



California Stormwater Quality Association®

Dedicated to the Advancement of Stormwater Quality Management, Science and Regulation

December 14, 2015

Ms. Jeanine Townsend
Clerk to the Board
State Water Resources Control Board



Subject: Comment Letter—North Coast Water Quality Objective Update & Editorial Amendment

Dear Ms. Townsend:

The California Stormwater Quality Association (CASQA) appreciates the opportunity to provide comments on the proposed North Coast Basin Plan Amendments. CASQA has long been a leader in the visioning and implementation of strategies for stormwater management in California. In this role, CASQA provides technical and policy support for MS4s and for other stormwater permittees. CASQA also strongly supports the State Water Board in the development of the Storm Water Strategy. In both of these roles, CASQA's goal is to help identify and promote viable pathways to compliance for stormwater permittees.

We have significant concerns regarding one of the amendments proposed for the North Coast Basin Plan. This proposed amendment changes the status of CCR Title 22 secondary maximum contaminant levels (secondary MCLs). In the current Basin Plan, use of the secondary MCLs as surface water standards is discretionary. The amendments make them mandatory. These secondary MCLs would be applied to all waterways designated as having the municipal and domestic supply (MUN) beneficial use. This change could create a significant compliance challenge for stormwater dischargers in the Region. We found no evidence in the record that the stormwater compliance implications were considered.

Consequently, we request the State Water Board delay approval of the secondary MCLs amendment until the implications of these proposed standards on stormwater dischargers are fully investigated and management tradeoffs evaluated.

CASQA would be pleased to participate in this effort, which would provide a much-needed opportunity to bridge the gaps between the state's stormwater and drinking water programs.

CASQA did not comment on the amendments during the Regional Water Board adoption process. This is because the Staff Report including the CEQA analysis did not highlight this change or otherwise assess the impacts making it difficult for the public or other reviewers to understand the significance of the amendments. The following bullet points summarize our specific concerns and related issues:

1. Aluminum and iron exist in background soil. Natural background concentrations of these metals in runoff will likely cause exceedances of surface water standards based on secondary MCLs. Table 1 demonstrates the likelihood of runoff exceeding the proposed standards if the runoff contains only natural soils at a relatively low total suspended solids (TSS) concentration of 50 mg/l. This comparison assumes that the discharge would not have a mixing zone and must comply with the standards at the point of discharge (end-of-pipe). The North Coast Region has not yet developed a mixing zone policy. Even if a mixing zone were allowed, it generally could not be used for CWA 303(d) listed waterways. Currently, segments of the Klamath, Gualala, Mad, Russian, and Eel rivers are listed for Aluminum.

Table 1 – Estimated Runoff Concentrations due to Natural Soil Constituents

Constituent	Background Concentration in California Soils ¹	Concentration in Runoff Assuming TSS = 50 mg/l (natural soils) ²	Water Quality Objectives Based on Secondary MCLs
Iron	3.7%	1.9 mg/l	0.2 mg/l
Aluminum	7.3%	3.7 mg/l	0.3 mg/l

As indicated in Table 1, TSS in runoff from natural background areas would need to be reduced to 5 mg/l or less to achieve compliance. This reduction is not a realistic goal for stormwater runoff.

2. National stormwater monitoring data indicates that stormwater discharges from a variety of permitted sources would exceed these proposed secondary MCL-based standards. See Table 2, attached.
3. Best Management Practices or other structural controls are not available to achieve these proposed standards. Drinking water treatment plants typically provide chemical addition, flocculation, sedimentation, and filtration to comply with the primary and secondary MCLs. Stormwater dischargers could not provide equivalent technology to the many dispersed stormwater discharge locations.
4. The documentation for the amendment does not identify or address the impacts of the changes. Chapter 4 indicates the changes will have no impact on stormwater facilities (page 4-86):

UTILITIES AND SERVICE SYSTEMS: e) and g) No Impact

Discussion: None of the potential compliance measures have any potential to increase the need for storm water facilities [emphasis added], change the demand on water supplies, require additional capacity for wastewater treatment, or conflict with any solid waste disposal regulation. No impact.

¹ Background Concentrations of Trace and Major Elements in California Soils, UC Riverside, 1996, Table 2, average concentrations, posted [here](#).

² Additional metals may be present in the dissolved form.

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Similarly, the *California Environmental Quality Act Findings for Potentially Significant Impacts*³ that was prepared for the amendment does not address Title 22 or secondary MCLs at all.

In closing, CASQA requests that the State Water Board's consideration of the amendments be delayed to provide time to conduct a planning level reassessment of the appropriate application of the secondary MCLs as surface water standards involving the state's drinking water regulatory program, with a specific emphasis on identifying and assessing impacts and unintended consequences to stormwater compliance and managing stormwater as a resource. There is a critical need to bridge the gap between the state's stormwater and drinking water programs to provide a productive and balanced path forward for the state's clean water needs.

We appreciate the opportunity to offer comments and we look forward to working with you on this issue. Please contact CASQA Executive Director Geoff Brosseau at (650) 365-8620 if you have any questions or would like to discuss our comments further.

Sincerely,



Gerhardt Hubner, Chair
California Stormwater Quality Association

cc: Cindy Forbes, Deputy Director, Division of Drinking Water, State Water Board
Diana Messina, Chief, Surface Water / Permitting Section, State Water Board
Rik Rasmussen, Chief, Water Quality Standards and Assessment Section, State Water Board
Paul Haan, Chief, Watersheds and Wetlands Section, State Water Board
Jeremiah Puget, Environmental Scientist, North Coast Water Board
CASQA Board of Directors and Executive Program Committee

³ Resolution No. R1-2015-0018, Attachment 3, California Environmental Quality Act Findings for Potentially Significant Impacts; posted [here](#).

Attachment
Table 2 – Stormwater Runoff Compliance with Secondary MCLs

Selected Parameters <i>(All mg/l except as noted)</i>	Secondary MCLs ¹	Highway (Mean) ²	Industry SMARTS ³ (Median)	MS4 ⁴	SCCWRP Parking Lot Study ⁵	National Database (Mean) ⁶
Aluminum	0.2	8.9	0.78	-	0.3 – 0.5	-
Iron	0.3	6.8	0.61	0.35 – 9.7	0.5 – 0.8	2.7
Turbidity NTU	5 units	260	62	-	-	39
Total Suspended Solids	none	59	-	24- 350	29 - 52	142

1. California Secondary MCLs, posted [here](#), only three are presented in the table.
2. *Discharge Characterization Study Report*, November 2003, Caltrans, Table 3-18, except for turbidity: 2000-2001, *Annual Data Summary Report*, January 2002, Caltrans, Table 8, Urban Table 3-18. Also see: *Annual Data Summary Report*, February 2008, Caltrans, which provides monitoring results for Areas of Special Biological Significance as well as other monitoring sites including background values from streams, posted [here](#).
3. *Storm Water Multiple Application and Report Tracking System (SMARTS)*, statewide, reporting period: 2016-2016: values for Fe and Al, accessed Dec. 10, 2015, values labelled “dissolved” were deleted; statewide, reporting period: 2014-2015: values for turbidity, accessed Dec. 13, 2015; posted [here](#). Also see: *Stormwater Annual Report 2009-2010*, Lawrence Berkeley National Laboratory, June 2010, 2.4.3 Monitored Location MP-3 (Building 77-79, Metal Fabrication, Storage, and Scrap Recycling), 2 events in 2009 and 2010, posted [here](#).
4. Barrett, et al., *A Review and Evaluation of Literature Pertaining to the Quality and Control of Pollution from Highway Runoff and Construction*. 1995, referenced in *Characteristics of Parking Lot Runoff Produced by Simulated Rainfall*, see next.
5. *Characteristics of Parking Lot Runoff Produced by Simulated Rainfall*, July 2001, Southern California Coastal Water Research Project, Table III-1, Comparison of constituent accumulation over time, means from 5 simulated events, posted [here](#).
6. *National Stormwater Quality Database*, NSQD Version 4.02 (last updated January 2015), average of numeric data (line 9059), posted [here](#).

Note that compliance generally is not based on long-term averages as shown in the last column (National Database) but rather on single samples that may be significantly higher or lower than the average values.