



# California Regional Water Quality Control Board Los Angeles Region



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Linda S. Adams  
Agency Secretary

320 W. 4th Street, Suite 200, Los Angeles, California 90013  
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

Arnold Schwarzenegger  
Governor

**TO:** Any Interested Person

**FROM:** California Regional Water Quality Control Board, Los Angeles Region  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013

**DATE:** August 29, 2006

**SUBJECT:** Notice of Filing Submitted under section 21080.5 of the Public Resources Code

**PROPONENT:** California Regional Water Quality Control Board, Los Angeles Region

**TITLE:** Amendment to the Water Quality Control Plan for the Los Angeles Region

**CONTACT:** Deborah Neiter, (213) 576-6763  
Environmental Scientist  
TMDLs and Water Quality Standards

**LOCATION:** Los Angeles Region

**DESCRIPTION:** Basin Plan Amendment to incorporate water-effect ratios (WERs)<sup>1</sup> that would modify the copper water quality objectives for lower Calleguas Creek and Mugu Lagoon in the Calleguas Creek Watershed in Ventura County.

This notice is to advise any interested person that the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) will hold a public hearing on November 9, 2006. The subject under consideration is an amendment to Chapter 3 of the Water Quality Control Plan for the Los Angeles Region to incorporate water-effect ratios (WERs) that would modify the copper water quality objectives for lower Calleguas Creek and Mugu Lagoon in the Calleguas Creek Watershed in Ventura County. The WER would be applied as a multiplier to the copper water quality criteria contained in the federally promulgated California Toxics Rule (CTR). The public hearing will begin at 9:00 AM. The location of the public hearing is yet to be determined; please check the Board's website at <http://www.waterboards.ca.gov/losangeles/html/meetings/meetings.html> for the location of the meeting.

Copies of the tentative resolution, proposed amendment, staff report, and CEQA checklist are available on the website of the Los Angeles Regional Water Quality Control Board at: <http://www.waterboards.ca.gov/losangeles/html/bpaRes/bpa.html>. If you would like these documents in

<sup>1</sup> A water-effect ratio is a measure of the toxicity of a material obtained in site water from a particular waterbody divided by the same measure of the toxicity of the same material obtained simultaneously in laboratory dilution water.

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hard copy, please call Sandra Kelley at (213) 576-6619 or fax your request to her attention at (213) 576-6686.

Actions to amend the Basin Plan will be taken in accordance with a regulatory program exempt under section 21080.5 of the Public Resources Code from the requirement to prepare an environmental impact report under the California Environmental Quality Act (Public Resources Code section 21000 et seq.) and with other applicable laws and regulations. Additional regulations or policies consistent with the general purpose of the proposed amendment and complementary to the proposal may be developed at the hearing as a logical outgrowth. The Regional Board will take action on the proposed amendment after hearing staff's presentation and public comments.

The Regional Board is soliciting comments on the tentative resolution, proposed amendment and supporting documents. In order to be fully considered by the Regional Board, written comments and exhibits must be submitted to the Regional Board no later than 5:00 PM on October 13, 2006. Failure to comply with these requirements is grounds for the Board to refuse to admit the proposed written comment or exhibit into evidence (California Code of Regulations, title 23, section 649.4).

Comments should be submitted to:

California Regional Water Quality Control Board  
Los Angeles Region  
320 W. 4<sup>th</sup> Street, Suite 200  
Los Angeles, California 90013  
ATTN: Deborah Neiter

All exhibits including charts, graphs and other testimony presented at the public hearing must be left with the Regional Board for inclusion in the Administrative Record. Please note that the Regional Board may impose time limits on oral testimony at the public hearing. Please contact Deborah Neiter at (213) 576-6763 if you have any questions.

### **Background**

The Regional Board will consider amending its Basin Plan to revise Chapter 3 "Water Quality Objectives" to incorporate water-effect ratios (WERs) that would modify the copper objectives for two reaches within the Calleguas Creek watershed in Ventura County. The two reaches are 1) lower Calleguas Creek (also known as Calleguas Creek Reach 2 (Estuary to Potrero Road)) and 2) Mugu Lagoon (also known as Calleguas Creek Reach 1). The WER would be applied as a multiplier to the copper water quality objectives contained in the federally promulgated California Toxics Rule (CTR). The CTR establishes a mathematical function to calculate water quality objectives for metals, using thresholds for copper, a water-effect ratio (WER) multiplier and other variables. In the CTR, the US EPA has provided for the adjustment of these water quality objectives through the application by States of the WER procedure. If approved, the WER would modify the current acute (one-hour average) and chronic (4-day average) copper objectives set to protect aquatic life for this subset of inland surface waters.

The WER has a default value of 1.0 unless a study is conducted consistent with US EPA's WER guidance and adopted by the Regional Board, establishing the ratio that represents the difference between toxicity in laboratory test water and toxicity in a specific waterbody based on ambient conditions. If a

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WER is greater than 1.0 it means that the chemistry of the site water makes the metal less toxic to aquatic life than that metal would be in lab test water and therefore the modified objective can be higher (less stringent), while still being as protective of aquatic as the unmodified CTR objectives are intended to be. Conversely, if a WER is less than 1.0 it means that the chemistry of the site water makes the metal more toxic than the metal would be in lab test water and therefore the modified objective must be lower (more stringent) to be as protective as the CTR objectives are intended to be (US EPA, 1994).

The goal of this amendment is to take into account site specific conditions in lower Calleguas Creek and Mugu Lagoon that have been shown to alter [reduce] the toxicity of copper to aquatic life. The bioavailability and toxicity of copper are dependent on site-specific factors such as pH, hardness, suspended solids, dissolved oxygen (i.e., redox state), dissolved carbon compounds, salinity, and other constituents. The purpose of this amendment is to derive modified objectives for copper that will be sufficiently protective of the aquatic life in these waterbodies, given the local water chemistry, while not being more stringent than the CTR objectives are intended to be.

This proposed basin plan amendment is based on the scientific background and data in the Technical Report, "Calleguas Creek Watershed Copper Water-Effects Ratio (WER) Study," prepared by Larry Walker Associates, Inc. (LWA) on behalf of the Calleguas Creek Watershed Management Plan, a stakeholder group in the Calleguas Creek Watershed. The technical report is distinguished from the staff report in that it does not present the recommendation of Regional Board staff. The methods to develop the WERs generally follow the US EPA's direction for the development of WERs contained in "Interim Guidance on Determination and Use of Water-Effect Ratios for Metals" (US EPA, 1994).

Individual WERs for each of the sample events were calculated by dividing the site water LC<sub>50</sub> by the adjusted lab water LC<sub>50</sub>. To calculate the final WER (fWER) the adjusted geometric mean was taken of the individual WERs from the weather condition that was most critical (dry weather for the lagoon and wet weather for the creek). Regional Board staff propose a final WER for Mugu Lagoon of 1.51 and a final WER for lower Calleguas Creek of 3.69.

The last step in this study is to calculate the modified objectives using the final WER. Below are modified objectives calculated using the saltwater copper criteria contained in the CTR and the proposed final WERs.

Reach	Final WER	Modified Chronic Objective (ug/L)	Modified Acute Objective (ug/L)
Mugu Lagoon	1.51	4.68	7.25
Lower Calleguas Creek	3.69	11.4	17.7

The POTWs discharging to these waterbodies are expected to be the primary parties involved in compliance with the modified objectives. If approved, the copper WERs would be reflected in revised effluent and receiving water limitations for the affected POTWs and waterbody reaches, subject to antidegradation and antibacksliding requirements. It is not foreseeable that the amendment would instigate new or different compliance measures other than those required to comply with the current objectives. Therefore, the additional economic cost of this amendment should be negligible.

Additional receiving water monitoring will be required of dischargers subject to site-specific WER(s) to evaluate whether the copper objectives, as modified by the WER(s), are as protective of beneficial uses as the CTR objectives are intended to be. This additional monitoring will be required through the discharger's NPDES permit monitoring and reporting program. If additional monitoring indicates a change in the chemical characteristics of the waterbody or toxicity, the Regional Board may reconsider the site-specific WER(s).

Samuel Unger for  
Jonathan Bishop  
Executive Officer

Aug. 29, 2006  
Date