Change Sheet for the Calleguas Creek Watershed Metals and Selenium TMDLs
Revised Tentative Resolution and Basin Plan Amendment Language

Page	Location	Action	Added or Deleted Text (additions are underlined, deletions are lined over)	Reason for Change.
3	Tentative Resolution	Add	Add new Finding No. 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."	To provide definition of the WER for copper, and the guidance to conduct a site specific WER.
3	Tentative Resolution	Add	Finding 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."	To notify that a WER study for Mugu Lagoon, Lower Calleguas Creek, Revolon Slough and Beardsley Wash was conducted by Larry Walker Associates and a draft technical report was submitted to the Regional Board on September 21, 2005.
3	Tentative Resolution	Add	Finding 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	To clarify that the Regional Board had reviewed the draft report and a comment letter was sent to LWA on March 15, 2006. Regional Board staff identified several concerns and data

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			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."	limitations of the study that constrained the scientifically defensible alternatives available to the Board. The finding also notify that Larry Walker Associates had sampled an additional wet weather event on April 14, 2006 in response to Regional Board comments.
3	Tentative Resolution	Add	Finding 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."	To notify that Regional Board staff will recommend the proposed site-specific WERs to the Regional Board for consideration.
3	Tentative Resolution	Add	Finding 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."	To clarify that if site-specific WERs are approved by the Regional Board, the TMDL targets and allocations shall be implemented in accordance with the approved WERs.
3	Tentative Resolution	Replace	Re-number subsequent findings (Finding Nos. 16-25) accordingly.	To conform with previous changes.
2	BPA	Add and delete	First sentence of the Numeric Target section was revised to read "This TMDL establishes four types of numeric targets: (1) CTR	To clarify that numeric target for mercury is in total recoverable form and there is no fish tissue

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			criteria in dissolved fraction for copper, ~~mercury,~~ nickel, and zinc, and in total recoverable form for mercury and selenium; (2) Fish tissue targets for mercury ~~and selenium~~; (3) Bird egg targets for mercury and selenium; and (4) Sediment quality guidelines for copper, nickel, and zinc for 303(d) listed reaches."	target for selenium.
3 and 4	BPA	Add	Add "Targets" to title of numeric target sections for nickel, selenium, and zinc.	To be consistent with other section titles.
2,3, and 4	BPA	Add	Add "(SQuiRTs, ERL)" to table headers of the numeric tagret tables for copper, nickel, and zinc.	To clarify that the Effects Range Low (ERL) values for marine were used as sediment target based on the Screening Quick Reference Tables (SquiRTs) published by National Oceanic and Atmospheric Administration (NOAA)
2	BPA	Add and delete	Replace footnote 1 in the Copper Targets table as follow: "The water quality targets for copper in the TMDL are expressed as the copper water quality criteria from the federal California Toxics Rule (CTR). Those criteria include a numerical threshold multiplied by a water-effect ratio (WER). The 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. A WER study for Mugu Lagoon (Reach 1), lower Calleguas Creek (Reach 2), Revolon Slough (Reach 4) and Beardsley Wash (Reach 5) has been submitted to the Regional Board. If the Regional Board approves site-specific WERs for copper in these waterbodies, the TMDL targets will be modified in accordance with all legal and regulatory requirements and implemented in accordance with the approved WERs using the equations set forth in Table 7-19.1 above. ~~The WER has a numeric value of 1.0. A WER study for Mugu Lagoon, lower~~	To conform with the new findings in tentative Resolution (finding Nos 11, 12, 13, 14, 15) Please refer to reason for change for these findings above

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			~~Calleguas Creek and Revolon Slough has been submitted to the Regional Board and is currently under review by Regional Board and USEPA staff. If a WER or SSO for copper is approved, the numeric target in this TMDL shall be set in accordance with the approved WER or SSO, or the Regional Board will reconsider revision to the numeric targets based on the approved WER or SSO.~~"	
4	BPA	Add and Delete	The Source Analysis section was revised to read: "Significant sources of metals and selenium ~~were grouped into~~ include urban runoff, agricultural runoff, groundwater seepage, and POTW effluent~~, and background~~. For mercury, open space was also a significant source. Sources were also analyzed as a function of wet and dry weather. Higher loads were delivered during wet weather for all constituents, due to the association between metals and particulate matter. ~~During dry weather, major sources of copper, zinc, and nickel stemmed from urban runoff. During wet weather, major sources of copper, zinc, and nickel are runoff from agricultural lands.~~ The source analysis indicates naturally occurring mercury in soil may be a significant source, naturally occurring nickel, copper, zinc, and selenium in soil may be a contributing source and naturally occurring selenium in groundwater may be a significant source. The TMDL Implementation Plan also includes special studies to address natural sources of metals in soil."	This paragraph is revised to clearly specify sources of metals and selenium in Callguas creek watershed and clarify that the TMDL Implementation Plan also includes special studies to address natural sources of metals in soil.
5	BPA	Add and Delete	First paragraph of the Waste Load Allocation section was revised to read: "In the case of copper, nickel, and selenium, ~~W~~waste load allocations (WLAs) are developed for both wet and dry-weather. The dry-weather WLAs apply to days when flows in the stream are less than the 86th percentile flow rate for each reach. The	To clarify that annual mass loads of mercury in suspended sediment were developed according to low, medium, and high annual flow categories and to clarify that a margin of safety of 15% was included in the WLAs for copper and nickel.

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			wet-weather WLAs apply to days when flows in the stream exceed the 86th percentile flow rate for each reach. Annual mass loads of mercury in suspended sediment were developed according to low, medium, and high annual flow categories. A margin of safety of 15% was included in the WLAs for copper and nickel."	
5	BPA	Add and Delete	Second paragraph of the Waste Loan Allocation section was revised to read: "... The daily maximum and monthly average interim limits are set equal to the 99th and 95th percentile of available discharge data respectively. ~~A WER study for Mugu Lagoon, lower Calleguas Creek and Revolon Slough has been submitted to the Regional Board and is currently under review by Regional Board and USEPA staff. If the proposed WERs or SSO for copper are adopted, approved, and in effect, interim limits for copper will no longer be effective and the final WLAs will become effective. The final WLAs shall be set in accordance with the approved WER or SSO, or the Regional Board will reconsider revision to the final WLAs based on the approved WER or SSO.~~"	The WER language was removed as it was revised and added to the footnote of the WLAs and LAs table to avoid reiteration.
5, 6, 8, 10, and 11	BPA	Add	Add the words "Total Recoverable Form" to the title of subsections	To clarify that the interims and final allocations are in total recoverable form
6,7,8, 10, and 13	BPA	Replace	Replace the headers in the WLAs and LAs tables "~~CMC~~" with "Daily Maximum" and "~~CCC~~" with "Monthly Average"	To spell out the "CMC" and "CMC" acronyms for clarification.
6	BPA	Replace	Replace "~~25.9~~", "~~26.3~~", "~~29.3~~", "~~29.8~~"with "27.0", "27.4", "30.5", "31.0"	To convert final dissolved WLAs to total recoverable form to be consistent with other final allocations set forth in the BPA
6	BPA	Replace	Replace "~~0.7~~" and "~~0.7 (a)~~" with "0.11*WER-0.04" and	To include a placeholder for the proposed WER.

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			"0.12*WER-0.04"	If site-specific WERs are approved by the Regional Board, the WLAs shall be implemented in accordance with the approved WERs using these equations
6	BPA	Replace	Replace the first footnote ~~"The WER has a numeric value of 1.0. A WER study for Mugu Lagoon, lower Calleguas Creek and Revolon Slough has been submitted to the Regional Board and is currently under review by Regional Board and USEPA staff. If a WER or SSO for copper is approved, the WLAs shall be set in accordance with the approved WER or SSO, or the Regional Board will reconsider revision to the final WLAs based on the approved WER or SSO~~." with "If site-specific WERs are approved by the Regional Board, TMDL waste load allocations shall be implemented in accordance with the approved WERs using the equations set forth above. Regardless of the final WERs, total copper loading shall not exceed current loading. In addition, effluent concentrations shall not exceed the performance standards of current treatment technologies."	The footnote is replaced in response to the request to provide for incorporation of a copper WER upon its approval by the Regional Board.
6	BPA	Add	Add second footnote "** Concentration-based targets have been converted to total recoverable allocations using the CTR default translator of 0.96"	To explain how the final dissolved WLAs were converted to total recoverable form
7	BPA	Replace	Replace ~~"168.0", "856.0", "958.0"~~ with "169.0", "858.0", "960.0"	To convert final dissolved WLAs to total recoverable form to be consistent with other final allocations set forth in the BPA
7	BPA	Add	Add first and second foot note: "* Concentration-based targets have been converted to total recoverable allocations using the CTR default translator of 0.998. ** Concentration-based targets have been converted to total recoverable allocations using the CTR default translator of 0.997."	To explain how the final dissolved WLAs were converted to total recoverable form
8	BPA	Add	Add new paragraph at the beginning of subsection for Urban	The changes make the introduction consistent

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<tr><td></td><td></td><td></td><td>Runoff:
“Mass-based WLAs are established for copper, nickel, and selenium in total recoverable forms. Mass-based WLAs are developed for mercury in suspended sediment. Interim limits are included to allow time for dischargers to put in place implementation measures necessary to achieve final waste load allocations. The daily maximum and monthly average interim limits are set equal to the 99th and 95th percentile of available discharge data.</td><td>with the waste load allocation section, distinguishes between the allocation process for copper, nickel and selenium, versus mercury.</td></tr>
<tr><td>9</td><td>BPA</td><td>Replace</td><td>Replace the dry-weather WLAs for copper:
<table>
<tr><th rowspan="2">Flow Range</th><th colspan="3">Calleguas and Conejo Creek</th><th colspan="3">Revolon Slough</th></tr>
<tr><th>Low Flow</th><th>Average Flow</th><th>Elevated Flow</th><th>Low Flow</th><th>Average Flow</th><th>Elevated Flow</th></tr>
<tr><td>Copper*</td><td>~~0.030~~</td><td>~~0.040~~</td><td>~~0.100~~</td><td>~~0.019~~</td><td>~~0.030~~</td><td>~~0.101~~</td></tr>
<tr><td>Nickel</td><td>0.100</td><td>0.120</td><td>0.440</td><td>0.050</td><td>0.069</td><td>0.116</td></tr>
<tr><td>Selenium</td><td>(a)</td><td>(a)</td><td>(a)</td><td>0.004</td><td>0.003</td><td>0.004</td></tr>
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with
<table>
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<tr><th>Low Flow</th><th>Average Flow</th><th>Elevated Flow</th><th>Low Flow</th><th>Average Flow</th><th>Elevated Flow</th></tr>
<tr><td>Copper(b)</td><td>0.04*WER - 0.02</td><td>0.12*WER - 0.02</td><td>0.18*WER - 0.03</td><td>0.03*WER - 0.01</td><td>0.06*WER - 0.03</td><td>0.13*WER - 0.02</td></tr>
<tr><td>Nickel</td><td>0.100</td><td>0.120</td><td>0.440</td><td>0.050</td><td>0.069</td><td>0.116</td></tr>
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</table></td><td>To include a placeholder for the proposed WER. If site-specific WERs are approved by the Regional Board, the WLAs shall be implemented in accordance with the approved WERs using these equations</td></tr>
<tr><td>9</td><td>BPA</td><td>Replace</td><td>Replace the footnote “~~The WER has a numeric value of 1.0. A WER study for Mugu Lagoon, lower Calleguas Creek and Revolon Slough has been submitted to the Regional Board and is currently under review by Regional Board and USEPA staff. If a WER or SSO for copper is approved, the WLAs shall be set in accordance with the approved WER or SSO, or the Regional Board will reconsider revision to the final WLAs based on the approved WER or SSO.~~” with “If site-specific WERs are</td><td>The footnote is replaced in response to the request to provide for incorporation of a copper WER upon its approval by the Regional Board.</td></tr>
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<tr><td>9</td><td>Replace</td><td>BPA</td><td>Replace wet weather WLAs for copper:
<table>
<tr><th>Constituent</th><th>Calleguas Creek</th><th>Revolon Slough</th></tr>
<tr><td>Copper*</td><td>~~0.00054*Q^2+0.0168*Q-0.106~~</td><td>~~0.0002*Q^2+0.0005*Q~~</td></tr>
<tr><td>Nickel</td><td>0.014*Q^2+0.82*Q</td><td>0.027*Q^2+0.47*Q</td></tr>
<tr><td>Selenium</td><td>(a)</td><td>0.027*Q^2+0.47*Q</td></tr>
</table>
with:
<table>
<tr><th>Constituent</th><th>Calleguas Creek</th><th>Revolon Slough</th></tr>
<tr><td>Copper*</td><td>(0.00054*Q^2*0.032*Q - 0.17)*WER - 0.06</td><td>(0.0002*Q2+0.0005*Q)*WER</td></tr>
<tr><td>Nickel**</td><td>0.014*Q^2+0.82*Q</td><td>0.027*Q^2+0.47*Q</td></tr>
<tr><td>Selenium**</td><td>(a)</td><td>0.027*Q^2+0.47*Q</td></tr>
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<tr><td>9</td><td>BPA</td><td>Add</td><td>Add second footnote "** Current loads do not exceed loading capacity during wet weather. Sum of all loads cannot exceed loads presented in the table."</td><td>To clarify that the current loads for nickel and selenium do not exceed loading capacity during wet weather and sum of all loads cannot exceed loads presented in the table</td></tr>
<tr><td>10</td><td>BPA</td><td>Replace</td><td>Replace the WLAs for copper and nickel:</td><td>To include a placeholder for the proposed WER as mentioned above and to convert final</td></tr>
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<tr><th rowspan="2">Reach</th><th colspan="2">Copper*</th><th colspan="2">Nickel</th><th colspan="2">Selenium</th></tr>
<tr><th>Final Dry CCC (ug/L)</th><th>Final Wet CMC (ug/L)</th><th>Final Dry CCC (ug/L)</th><th>Final Wet CMC (ug/L)</th><th>Final Dry CCC (ug/L)</th><th>Final Wet CMC (ug/L)</th></tr>
<tr><td>1</td><td>3.1</td><td>4.8</td><td>8.2</td><td>74</td><td>(b)</td><td>(b)</td></tr>
<tr><td>2</td><td>3.1</td><td>4.8</td><td>8.2</td><td>74</td><td>(b)</td><td>(b)</td></tr>
<tr><td>3</td><td>25.9</td><td>26.3</td><td>149</td><td>856</td><td>(b)</td><td>(b)</td></tr>
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<tr><td>5</td><td>3.1</td><td>4.8</td><td>8.2</td><td>74</td><td>5</td><td>290</td></tr>
<tr><td>6</td><td>(a)</td><td>29.8</td><td>(a)</td><td>958</td><td>(b)</td><td>(b)</td></tr>
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<table>
<tr><th rowspan="2">Reach</th><th colspan="2">Copper*</th><th colspan="2">Nickel</th><th colspan="2">Selenium</th></tr>
<tr><th>Final Dry Allocation (ug/L)**</th><th>Final Wet Allocation (ug/L)**</th><th>Final Dry Allocation (ug/L)***</th><th>Final Wet Allocation (ug/L)***</th><th>Final Dry Allocation (ug/L)</th><th>Final Wet Allocation (ug/L)</th></tr>
<tr><td>1</td><td>3.7*WER</td><td>5.8*WER</td><td>8.2</td><td>74</td><td>(b)</td><td>(b)</td></tr>
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</table>
</td><td>dissolved WLAs to total recoverable form to be consistent with other final allocations set forth in the BPA.</td></tr>
<tr><td>10-11</td><td>BPA</td><td>Replace</td><td>Replace the footnote “~~The WER has a numeric value of 1.0. A~~</td><td>The footnote is replaced in response to the</td></tr>
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			~~WER study for Mugu Lagoon, lower Calleguas Creek and Revolon Slough has been submitted to the Regional Board and is currently under review by Regional Board and USEPA staff. If a WER or SSO for copper is approved, the WLAs shall be set in accordance with the approved WER or SSO, or the Regional Board will reconsider revision to the final WLAs based on the approved WER or SSO."~~ with "If site-specific WERs are approved by the Regional Board, TMDL waste load allocations shall be implemented in accordance with the approved WERs using the equations set forth above. Regardless of the final WERs, total copper loading shall not exceed current loading. In addition, effluent concentrations shall not exceed the performance standards of current treatment technologies"	request to provide for incorporation of a copper WER upon its approval by the Regional Board.
11	BPA	Add	Add second and third foot notes: "** Concentration-based targets have been converted to total recoverable allocations using the CTR default translator of 0.96 for freshwater reaches and 0.83 for saltwater reaches. *** Concentration-based targets have been converted to total recoverable allocations using the CTR default translator of 0.997 for freshwater reaches and 0.99 for saltwater reaches."	To explain how the final dissolved WLAs were converted to total recoverable form
11	BPA	Revise	Revise the first paragraph of the Load Allocation section to read: "Mass-based load allocations (LAs) for agriculture, ~~background,~~ and open space are developed for copper, nickel, and selenium in total recoverable forms. Open space represents background loads from ambient sources (i.e. natural soil concentrations, atmospheric deposition, and natural groundwater seepage) discharged from undeveloped open space, but not ambient sources that are discharged from developed land, such as agricultural and urban areas. LAs are developed for both wet and dry-weather. The dry-weather LAs apply to days when flows	To clarify that open space represents background loads from ambient sources and annual mass loads of mercury in suspended sediment were developed according to low, medium, and high annual flow categories.

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			in the stream are less than 86th percentile flow rate for each reach. The wet-weather LAs apply to days when flows in the stream exceed 86th percentile flow rate for each reach. Annual mass loads of mercury in suspended sediment were developed according to low, medium, and high annual flow categories. A margin of safety of 15% was included in the LAs for copper and nickel."	
11	BPA	Add	Add the following sentences to the opening paragraph of the Interims and Final Load Allocations for Total Recoverable Copper, Nickel, and Selenium subsection: "Interim limits are included to allow time for dischargers to put in place implementation measures necessary to achieve final load allocations. The daily maximum and monthly average interim limits are set equal to the 99th and 95th percentile of available discharge data."	To make the load allocations section consistent with the waste load allocations section
12 and 13	BPA	Replace	Replace the first footnote of the Dry-Weather LAs and Wet-Weather LAs tables: "~~The WER has a numeric value of 1.0. A WER study for Mugu Lagoon, lower Calleguas Creek and Revolon Slough has been submitted to the Regional Board and is currently under review by Regional Board and USEPA staff. If a WER or SSO for copper is approved, the LAs shall be set in accordance with the approved WER or SSO, or the Regional Board will reconsider revision to the final LAs based on the approved WER or SSO"~~ with "If site-specific WERs are approved by the Regional Board, TMDL load allocations shall be implemented in accordance with the approved WERs using the equations set forth above."	The footnote is replaced in response to the request to provide for incorporation of a copper WER upon its approval by the Regional Board.
12	BPA	Replace	Replace the dry-weather LAs for copper:	To include a placeholder for the proposed WER.

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<tr><td rowspan="2">Copper*</td><td>Agriculture</td><td>0.040</td><td>0.040</td><td>0.170</td><td>0.043</td><td>0.070</td><td>0.280</td></tr>
<tr><td>Open Space</td><td>0.150</td><td>0.080</td><td>0.130</td><td>0.050</td><td>0.120</td><td>0.110</td></tr>
<tr><td rowspan="2">Nickel</td><td>Agriculture</td><td>0.420</td><td>0.260</td><td>0.970</td><td>0.390</td><td>0.690</td><td>1.600</td></tr>
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<tr><td>Copper*</td><td>Agriculture</td><td>0.00017*Q^2+0.0053*Q-0.034</td><td>0.00123*Q^2+0.0034*Q</td></tr>
<tr><td></td><td>Open Space</td><td>0.0000537*Q^2+0.00321*Q</td><td>0.0000432*Q^2+0.000765*Q</td></tr>
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13	BPA	Add	Add second footnote to Wet-Weather LAs Table: "** Current loads do not exceed loading capacity during wet weather. Sum of all loads cannot exceed loads presented in the table"	To clarify that current loads for nickel and selenium do not exceed loading capacity during wet weather. Sum of all loads cannot exceed loads presented in the table
15-16	BPA	Add	Add "Optional" to "Special Study #1", "Special Study #2", and "Special Study #3"	To clarify that special studies 1, 2, and 3 are optional in response to comment that the Regional Board should make clear that these proposed special studies are optional.
16-17	BPA	Revise	Revise the opening paragraph of the Monitoring Plan section to read: "The Calleguas Creek Watershed TMDL Monitoring Plan (CCWTMP) is designed to monitor and evaluate the implementation of this TMDL and refine the understanding of ~~current~~ metal and selenium loads. CCWTMP is intended to parallel efforts of the Calleguas Creek Watershed Nutrients TMDL, Toxicity TMDL, and OC Pesticide, PCBs, and Sediment TMDL monitoring programs. The proposed CCWTMP shall be made available for public review before approval by the Executive Officer. ;~~as well as the coordinated monitoring program which is currently being developed by Calleguas Creek Watershed stakeholders to minimize duplicative sampling efforts between required monitoring programs in the watershed including NPDES, Conditional Waiver for Discharges from Irrigated Lands (Conditional Waiver) Program and TMDL monitoring~~."	To clarify the proposed CCWTMP shall be made available for public review before approval by the Executive Officer.
17	BPA	Revised	Revise the 4th paragraph to read: "Monitoring will begin within one year of the effective date of the TMDL. In-stream water column samples will be collected monthly ~~quarterly~~ for analysis of general water quality constituents (GWQC), copper, mercury, nickel, selenium, and zinc for the first year. After the first year, the Executive Officer	To change the sampling frequency from quarterly to monthly in response to the comment that the water column samples should be collected monthly in all areas impaired by metals.

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			will review the monitoring report and revise the monitoring frequency as appropriate…"	
18	BPA	Revised	Revise the first paragraph of the Implementation Plan section to read: "… In addition, the implementation schedule was developed with the assumption that a WER for copper and a SSO for nickel ~~will be adopted concurrently with the TMDL and an SSO for nickel~~ will proceed following the TMDL. Should adoption and approvals of the WER and SSO not proceed, additional implementation actions could be required. The implementation plan includes discussion of implementation actions to address these conditions.	To clarify that the implementation schedule was developed with the assumption that a WER for copper and a SSO for nickel will proceed following the TMDL.
21	BPA	Replace	Replace the completion date of "~~6 months~~" for Tasks 3a and 3b with "3 months"	To reduce the completion date for Tasks 3a and 3b from 6 months to 3 months in response to the comment that monitoring should begin within 6 months of the effective date of the TMDL.
22	BPA	Add	Add the word "Optional" to Tasks 13a, 13b, 14a, 14b, 15a, and 15b.	To conform with previous changes.
22	BPA	Replace	Replace the completion date for Task 13b "~~Within 4 years after the effective date of the amendment~~" with "Within 3 years of approval of workplan by Executive Officer"	To clarify that the completion date for Task 13b will be within 3 years of approval of workplan by the Executive Officer in response to the comment that the time frames for completion of studies should be linked to approval of the workplans so that the studies are not compromised by shortened timeframes caused by delays in approval of the workplans.
22	BPA	Replace	Replace the completion date for Task 14b "~~Within 2 years after the effective date of the amendment~~" with "Within 1 years of approval of workplan by Executive Officer"	See above explanation.
22	BPA	Replace	Replace the completion date for Task 15b "~~Within 3 years after~~	See above explanation.

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			~~the effective date of the amendment~~" with "Within 2 years of approval of workplan by Executive Officer"	
23	BPA	Add	Add new Task 22 : "Prepare water effect ratios for copper based on study performed by stakeholders for Regional Board consideration Responsible Party: Regional Board Completion Date: Within 4 months of Regional Board adoption of the amendment."	To clarify that the Regional Board staff will prepare water effect ratios for copper based on study performed by stakeholders for Regional Board consideration within 4 months of Regional Board adoption of the amendment in response to the comment that Regional Board should move forward as quickly as possible with the adoption of the Copper WER.
23	BPA	Add	Re-number subsequent task (task No. 23) accordingly.	To conform with previous changes.
23	BPA	Add	Add new Task 24: "POTWs will be required to reduce loadings by 25%, 50%, and 100% of the difference between the current loading and the WLAs at 5, 8 , and 10 years after the effective date, respectively. Responsible Party: POTWs Completion Date: 5, 8, and 10 years after the effective date of the amendment."	To clarify that POTWs will be required to reduce loadings by 25%, 50%, at 5, 8 , and 10 years after the effective date. The changes are made in response to the comment that POTWs should have a required 25%, 50%, and 100% reduction in the current loading minus the waste load allocation at 5, 8, and 10 years after the effective date.
23	BPA	Add	Re-number subsequent tasks (task Nos. 24-28) accordingly.	To conform with previous changes.
			Revise Task 26 to read: "Re-evaluation of Agricultural and Urban load and waste load allocations for copper, mercury, nickel, and selenium based on the evaluation of BMP effectiveness. ~~Develop milestones for reductions resulting from BMP implementation.~~ Agricultural and urban dischargers will have a required 25%, 50%, and 100% reduction in the difference between the current loadings and the load allocations at 5, 10, and 15 years after the effective date, respectively."	To clarify that agricultural and urban dischargers will be required to reduce loadings by 25%, 50%, at 5, 10 , and 15 years after the effective date. The changes are made in response to the comment that Agricultural Dischargers and Permitted Stormwater Dischargers should have a required 25%, 50% and 100% reduction in the current loading minus the waste load allocation at 5, 10, and 15 years.
23	BPA	Add	Add "and water quality standards" to Tasks 28 and 29 after WLAs and LAs.	To clarify that water quality standards for copper, mercury, nickel, and selenium shall also

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				be meet as final WLAs and LAs are achieved by POTWs, Agricultural Dischargers, and PSD. The changes are made in response to the comment that final compliance milestones in the Implementation Plan should ensure that numeric water quality standards are met and the Waste Load Allocations should not be used as the sole compliance endpoint.
	BPA	Correct	Correct minor typographical errors throughout the BPA	For clarification.