TMDL are not water quality objectives and do not create new bases for enforcement against dischargers apart from the existing, numeric water quality standards they translate. The targets merely establish the bases through which load allocations (LAs) and waste load allocations (WLAs) are calculated. WLAs are only enforced for a discharger's own discharges, and then only in the context of its National Pollutant Discharge Elimination System (NPDES) permit, which must contain effluent limits consistent with the assumptions and requirements of the WLA (40 C.F.R. 122.44(d)(vii)(B)). The Regional Board will develop permit requirements through subsequent permit actions that will allow all interested persons, including but not limited to municipal storm water dischargers, to provide comments on how the WLA will be translated into permit requirements.

5. As envisioned by Water Code section 13242, the TMDL contains a "description of surveillance to be undertaken to determine compliance with objectives." The Compliance Monitoring and Special Studies elements of the TMDL recognize that monitoring will be necessary to assess the on-going condition of the Calleguas Creek, its tributaries, and Mugu Lagoon and to assess the on-going effectiveness of efforts by dischargers to reduce metals loading to the Calleguas Creek. Special studies may also be appropriate to provide further information about new data, new or alternative sources, and revised scientific assumptions. The TMDL does not establish the requirements for these monitoring programs or reports, although it does recognize the type of information that will be necessary to secure. The Regional Board's Executive Officer will issue orders to appropriate entities to develop and to submit monitoring programs and technical reports. The Executive Officer will determine the scope of these programs and reports, taking into account any legal requirements, and issue the orders to the appropriate entities.
6. Upon establishment of TMDLs by the State or U.S. EPA, 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. Attachment A to this resolution contains the Basin Planning language for this TMDL.
7. The Calleguas Creek Watershed is located in southeast Ventura County, California, and in a small portion of western Los Angeles County, and drains an area of approximately 343 square miles from the Santa Susana Pass in the east, to Mugu Lagoon in the southwest. Current land use is approximately 26 percent agriculture, 24 percent urban, and 50 percent open space. The tributaries and the streams of the Calleguas Creek Watershed are divided into fourteen segments, or reaches. The 2002 Clean Water Act 303(d) list identified lower reaches of the Calleguas Creek watershed (reach 1, 2, and 3) as impaired for copper, mercury, nickel, selenium, and zinc. These listings were approved by the State Water Resources Control Board on February 4, 2003. The proposed TMDL addresses impairments of water quality caused by these metals in lower reaches of the Calleguas Creek Watershed.
8. On May 18, 2000, the USEPA promulgated numeric criteria for priority pollutants for the State of California, known as the California Toxics Rule (CTR), codified as 40 CFR section 131.38. Federal water quality standards under section 303 of the Clean Water Act consist of designated uses and criteria to protect those uses. (40 C.F.R. 131.3(i)). Designated uses are beneficial uses under state law, and criteria are water quality objectives under state law. The CTR establishes the numeric water quality objectives for various toxic pollutants. These objectives apply "without exception" to all inland surface waters within the State of California, including the Los Angeles region. (40 C.F.R. 131.38(d)(1)-(2)).
9. "[I]t is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited." (33 U.S.C. 1251(a)(3).) Water quality standards, including the CTR, reflect this express national policy of Congress. When a pollutant is present at levels in excess of the CTR numbers, then the pollutant is present in toxic amounts. In this sense, the numeric objectives in the CTR are USEPA's determination of when priority pollutants are present at toxic amounts in contravention of Congress's national policy.
10. The Regional Board's goal in establishing the Calleguas Creek Metals TMDL is to protect the aquatic life and wildlife beneficial uses of Calleguas Creek, its tributaries, and Mugu

Lagoon, and to achieve the numeric water quality objectives set to protect these uses as contained in the CTR.

11. The water quality targets for copper in the TMDL are expressed as the copper water quality objective multiplied by a water-effect ratio (WER) consistent with the federal California Toxics Rule (CTR). A WER is a means to account for a difference between the toxicity of copper in laboratory dilution water and its toxicity in local waterbodies. A WER of 1.0 indicates equivalence between local waters and laboratory dilution water, while a WER of greater (*less*) than 1.0 indicates lower (*higher*) toxicity in local waters than in laboratory dilution waters. The water-effect ratio (WER) has a default value of 1.0 unless a site-specific WER is approved. To use a WER other than the default of 1.0, a study must be conducted consistent with USEPA's WER guidance and adopted by the Regional Board through the state's basin plan amendment process.
12. A WER study for Mugu Lagoon (Reach 1) lower Calleguas Creek (Reach 2), Revolon Slough (Reach 4) and Beardsley Wash (Reach 5) was conducted by Larry Walker Associates for the Calleguas Creek Management Group with involvement by Regional Board staff. A draft technical report dated September 21, 2005 contains recommended WERs of 2.13 for Mugu Lagoon and Revolon Slough and 4.06 for lower Calleguas Creek.
13. Regional Board staff commented on the draft report in a letter to Larry Walker Associates dated March 15, 2006. Regional Board staff identified several concerns and data limitations of the study that constrained the scientifically defensible alternatives available to the Board. Given these data limitations and unresolved technical issues, Regional Board staff proposed a single WER for the lagoon and lower creek that would be protective. Regional Board staff agreed to reconsider this single WER value if additional wet weather data were collected in the creek and technical issues were resolved. In response to Regional Board comments, Larry Walker Associates sampled an additional wet weather event on April 14, 2006 and Regional Board staff is actively engaged in discussions with Larry Walker Associates and independent technical experts to resolve other technical issues.
14. Upon resolution of these issues, Regional Board staff will recommend site-specific WERs for Mugu Lagoon (Reach 1), lower Calleguas Creek (Reach 2), Revolon Slough (Reach 4) and Beardsley Wash (Reach 5) to the Regional Board. Prior to Regional Board consideration, the proposed basin plan amendment to incorporate site-specific WERs must be submitted for peer review as required by Health and Safety Code section 57004 and be subject to public review and comment.
15. If site-specific WERs are approved by the Regional Board, the TMDL targets and allocations shall be implemented in accordance with the approved WERs using the equations set forth in Table 7-19.1 under "Numeric Targets", "Waste Load Allocations" and "Load Allocations", of the TMDL.
16. Calleguas Creek stakeholders have been actively engaged with USEPA and the Regional Board on a variety of watershed planning initiatives in the Calleguas Creek Watershed. Key stakeholders have formed the Calleguas Creek Watershed Management Plan (CCWMP), an established, stakeholder-led watershed management group that has been continually operating since 1996. The CCWMP has broad participation from federal, State and county agencies, municipalities, POTWs, water purveyors, groundwater management agencies, and agricultural and environmental groups. As part of its mission to address issues of long-range comprehensive water resources; land use; economic development; open space preservation,

enhancement and management, the CCWMP proposed to USEPA and Regional Board to take the lead on development of the TMDLs.

17. Regional Board staff have worked with the CCWMP and USEPA in the development of a detailed technical document that analyzes and describes the specific necessity and rationale for the development of this TMDL. The technical document entitled "Calleguas Creek Watershed Metals and Selenium TMDL" prepared by Larry Walker Associates is an integral part of this Regional Board action and was reviewed, and accepted by the Regional Board as a supporting technical analysis before acting. The technical document provides the detailed factual basis and analysis supporting the problem statement, numeric targets (interpretation of the narrative and numeric water quality objectives, used to calculate the pollutant allocations), source analysis, linkage analysis, waste load allocations (for point sources), load allocation (for nonpoint sources), margin of safety, and seasonal variations and critical conditions of this TMDL.
18. On June 8, 2006, prior to the Board's action on this resolution, public hearings were conducted on the Calleguas Creek Watershed Metals TMDL. Notice of the hearing for the Calleguas Creek Watershed Metals TMDL was published in accordance with the requirements of Water Code Section 13244. This notice was published in the Ventura County Star on April 10, 2006.
19. The public has had reasonable opportunity to participate in the review of the amendment to the Basin Plan. A draft of the Calleguas Creek Watershed Metals TMDL was released for public comment on March 30, 2006; a Notice of Hearing and Notice of Filing were published and circulated 45 days preceding Board action; Regional Board staff responded to oral and written comments received from the public; and the Regional Board held a public hearing on June 8, 2006 to consider adoption of the TMDL.
20. In amending the Basin Plan, the Regional Board considered the requirements set forth in Sections 13240 and 13242 of the California Water Code.
21. Because the TMDL implements existing numeric water quality objectives (i.e., the numeric water quality criteria established by U.S. EPA in the CTR), the Regional Board has consistently maintained (along with the State Water Resources Control Board) that adopting a TMDL does not require the water boards to consider the factors of Water Code section 13241. The consideration of the Water Code section 13241 factors, by section 13241's express terms, only applies "in establishing water quality objectives." Here the Regional Board is not establishing water quality objectives, but as required by section 303(d)(1)(C) of the Clean Water Act is adopting a TMDL that will implement the previously established objectives that have not been achieved.
22. While the Regional Board is not required to consider the factors of Water Code section 13241, it, nonetheless, has developed and received significant information pertaining to the Water Code section 13241 factors and considered that information in developing and adopting this TMDL. The past, present, and probable future beneficial uses of water have been considered in that the Calleguas Creek is designated for a multitude of beneficial uses in the Basin Plan. Various living organisms (including vegetation, fish, invertebrates, and wildlife) are present in, transient through, and will be present in the Calleguas Creek. Dry weather surface water in the Calleguas Creek watershed is primarily composed of groundwater, municipal wastewater, urban non-stormwater discharges, and agricultural runoff. In the upper reaches of the watershed, upstream of any wastewater discharges,

groundwater discharge from shallow surface aquifers provide a constant base flow. "Storm-peaking" refers to peak discharges limited to a wet weather season and concentrated into a few days after short-term, discrete storm events, when flow commonly is two to three orders of magnitude greater than non-storm flow. The environmental characteristics of the Calleguas Creek are spelled out at length in the Basin Plan and in the technical documents supporting this Basin Plan amendment, and have been considered in developing this TMDL. Water quality conditions that reasonably could be achieved through the coordinated control of all factors which affect water quality in the area have been considered via the discussion of likely means of compliance, and studies indicating that a mix of best management practices (BMPs), rather than advanced treatment plants, would achieve the water quality criteria established in the CTR. Authorizing certain storm water dischargers to rely on BMPs in the first instances reflects the reasonableness of the action in terms of the ability to implement the requirements, as well as a belief that the water quality conditions can reasonably be achieved in any event. Establishing a plan that will ensure the Calleguas Creek is not toxic is a reasonable water quality condition. However, to the extent that there would be any conflict between the consideration of the factor in Water Code section 13241 subdivision (c), if the consideration were required, and the Clean Water Act, the Clean Water Act would prevail. Notably, national policy established by Congress prohibits the discharge of toxic pollutants in toxic amounts. Economic considerations were considered throughout the development of the TMDL. Some of these economic considerations arise in the context of Public Resources Code section 21159 and are equally applicable here. This implementation program recognizes the economic limitations on achieving immediate compliance—especially for municipal storm water dischargers. The TMDL also authorizes the use of BMPs, to the extent authorized by law, for various storm water dischargers. Economic considerations were considered and are reflected in an implementation program that is flexible and allows 10 years for POTWs, and 15 years for agricultural and permitted stormwater dischargers to comply with the final allocations. The need for housing within the region has been considered, but this TMDL is unlikely to affect housing needs. Whatever housing impacts could materialize are ameliorated by the flexible nature of this TMDL and the implementation schedule.

23. The amendment is consistent with the State Antidegradation Policy (State Board Resolution No. 68-16), in that it does not authorize any lowering of water quality and is designed to implement existing water quality objectives. Likewise, the amendment is consistent with the federal Antidegradation Policy (40 CFR 131.12).
24. 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, Section 21000 et seq.) requirements for preparing environmental documents. (14 Cal. Code Regs. § 15251(g); 23 Cal. Code Regs. § 3782.) As such, the Regional Water Board's basin planning documents together with an Environmental Checklist, are the "substitute documents" that contain the required environmental documentation under CEQA. (23 Cal. Code Regs. § 3777.) The detailed technical report entitled "Calleguas Creek Watershed Metals and Selenium TMDL", this resolution, and the Environmental Checklist serve as the substitute documents for this project. The project itself is the establishment of a TMDL for toxic metals in the Calleguas Creek, its tributaries, and Mugu Lagoon. While the Regional Board has no discretion to not establish a TMDL (the TMDL is required by federal law) or for determining the water quality standard to be applied (the CTR establishes the numeric water quality objectives that must be implemented), 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 numeric water quality standards established in the CTR.

25. A CEQA Scoping hearing was conducted on January 26, 2006 in the City of Thousand Oaks, 2100 E. Thousand Oaks Blvd., Thousand Oaks, California. A notice of the CEQA Scoping hearing was sent to interested parties including cities and/or counties with jurisdiction in or bordering the Calleguas Creek watershed.
26. The lengthy implementation period allowed by the TMDL, will allow many compliance approaches to be pursued. 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. Many compliance obligations will be undertaken directly by public agencies that will have their own obligations under CEQA. In addition, public agencies such as the Ventura County, Farm Bureau and the Resource Conservation District, are expected to facilitate compliance obligations per participated growers, and to the extent that the proposed projects including installation of BMPs, are subject to project-level CEQA analysis, the public agency may assume those responsibilities. Individual growers who propose BMPs that impact waters of the State through dredge or fill operations will be subjected to applicable State and federal permitting requirements. In this instance, the "Lead" State agency will assure compliance with project-level CEQA analysis. 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. If not properly mitigated at the project level, there could be adverse environmental impacts. 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. 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.
27. The proposed amendment could have a significant adverse effect on the environment. However, there are feasible alternatives, feasible mitigation measures, or both that would substantially lessen any significant adverse impact. The public agencies responsible for those parts of the project can and should incorporate such alternatives and mitigation into any subsequent projects or project approvals. Possible alternatives and mitigation are described in the CEQA substitute documents, specifically the TMDL technical report and the Environmental Checklist. To the extent the alternatives, mitigation measures, or both are not deemed feasible by those agencies, the necessity of implementing the federally required metals TMDL and removing the metals-related toxicity impairment from the Calleguas Creek (an action required to achieve the express, national policy of the Clean Water Act) outweigh the unavoidable adverse environmental effects.
28. Health and Safety Code section 57004 requires external scientific peer review for certain water quality control policies. Prior to public notice of the draft TMDL, the Regional Board submitted the scientific basis and scientific portions of the Calleguas Creek Watershed Metals and Selenium TMDL to Theo Dillaha, Ph.D., P.E. (Virginia Tech) and Rhea L. Williamson, Ph.D. (San Jose State University) for external scientific peer review. Written peer review reports were received by the Regional Board. Minor modifications were made to the

scientific portions of the TMDL to address concerns identified during the peer review process.

29. The regulatory action meets the "Necessity" standard of the Administrative Procedures Act, Government Code, Section 11353, Subdivision (b). As specified above, federal regulations require that TMDLs be incorporated into the water quality management plan. The Regional Board's Basin Plan is the Regional Board's component of the water quality management plan, and the Basin Plan is how the Regional Board takes quasi-legislative, planning actions. Moreover, the TMDL is a program of implementation for existing water quality objectives, and is, therefore, appropriately a component of the Basin Plan under Water Code section 13242. The necessity of developing a TMDL is established in the TMDL staff report, the section 303(d) list, and the data contained in the administrative record documenting the metals impairments of the Calleguas Creek, its tributaries, and Mugu Lagoon.
30. The Basin Plan amendment incorporating a TMDL for metals for the Calleguas Creek, its Tributaries, and Mugu Lagoon must be submitted for review and approval by the State Water Resources Control Board (State Board), the State Office of Administrative Law (OAL), and the U.S. EPA. The Basin Plan amendment will become effective upon approval by U.S. EPA. A Notice of Decision will be filed with the Resources Agency.

THEREFORE, be it resolved that pursuant to sections 13240 and 13242 of the Water Code, the Regional Board hereby amends the Basin Plan as follows:

1. 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 amendments to Chapter 7 of the Water Quality Control Plan for the Los Angeles Region, as set forth in Attachment A hereto, to incorporate the elements of the Calleguas Creek, its Tributaries, and Mugu Lagoon Metals TMDL.
2. 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.
3. 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 OAL and the U.S. EPA.
4. If 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, the Executive Officer may make such changes, and shall inform the Board of any such changes.
5. The Executive Officer is authorized to sign a Certificate of Fee Exemption.

I, Jonathan Bishop, 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 June 8, 2006.



Jonathan S. Bishop
Executive Officer

6/29/06
Date