

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2003 - 0023

APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE
LOS ANGELES REGION INCORPORATING A TOTAL MAXIMUM DAILY LOAD FOR
NITROGEN COMPOUNDS AND RELATED EFFECTS IN CALLEGUAS CREEK, ITS
TRIBUTARIES, AND MUGU LAGOON

WHEREAS:

1. The Los Angeles Regional Water Quality Control Board (Regional Board) adopted a Water Quality Control Plan for the Los Angeles Region (Basin Plan) on June 13, 1994 which was approved by the State Water Resources Control Board (State Board) on November 17, 1994 and by the Office of Administrative Law (OAL) on February 23, 1995.
2. On October 24, 2002, the Regional Board adopted Resolution No. 02-017 (attached) amending the Basin Plan by establishing a Total Maximum Daily Load (TMDL) for nitrogen compounds and related effects in Calleguas Creek, its tributaries, and Mugu Lagoon (Nitrogen TMDL).
3. The State Board finds that provisions of the amendment as adopted warranted minor non-substantive clarification of the language of various provisions.
4. Regional Board Resolution No. 02-017 delegated to the Regional Board Executive Officer authority to make minor, non-substantive corrections to the adopted amendment if needed for clarity or consistency. The Regional Board Executive Officer has made the necessary corrections to the amendment by memorandum dated January 29, 2003.
5. The State Board finds that the Nitrogen TMDL is in conformance with the requirements for TMDL development specified in section 303(d) of the federal Clean Water Act and State Board Resolution No. 68-16.
6. The Regional Board staff prepared documents and followed procedures satisfying environmental documentation requirements in accordance with the California Environmental Quality Act and other State laws and regulations.
7. This Basin Plan amendment does not become effective until approved by the State Board and until the regulatory provisions are approved by OAL. The U.S. Environmental Protection Agency (USEPA) must also approve the Nitrogen TMDL.
8. This Basin Plan amendment furthermore relies on the ammonia objectives set forth by the Regional Board in Resolution No. 2002-011 adopted on April 25, 2002 and will only become effective if the State Board, OAL, and USEPA approve these objectives.

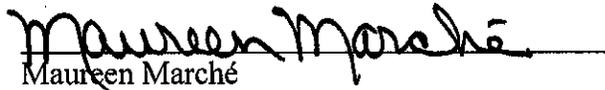
THEREFORE BE IT RESOLVED THAT:

The State Board:

1. Approves the amendment to the Basin Plan as adopted under Regional Board Resolution No. 02-017 and as corrected by the Regional Board Executive Officer.
2. Authorizes the Executive Director or designee to submit the amendment adopted under Regional Board Resolution No. 02-017, as approved, and the administrative record for this action to OAL and the TMDL to USEPA for approval.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on March 19, 2003.


Maureen Marché
Clerk to the Board

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

RESOLUTION NO. 02-017
October 24, 2002

**Amendment to the Water Quality Control Plan for the Los Angeles Region to include a TMDL
for Nitrogen Compounds and Related Effects in Calleguas Creek**

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 which include beneficial use designations and criteria to protect beneficial uses for each water body found within its region.
2. The Regional Board carries out its CWA responsibilities through California's Porter-Cologne Water Quality Control Act and establishes water quality objectives designed to protect beneficial uses contained in the Water Quality Control Plan for the Los Angeles Region (Basin Plan).
3. Section 303(d) of the CWA requires states to identify and to prepare a list of water bodies that do not meet water quality standards and then to establish load and waste load allocations, or a total maximum daily load (TMDL), for each water body that will ensure attainment of water quality standards and then to incorporate those allocations into their water quality control plans.
4. Calleguas Creek was listed on California's 1998 section 303(d) list, due to impairment for nitrogen compounds and their effects that do not protect the most sensitive beneficial uses of the water body.
5. A consent decree between the U.S. Environmental Protection Agency (USEPA), Heal the Bay, Inc., and BayKeeper, Inc. was approved on March 22, 1999. The court order directs the USEPA to complete TMDLs for all the Los Angeles Region's impaired waters within 13 years.
6. 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 (e.g., USEPA, 1991). A TMDL is defined as "the sum of the individual waste load allocations for point sources and 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.
7. 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). The Basin Plan, and applicable statewide plans serve as the State Water Quality Management Plans governing the watersheds under the jurisdiction of the Regional Board.

8. Calleguas Creek is located in Ventura County, California. It reaches from the Simi Hills east of the City of Simi Valley to Mugu Lagoon south of the City of Oxnard.
9. The Regional Board's goal in establishing the above-mentioned TMDL is to maintain the warm water fish and wildlife habitat (WARM, WILD) and groundwater recharge (GWR) beneficial uses of Calleguas Creek as established in the Basin Plan. Additionally, ammonia is known to cause toxicity to aquatic organisms.
10. Interested persons and the public have had reasonable opportunity to participate in review of the amendment to the Basin Plan. Efforts to solicit public review and comment include ten public workshops held between January 1999 and February 2002; public notification 45 days preceding the Board hearing; and responses from the Regional Board staff to oral and written comments received from the public.
11. 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).
12. The basin planning process has been certified as functionally equivalent to the California Environmental Quality Act requirements for preparing environmental documents and is, therefore, exempt from those requirements (Public Resources Code section 21000 et seq.), and the required environmental documentation and environmental checklist have been prepared.
13. The proposed amendment results in no potential for adverse effect (de minimis finding), either individually or cumulatively, on wildlife.
14. The regulatory action meets the "Necessity" standard of the Administrative Procedures Act, Government Code section 11353, subdivision (b).
15. The Basin Plan amendment incorporating a TMDL for nitrogen compounds and related effects for the Calleguas Creek watershed 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 US Environmental Protection Agency (USEPA). The Basin Plan amendment will become effective upon approval by OAL and USEPA. A Notice of Decision will be filed.

THEREFORE, be it resolved that pursuant to Section 13240 and 13241 of the Water Code, the Regional Board hereby amends the Basin Plan as follows:

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 7 the Water Quality Control Plan for the Los Angeles Region to incorporate the elements of the Calleguas Creek Nitrogen Compounds and Related Effects TMDL as set forth in Attachment A hereto.
2. The Executive Officer is directed to forward copies of the Basin Plan amendment to the SWRCB in accordance with the requirements of section 13245 of the California Water Code.

3. The Regional Board requests that the SWRCB 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 USEPA.
4. If during its approval process the SWRCB 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.
6. Amend the text in the Basin Plan, Plans and Policies (Chapter 5) to add:

"Resolution No. 02-017. Adopted October 24, 2002.
'Amendment to include a TMDL for Nitrogen Compounds and Related Effects for Calleguas Creek'
The resolution proposes a TMDL for nitrogen compounds and related effects in Calleguas Creek."
7. The Basin Plan amendment set forth in Attachment A shall only become effective if the water quality objectives revised by Regional Board Resolution 2002-011, or equivalent water quality objectives, have been approved by the OAL and USEPA, and are consistent with the TMDL.

I, Dennis A. Dickerson, 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 October 24, 2002.

Dennis A. Dickerson
Executive Officer

Attachment A to Resolution No. 02-017

**Proposed Amendment to the Water Quality Control Plan – Los Angeles Region
to Incorporate the
Calleguas Creek Nitrogen Compounds and Related Effects TMDL**

~~Proposed for adoption~~ Adopted by the California Regional Water Quality Control Board, Los Angeles Region on October 24, 2002.

Amendments

Table of Contents

Add:

Chapter 7. Total Maximum Daily Loads (TMDLs) ~~Summaries~~

7-7 — Calleguas Creek Nitrogen Compounds and Related Effects TMDL

List of Figures, Tables, and Inserts

Add:

Chapter 7. -Total Maximum Daily Loads (TMDLs)

Tables

7-7 Calleguas Creek Nitrogen Compounds and Related Effects TMDL

7-7.1. Calleguas Creek Nitrogen Compounds and Related Effects TMDL: Elements

7-7.2. Calleguas Creek Nitrogen Compounds and Related Effects TMDL: Implementation Schedule

**Chapter 7. -Total Maximum Daily Loads (TMDLs) ~~Summaries~~
Calleguas Creek Nitrogen Compounds and Related Effects TMDL**

This TMDL was adopted by:

The Regional Water Quality Control Board on ~~{~~October 24, 2002}.

~~This TMDL was approved by:~~

The State Water Resources Control Board on [Insert Date].

The Office of Administrative Law on [Insert Date].

The U.S. Environmental Protection Agency on [Insert Date].

~~The following table summarizes the key elements of this TMDL.~~

Table 7-7.1. Calleguas Creek Nitrogen Compounds and Related Effects TMDL: Elements

Element	Calleguas Creek Nitrogen Compound and Related Effects																																																						
<p>Problem Statement</p>	<p>Elevated ammonia and nitrogen concentrations (ammonia, nitrite and nitrate) concentrations are causing impairments of the warm water fish and habitat, wildlife habitat, and groundwater recharge beneficial uses of Calleguas Creek. Nitrite and nitrate contribute to eutrophic effects such as low dissolved oxygen and algae growth. Ammonia contributes to toxicity.</p>																																																						
<p>Numeric Target (Interpretation of the numeric water quality objective, used to calculate the load allocations)</p>	<p>This TMDL has numeric targets, expressed as ammonia, nitrite and nitrate concentrations, based on the water quality objectives set forth in the Basin Plan. These objectives are set forth in Chapter 3 of the Basin Plan and updated criteria for ammonia promulgated by EPA in 1999. The numeric targets for ammonia (chronic) range from 1.7 mg/L to 3.5 mg/L and from 3.2 mg/L to 9.5 mg/L (acute) depending on location. The oxidized nitrogen targets are 10 mg/L for nitrate-N, 1 mg/L for nitrite-N, and 10 mg/L for nitrite-N+nitrate-N. The pH target ranges from 6.5 to 8.5, and the dissolved oxygen target is an average of 7 mg/L but not less than 5 mg/L. Numeric targets for this TMDL are listed as follows:</p> <p>1. Total Ammonia as Nitrogen (NH₃-N)</p> <table border="1" data-bbox="358 982 1330 1917"> <thead> <tr> <th data-bbox="358 982 889 1234"></th> <th colspan="2" data-bbox="893 982 1330 1024"><i>NH₃-N concentration</i></th> </tr> <tr> <th data-bbox="358 1024 889 1234"><i>(mg-N/L)</i></th> <th data-bbox="893 1024 1117 1129"><i>One-hour average</i></th> <th data-bbox="1120 1024 1330 1129"><i>Thirty-day average</i></th> </tr> <tr> <th data-bbox="358 1092 889 1234"><i>Reach</i></th> <th colspan="2" data-bbox="893 1092 1330 1129"></th> </tr> </thead> <tbody> <tr> <td data-bbox="358 1171 889 1234">-</td> <td colspan="2" data-bbox="893 1171 1330 1234"></td> </tr> <tr> <td data-bbox="358 1276 889 1318">* Mugu Lagoon</td> <td data-bbox="893 1276 1117 1318">8.1</td> <td data-bbox="1120 1276 1330 1318">2.9</td> </tr> <tr> <td data-bbox="358 1318 889 1360">* Calleguas Creek, South</td> <td data-bbox="893 1318 1117 1360">5.5</td> <td data-bbox="1120 1318 1330 1360">2.4</td> </tr> <tr> <td data-bbox="358 1360 889 1402">* Calleguas Creek, North</td> <td data-bbox="893 1360 1117 1402">8.4</td> <td data-bbox="1120 1360 1330 1402">3.0</td> </tr> <tr> <td data-bbox="358 1402 889 1444">* Revlon Slough</td> <td data-bbox="893 1402 1117 1444">5.7</td> <td data-bbox="1120 1402 1330 1444">2.9</td> </tr> <tr> <td data-bbox="358 1444 889 1486">* Beardsley Channel</td> <td data-bbox="893 1444 1117 1486">5.7</td> <td data-bbox="1120 1444 1330 1486">2.9</td> </tr> <tr> <td data-bbox="358 1486 889 1528">* Arroyo Las Posas</td> <td data-bbox="893 1486 1117 1528">8.1</td> <td data-bbox="1120 1486 1330 1528">2.6</td> </tr> <tr> <td data-bbox="358 1528 889 1570">* Arroyo Simi</td> <td data-bbox="893 1528 1117 1570">4.7</td> <td data-bbox="1120 1528 1330 1570">2.4</td> </tr> <tr> <td data-bbox="358 1570 889 1612">* Tapo Canyon</td> <td data-bbox="893 1570 1117 1612">3.9</td> <td data-bbox="1120 1570 1330 1612">1.9</td> </tr> <tr> <td data-bbox="358 1612 889 1675">* Conejo Creek (Confluence with Calleguas Creek to Santa Rosa Rd.)</td> <td data-bbox="893 1612 1117 1675">9.5</td> <td data-bbox="1120 1612 1330 1675">3.5</td> </tr> <tr> <td data-bbox="358 1675 889 1738">* Conejo Creek (Santa Rosa Road to Thousand Oaks City Limit)</td> <td data-bbox="893 1675 1117 1738">8.4</td> <td data-bbox="1120 1675 1330 1738">3.4</td> </tr> <tr> <td data-bbox="358 1738 889 1780">* Conejo Creek, Hill Canyon Reach</td> <td data-bbox="893 1738 1117 1780">8.4</td> <td data-bbox="1120 1738 1330 1780">3.1</td> </tr> <tr> <td data-bbox="358 1780 889 1822">* Conejo Creek, North Fork</td> <td data-bbox="893 1780 1117 1822">3.2</td> <td data-bbox="1120 1780 1330 1822">1.7</td> </tr> <tr> <td data-bbox="358 1822 889 1864">* Arroyo Conejo (South Fork Conejo Creek)</td> <td data-bbox="893 1822 1117 1864">5.1</td> <td data-bbox="1120 1822 1330 1864">3.4</td> </tr> <tr> <td data-bbox="358 1864 889 1917">* Arroyo Santa Rosa</td> <td data-bbox="893 1864 1117 1917">5.7</td> <td data-bbox="1120 1864 1330 1917">2.4</td> </tr> </tbody> </table>		<i>NH₃-N concentration</i>		<i>(mg-N/L)</i>	<i>One-hour average</i>	<i>Thirty-day average</i>	<i>Reach</i>			-			* Mugu Lagoon	8.1	2.9	* Calleguas Creek, South	5.5	2.4	* Calleguas Creek, North	8.4	3.0	* Revlon Slough	5.7	2.9	* Beardsley Channel	5.7	2.9	* Arroyo Las Posas	8.1	2.6	* Arroyo Simi	4.7	2.4	* Tapo Canyon	3.9	1.9	* Conejo Creek (Confluence with Calleguas Creek to Santa Rosa Rd.)	9.5	3.5	* Conejo Creek (Santa Rosa Road to Thousand Oaks City Limit)	8.4	3.4	* Conejo Creek, Hill Canyon Reach	8.4	3.1	* Conejo Creek, North Fork	3.2	1.7	* Arroyo Conejo (South Fork Conejo Creek)	5.1	3.4	* Arroyo Santa Rosa	5.7	2.4
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Source Analysis	The principal sources of nitrogen into Calleguas Creek are discharges from the POTWs in the watershed and runoff from agricultural activities in the watershed.																																																																																															
Linkage Analysis	Linkage between nitrogen sources and the in-stream water quality was established through a mass continuity model based on an evaluation of recent hydrodynamic and water quality data.																																																																																															
Waste Load Allocations (for point sources)	<p>The Basin Plan Amendment clearly identifies the TMDLs and all load and wasteload allocations. The numeric target using the entire historical record, proposed The waste load allocations (WLAs) are listed as follows:</p> <table border="1"> <thead> <tr> <th rowspan="2"><i>POTWs</i></th> <th colspan="7"><i>Concentration (mg-N/L)</i></th> </tr> <tr> <th colspan="2"><i>NO₃-N + NO₂-N</i></th> <th><i>NH₃-N</i></th> <th><i>NO₃-N</i></th> <th colspan="2"><i>NO₂-N</i></th> <th></th> </tr> <tr> <th></th> <th><i>MDEL¹</i></th> <th><i>AMEL²</i></th> <th colspan="4"><i>Daily WLA</i></th> <th></th> </tr> <tr> <th></th> <th><i>(mg-N/L)</i></th> <th><i>(lb/day)</i></th> <th colspan="4"><i>(mg-N/L)</i></th> <th></th> </tr> </thead> <tbody> <tr> <td>• Hill Canyon WTP³</td> <td>5.6</td> <td>3.1</td> <td>254</td> <td>9.0</td> <td>0.9</td> <td>9.0</td> <td></td> </tr> <tr> <td>• Simi Valley WQCF⁴</td> <td>3.3</td> <td>2.4</td> <td>220</td> <td>9.0</td> <td>0.9</td> <td>9.0</td> <td></td> </tr> <tr> <td>• Moorpark WTP</td> <td></td> <td>6.4</td> <td>2.6</td> <td>59</td> <td>9.0</td> <td>0.9</td> <td></td> </tr> <tr> <td>9.0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>• Camarillo WRP⁵</td> <td>7.8</td> <td>3.5</td> <td>177</td> <td>9.0</td> <td>9.0</td> <td>0.9</td> <td></td> </tr> <tr> <td>9.0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>• Camrosa WRF⁶</td> <td>7.2</td> <td>3.0</td> <td>33</td> <td>9.0</td> <td>9.0</td> <td>0.9</td> <td></td> </tr> <tr> <td>9.0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	<i>POTWs</i>	<i>Concentration (mg-N/L)</i>							<i>NO₃-N + NO₂-N</i>		<i>NH₃-N</i>	<i>NO₃-N</i>	<i>NO₂-N</i>				<i>MDEL¹</i>	<i>AMEL²</i>	<i>Daily WLA</i>						<i>(mg-N/L)</i>	<i>(lb/day)</i>	<i>(mg-N/L)</i>					• Hill Canyon WTP ³	5.6	3.1	254	9.0	0.9	9.0		• Simi Valley WQCF ⁴	3.3	2.4	220	9.0	0.9	9.0		• Moorpark WTP		6.4	2.6	59	9.0	0.9		9.0								• Camarillo WRP ⁵	7.8	3.5	177	9.0	9.0	0.9		9.0								• Camrosa WRF ⁶	7.2	3.0	33	9.0	9.0	0.9		9.0							
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¹ MDEL: Maximum daily effluent limitation

² AMEL: Average monthly effluent limitation

³ WTP: Wastewater Treatment Plant

⁴ WQCF: Water Quality Control Facility

⁵ WRP: Water Reclamation Plant

⁶ WRF: Water Reclamation Facility

	<p>The ammonia objective is based on the average monthly effluent limit as calculated in accordance with Resolution 02-011. It is noted that for compliance purposes, Resolution 02-011 also provides maximum daily effluent limits. Calculation of the maximum daily effluent limit is provided in the Staff Report</p>														
<p>Load Allocation (for non point sources)</p>	<p>The source analysis indicates that an agricultural discharge is the major non-point source of oxidized nitrogen to Calleguas Creek and its tributaries. This source is particularly significant in Revolon Slough and other agricultural drains in the lower Calleguas watershed where there are no point sources of ammonia and oxidized nitrogen. Load allocations for non-point sources are:</p> <table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;"><i>Nonpoint Source</i></td> <td style="text-align: center;"><i>NO₃nitrate-N + NO₂nitrite-N</i></td> <td style="text-align: center;"><i>(mg/L)</i></td> </tr> <tr> <td colspan="3" style="border-top: 1px solid black; height: 5px;"></td> </tr> <tr> <td style="text-align: center;">Agriculture</td> <td style="text-align: center;">9.0</td> <td></td> </tr> <tr> <td style="text-align: center;">Other Nonpoint Source</td> <td style="text-align: center;">9.0</td> <td></td> </tr> </table>	<i>Nonpoint Source</i>	<i>NO₃nitrate-N + NO₂nitrite-N</i>	<i>(mg/L)</i>				Agriculture	9.0		Other Nonpoint Source	9.0			
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Agriculture	9.0														
Other Nonpoint Source	9.0														
<p>Implementation</p>	<ol style="list-style-type: none"> Refer to Table 7-7.2 Several of the POTWs in the Calleguas Creek watershed will require additional time to meet the oxidized-nitrogen (nitrate, nitrite, and nitrate + nitriteNO₃-N, NO₂-N, and NO₃-N + NO₂-N) waste load allocations. To allow time for completion of denitrification facilities which are integral to this TMDL, to meet the nitrogen waste load allocations, interim limits will be allowedthe amendment to the Basin Plan made by this TMDL allows for higher interim loads that translate as the interim effluent limits as follows for a period of four years from the effective date of the TMDL during which the POTWs will be required to meet the effluent limit for- NO₃-N + NO₂-N Nitrate-N+NitriteN only. Effluent Limits for the individual compounds NO₃-N and NO₂-N are not required during the interim period.: <table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="2" style="text-align: center;"><i>Interim Limits* for NO₃nitrate-N + NO₂nitrite-N</i></td> </tr> <tr> <td style="text-align: center;">POTWs</td> <td style="text-align: center;"><i>Monthly Average</i></td> </tr> <tr> <td style="text-align: center;"><i>Daily Maximum</i></td> <td></td> </tr> <tr> <td style="text-align: center;"><i>POTWs</i></td> <td style="text-align: center;"><i>(mg/L)</i></td> </tr> <tr> <td colspan="2" style="border-top: 1px solid black; height: 5px;"></td> </tr> <tr> <td style="text-align: center;"> <ul style="list-style-type: none"> • Hill Canyon WWTP • Simi Valley WQCFP • Moorpark WWTP • Camarillo WRP • Olsen Rd. WRP </td> <td style="text-align: center;"> <ul style="list-style-type: none"> 36.03 31.60 31.5 36.23 N/A </td> </tr> <tr> <td></td> <td style="text-align: center;"> <ul style="list-style-type: none"> 38.32 32.17 32.01 37.75 N/A </td> </tr> </table> <p>*The monthly average and daily maximum interim limits are based on the 95th and 99th percentiles of effluent performance data reported in the Calleguas Creek Characterization Study</p> <ol style="list-style-type: none"> The waste load allocations for ammonia will be applicable on the effective date of the TMDL. Interim limits for ammonia will be applicable for no more than 2 years starting from October 24, 2002 for 	<i>Interim Limits* for NO₃nitrate-N + NO₂nitrite-N</i>		POTWs	<i>Monthly Average</i>	<i>Daily Maximum</i>		<i>POTWs</i>	<i>(mg/L)</i>			<ul style="list-style-type: none"> • Hill Canyon WWTP • Simi Valley WQCFP • Moorpark WWTP • Camarillo WRP • Olsen Rd. WRP 	<ul style="list-style-type: none"> 36.03 31.60 31.5 36.23 N/A 		<ul style="list-style-type: none"> 38.32 32.17 32.01 37.75 N/A
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	<ul style="list-style-type: none"> 38.32 32.17 32.01 37.75 N/A 														

	<p>POTWs that are not able to achieve immediate compliance with the assigned waste load allocations. The interim limits for ammonia may be established at the discretion of the Regional Board when a POTW's NPDES permit is reissued.</p>
<p><i>Margin of Safety</i></p>	<p>An implicit margin of safety is incorporated through conservative model assumptions and statistical analysis. In addition, an explicit margin of safety is incorporated by reserving 10% of the load, calculated on a concentration basis, from allocation to POTW effluent sources.</p>
<p><i>Seasonal Variations and Critical Conditions</i></p>	<p>A low flow critical condition is identified for this TMDL based on a review of flow data for the past twenty years. This flow condition was identified because less assimilative capacity is available to dilute effluent discharge.</p>

Table 7-7.2. Implementation Schedule

IMPLEMENTATION TASKS, MILESTONES AND PROVISIONS*		COMPLETION DATE
1.	WLA for ammonia apply to POTWs.	Effective Date of TMDL
2.	Interim Limits for NO_3 -N + NO_2 -N apply to POTWs.	
3.	Formation of Nonpoint Source BMP Evaluation Committee.	
4.	Submittal of Non Point Source Monitoring Workplan by Calleguas Creek Watershed Management Planning – Water Resources/Water Quality (CCWMP) Subcommittee. This monitoring is to evaluate nutrient loadings associated with agricultural drainage and other nonpoint sources. The monitoring program will include both dry and wet weather discharges from agricultural, urban and open space sources. In addition, groundwater discharge to Calleguas Creek will also be analyzed for nutrients to determine the magnitude of these loading and the need for load allocations. A key objective of these special studies will be to determine the effectiveness of agricultural BMPs in reducing nutrient loadings. Consequently, flow and analytical data for nutrients will be required to estimate loadings from non-point sources.	1 year after Effective Date of TMDL
5.	Submittal of Watershed Monitoring Workplan by CCWMP Calleguas Creek Watershed Management Planning Subcommittee. In addition to the analytical parameters and flow data requirements, the watershed monitoring program will establish sampling locations from which representative samples can be obtained, including all listed tributaries. Monitoring results will be compared to the numeric instream targets identified in this TMDL to determine the effectiveness of the TMDL. Data on the extent and distribution of algal mats, scum and odors will be included in the watershed monitoring program.	

* The ~~The Calleguas Creek Watershed Management Plan – Water Resources/Water Quality~~ (CCWMP) Subcommittee has offered to complete tasks 4 through 9 and 11. In the event the CCWMP Subcommittee fails to timely complete these tasks, the Regional Board will consider whether to amend this Implementation Plan to assign tasks to responsible dischargers in the regulatory approach. The Regional Board also reserves its right to take any other appropriate actions including, but not limited to, exercising its authorities under Water Code section 13267.

IMPLEMENTATION TASKS, MILESTONES AND PROVISIONS*	COMPLETION DATE
<p>6. The data will be used to provide further verification of the model and refine the TMDL to address nutrient effects as appropriate. Submittal of Special Studies Workplan by CCWMP Calleguas Creek Watershed Management Planning Subcommittee. These special studies include:</p> <p>Monitoring of minor point sources for nutrients to confirm assumptions that the loadings from these sources are minor;</p> <p>Monitoring of greenhouse discharges and runoff to assess loadings from these sources;</p> <p>Monitoring of groundwater extraction and discharges in the Arroyo Santa Rosa subwatershed and other areas that may add significant nutrient loadings to Calleguas Creek; and</p> <p>Additional studies of the type and extent of algae impairment in Calleguas Creek and Mugu Lagoon.</p>	
<p>7. Complete Special Studies for minor sources, greenhouses, and groundwater loadings.</p> <p>8. Completion of ammonia Water Effect Ratio (WER) studies.</p> <p>9. Complete planning and preparation for construction of TMDL remedies to reduce non-point source nitrogen loads.</p>	3 years after Effective Date of TMDL
<p>10. Interim Limits for NO₃nitrate-N + NO₂nitrite-N expire and WLAs for nitrateNO₃-N, nitriteNO₂-N, NO₃nitrate-N + NO₂nitrite-N apply to POTWs.</p>	4 years after Effective Date of TMDL
<p>11. Complete Special Studies for algae impairments of Calleguas Creek, its tributaries and Mugu Lagoon.</p>	5 years after Effective Date of TMDL
<p>12. Regional Board consideration of revised water quality objectives for nitrogen compounds based on monitoring data, special studies, and ammonia WER, if appropriate.</p>	6 years after Effective Date of TMDL
<p>13. Final achievement of ammonia and oxidized nitrogen standards.</p>	7 years after Effective Date of TMDL