

**Response to Comments on 2016 Triennial Report
October 31, 2016**

Commenter	Comment Number	Location/ Page	Comment	Response
Regional Board	1	General	Uncontrollable Source Study. Not part of the submitted report, nor was there any acknowledgement that the report lacked the referenced study. Submitted late. This report is still under review.	Comment noted.
Regional Board	2	General	Reference citations are missing.	References section added.
Regional Board	3	General	Need future Plans to address ongoing exceedances of Water Quality Objectives, WLAs, and LAs.	The purpose of the Triennial Report is to conduct a compliance assessment of the status of compliance with the TMDL. As stated in the CBRP: "Regional Board will review all data and information generated pursuant to the TMDL requirements on an ongoing basis (at least every three years). Based on results from the monitoring programs, special studies, modeling analysis, SWQSTF and/or special studies, changes to the TMDL, including revisions to the numeric targets, may be warranted." This language is a paraphrase of Task 6 in the TMDL. Plans to address ongoing exceedances is a part of each County's CBRP.
Regional Board	4	General	Need to evaluate compliance with both the running 5-sample/30 day geomeans and the single sample objective to not exceed 235 organisms/100 mL for <i>E. coli</i> . We need to know the exceedance frequency for both the geomean and single sample numeric targets. Need to justify the use of a numeric average instead of geomeans. Single sample results should be used as a trigger for more frequent monitoring when the <i>E. coli</i> is over 235 organisms/100 mL, so that sufficient data is collected to determine compliance with the geomean objectives and targets.	Tables 2-15 and 2-16 have been updated to show the exceedance frequency for both the geomean and single sample objectives. With regards to "more frequent monitoring when <i>E. coli</i> is over 235 organisms/mL," the Regional Bacteria Monitoring Program does not include this element as data collection efforts focus on collection sufficient data to calculate the geomean. Per the Basin Plan amendment, assessment of compliance with this value is only applicable where insufficient data to calculate a geomean.
Regional Board	5	Section 1.3, Page 1-3, end of first paragraph	End of First Paragraph cites the Residential Property Scale Study and Draft Uncontrollable Source Study (USS). States both are included as Attachment A. Not included. No Attachment A. We now have the USS and are reviewing the report. We apparently did not receive the Residential Property Scale Study.	Both the Residential Property Scale Study and the Uncontrollable Sources Study are included as Appendix B in the revised report.
Regional Board	6	Section 1.3, Page 1-3, Second paragraph	Claims all controllable sources are controlled, and they do not plan any synoptic studies. Instead, they will do focused studies on an as needed basis. What are the future plans to address ongoing non-compliance with the TMDL targets?	The text does not claim that all controllable sources are controlled. Rather, known sources of dry weather flow have been characterized and MS4 drainage areas have been evaluated per the CBRP. Focused studies will be conducted in the future to assess whether source elimination efforts are successful. Plans to address non-compliance on an on-going basis is being handled through implementation of the requirements of the CBRP.
Regional Board	7	Table 1-1, Page 1-4	Riverside County Monroe Basin retrofit? Is this still happening? I think Jason said they didn't get good percolation results in Monroe Basin, so this was not moving forward. Please clarify the status of this project.	A geotechnical study of the project indicated that the Monroe Basin project is not suitable for infiltration. Potential alternatives for the project are being investigated.
Regional Board	8	Page 1-4 and 1-5	Ag BASMP, Pages 1-4 and 1-5, the Ag BASMP has not been approved by us.	Original text indicated that "when approved...", not that it had been approved; however, to avoid misunderstanding, text revised to indicate approval is still pending.
Regional Board	9	Table 2-8, Page 2-8	Approximate baseflow is consistent for all sampling sites except Prado Park Lake Outflow which is listed (in cfs) as 4, 1.74, NA(?), 3.4 and 4.7; in general, how is baseflow calculated, what is changing the baseflow at this location and how was baseflow 'Not Available' for those sampling events?	For all sites except Prado Park Lake, baseflows reflect the annual median streamflows based on the following flows: <ul style="list-style-type: none"> • Chino Creek at Central = Chino-Schaeffer USGS + CCWRF discharge • Mill-Cucamonga Creek = Mira Loma USGS • SAR@MWD = MWD USGS • SAR@Pedley = MWD USGS + Riverside WQCC discharge Baseflow at Prado Park Lake has been revised to be 4 cfs throughout Table 2-8. Sometimes conditions do not allow for flow measurements (e.g., safety concerns from high flows).
Regional Board	10	Table 2-8, Page 2-8 and 2-9	During the 3 'wet seasons', 5 sites were sampled. During the 2014 'dry season' wet weather sampling, only 2 sites were sampled. During the 2015 'dry season' wet weather sampling, only 4 sites were sampled. Why were the number of 'dry season' wet weather sites different from 'wet season' wet weather sites and different from each other?	During wet seasons, all five sites are monitored during a wet weather event. Wet weather sampling is not targeted during any dry season sampling. However, when summer storms occur, it is noted in the corresponding dry season report. If rain was measurable in the 72-hour period preceding a dry season sample at a nearby rain gage, the sample is potentially influenced by wet weather and included in Table 2-8. As storms vary regionally, not all sites have measurable rainfall in the 72-hour period during each storm, which is why different sites are noted as "wet weather" during each dry season.
Regional Board	11	Table 2-8, Page 2-8	Why was the sampling of Mill-Cucamonga Creek missing the width measurement on 9/17/2005?	9/17/2005 should be 9/17/2015. The field staff under contract to the San Bernardino County Flood Control District did not indicate why the width measurement was not recorded at the Mill-Cucamonga Creek site.
Regional Board	12	Table 2-8, Page 2-8	It appears that the flow at Santa Ana River at Pedley can be measured to at least 650 cfs, yet was too high to measure throughout the 12/2-6/2014 storm event. Can additional information be provided and are actions being taken to provide measurement capability for future storms? The same question for the same storm event at Prado Park Lake Outflow.	The flow values for 12/2/2014 through 12/6/2014 are listed in the table incorrectly. Table 2-8 has been revised to reflect the correct values for that storm event. Field staff collect flow measurements whenever possible, however, safety concerns may impact the feasibility of measurements especially during storm events. As flow conditions can vary widely during storms (e.g., due to storm intensity, duration, etc.), it is hard to characterize precisely when measurements are feasible. Instead, the focus is on obtaining the required sample at the appropriate time.
Regional Board	13	Page 2-10	This is the first mention of box & whisker plots that are used throughout this report. It is here that the plot description (what whiskers, box limits, lines, dots, etc., represent) should be placed and not at Figure 3-6 or on page 60 of 120.	Text added to describe box plot.

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Regional Board	14	Tables 2-10 through 2-14	Tables 2-10 thru 2-14 include (> value) (i.e., greater than) as the reportable number. Need for additional dilutions. Additional sampling? Mill-Cucamonga creek had 260,000 <i>E. coli</i> on 8/27/13. Next sample on 9/3/13 was reported as > 1,160. Why was the 9/3/13 sample not rerun at the proper dilution to yield an actual result rather than a ">" result.	The ">" qualifier does not indicate that additional dilutions are necessary. The qualifier is required by the methodology and indicates the presence of background (atypical) bacteria growing on the same plate as the target (typical) bacteria (<i>E. coli</i> or fecal coliform in this case). When there are more than 200 colonies on the plate (atypical and typical), the qualifier is added to the results. However, the reported number is the concentration of typical colonies (<i>E. coli</i> or fecal coliform) and is less than 200 colonies on the plate. When there are more than 200 colonies of typical bacteria on the plate, additional dilutions are run until there are less than 200 colonies of typical bacteria. Text was added to Section 2 to clarify the interpretation of the data. Source: Email communication with Joe Guzman and Tania Chiem from OCPHL on August 4, 2016
Regional Board	15	Figures 2-2 through 2-15, Tables 2-9 through 2-14	How meaningful are geomeans when significant percentages of <i>E. coli</i> and fecal coliform analysis results are reported as '>' (e.g., for 2014 dry season, the samples for fecal coliform at Chino Creek and Mill-Cucamonga Creek had 95% of sampling events reported as '>')?	As the ">" qualifier indicates the presence of background bacteria and not a need for further dilutions, the reported concentrations are appropriate estimations and can be used in geomean calculations meaningfully. See also previous comment response.
Regional Board	16	Figure 2-2	Figure 2-2 caption incorrectly identifies dry seasons as 2010, 2011 and 2012.	Caption revised.
Regional Board	17	Figure 2-6	Figure 2-6. While it is hard to clearly identify, it appears that there are 4 (or more) geomean data points in 2015 without single sample results being displayed.	Figure has been revised to correctly reflect all single sample results.
Regional Board	18	Table 2-15	Dry Weather only. Prado Park Lake outlet has 0% exceedance for 2015. Is this sufficient to delist? I think it would be prudent to continue sampling for at least another year so we can clearly show this monitoring location meets the TMDL.	Since 2015 dry weather season was the first season where Prado Park Lake had a 0% exceedance frequency, it is likely not enough data to support delisting. We agree that it would be prudent to continue sampling for some period of time to demonstrate that Prado Park Lake will continue to have 0% exceedances. If it becomes appropriate, a recommendation to de-list can be brought to the MSAR Task Force for consideration.
Regional Board	19	Table 2-15	Chino and Mill-Cucamonga Creeks had 88% and 93% exceedance frequency, respectively, in 2015. What are the plans to address these ongoing exceedances?	San Bernardino County Flood Control District has planned/ongoing studies to investigate exceedances at these sites. As the purpose of the Triennial Report is to report findings identified from work completed to date, future plans or next steps would be typically addressed through other venues, e.g., CBRP report summary (part of MS4 Annual Report) and/or through reports made during MSAR Task Force meetings.
Regional Board	20	Table 2-15	SAR at MWD was 14% exceedance in 2015 and at Pedley Ave, was 57% exceedance. What are the plans to address these ongoing exceedances?	See response to previous comment.
Regional Board	21	Figures 2-3 through 2-5	Figures 2-3 thru 2-5. Show line for WLA/LAs.	Figures have been revised to show WLA.
Regional Board	22	Figures 2-17 through 2-20	Figures 2-17 thru 2-20. Significant downward trend at Prado Park Lake outlet and Chino Creek. Remaining stations show no statistically significant trend.	Table 2-17 and the paragraph on Page 2-28 says that there is a statistically significant downward trend at Prado Park Lake and Chino Creek during the wet season. Although levels during the dry season have generally decreased since 2007, the Mann-Kendall analysis does not indicate the trend to be statistically significant during the dry season.
Regional Board	23	Section 2.4.1, Page 2-28 (Page 40)	Agricultural Sources. This is old news from before this triennial review period. Does not belong in this latest report, unless something new has been done.	We recommend keeping this section for the following reasons: (a) The final Bacterial Indicator Agricultural Source Management Plan was submitted in 2014 and additional monitoring in the Arlington Greenbelt Area was conducted in 2015 - both events occurred since 2013 Triennial Report; (b) the additional monitoring is discussed in more detail in Section 3 and this section provides supporting information; and (c) during preparation of previous Triennial Reports Board staff requested that we include this section since the Triennial Report is an original TMDL reporting requirement and therefore is to include all sources.
Regional Board	24	Page 3-1 (Page 43), 4th bullet	Arlington Greenbelt Sampling. Says results are summarized in Section 3.4. There is no Section 3.4. Should be Section 3.2.4?	Revised text to reflect Section 3.2.4.
Regional Board	25	Section 3.1.2, Page 3-2 (Page 44)	Clearly identify the version and date of the QAPP used for data collection and analysis (both in the report and on the website) and if citing a website, make sure that that version of the QAPP stays available on the website.	Revised to identify version and date (MSAR QAPP July 2013 Version 4) and updated link to website.
Regional Board	26	Section 3.1.3, Page 3-3 (Page 45)	Section 3.1.3 states that Figure 3-3 illustrates... with red diamonds. Is this in fact Figure 3-2?	Yes, revised text to reflect Figure 3-2.
Regional Board	27	Page 3-4 (Page 46), First paragraph	The paragraph starting "A significant reduction..." is a duplicate of the paragraph from the previous page.	Duplicate paragraph is removed.
Regional Board	28	Pages 3-4 and 3-5 (Page 46-47)	With regards to the Human Bacteroides analyses descriptions, the details of this section are too sparse. Terms like "several MS4 permittees", "a subset of Tier 2 DWF samples", and Figure 3-3 identifying percentages by not # of samples, as examples, prevent the reader from analyzing the conclusions made in the report.	Text has been added to be more specific.
Regional Board	29	Figure 3-3, Page 3-5	Figure 3-3 is presented as evidence that mitigation activities have been successful at eliminating controllable sources... in some subareas, which may be true. But the sampling sites and sampling timing for the 3 studies are not compared and contrasted to provide the reader with evidence of their comparability.	Sentence has been revised.
Regional Board	30	Figure 3-3, Page 3-5	Figure 3-3 should include # of samples analyzed for each study in each county.	Figure 3-3 has been updated to include the number of samples.
Regional Board	31	Page 3-5 (Page 47)	Page 47 of 120 directs readers to the Tier 2 Source Evaluation Report if they want to see detailed results and interpretations. The purpose of a triennial report is to provide a single source summary of work performed during the 3 years, rather than simply refer the reader to another report. Therefore, unless the 6 bulleted examples on pages 47 and 48 represent the only significant findings from the Tier 2 Source Evaluation Report, more information should be provided.	Text has been added to include other findings from the Tier 2 Source Evaluation Report.
Regional Board	32	Page 3-5 (Page 47)	Page 47 of 120 states "Below are several examples of sources that were eliminated or have planned control measures in the 2013-2015 period as a result of Tier 2 source evaluations.". It is unclear how MS4 permittees can, in 2016, be discussing control measures that are planned for 2013-2015.	Sentence has been revised.

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Regional Board	33	Section 3.2, Pages 3-6 to 3-10 (Pages 48-52)	Simply as a comment for future consideration, it seems that the Residential Property Scale (RPS) study, described on pages 48-52, wasted the opportunity presented by putting teams in the field, by not looking for DWF beyond the gutter immediately in front of the identified property, demonstrated by the 80 samples from over 300 properties.	The experimental design of the RPS study was to collect water quality samples from a randomly selected set of properties. Findings from street inlets and other upstream sections of MS4 networks were made as a result of Tier 2 source evaluations in the preceding dry season (2013) and were the impetus for creating a randomized lot level study design in 2014. The RPS was in no way attempting to understand the transport of bacteria from properties through gutters, and within MS4 facilities. Collection of a single snapshot sample downstream at the inlet would not have addressed the questions of bacteria fate and transport between residential sites and receiving waters.
Regional Board	34	Table 3-2, Page 3-9	Table 3-2 presents the summary statistics for the RPS study. Is the actual data presented somewhere? Report says at the beginning that the RPS is part of Attachment A, which was not included in the report sent to us.	The Residential Property Study is included as part of Attachment A in the revised report.
Regional Board	35	Page 3-9 (Page 51)	Page 51 identifies that backyards are drained via subsurface perforated pipes to curb openings and that front yards drain by sheet flow. Reader simply points out that depending on front yard layout, surface drains and subsurface piping can route front yard 'overwatering' to the same curb openings that convey backyard runoff.	Comment noted.
Regional Board	36	Page 3-10 (Page 52)	Page 52, middle paragraph states "would be best represented by the arithmetic means shown in Table 3-8 above." Is this actually referencing Table 3-2 or Figure 3-6? Why an arithmetic mean instead of a geometric mean?	Yes, reference revised to reflect Table 3-2. For conservation of mass purposes, an arithmetic mean should be used. Geometric means would mask skews from high or low flow-weighted concentrations.
Regional Board	37	Page 3-10 (Page 52)	Page 52, the section numbering scheme would suggest that Section 3.2.3, Uncontrollable Bacteria Source Studies is a subsection of 3.2, RSP. It would appear that the section identification past 3.2.2 is wrong.	Section numbering has been revised.
Regional Board	38	Page 3-12 (Page 54)	More detail needed on Menu Leddy personal communication.	Text has been revised.
Regional Board	39	Page 3-12 (Page 54)	The inference identified at the bottom of page 54 would need more data than is presented here.	We agree with this comment. Sentence has been revised and text has been added to clarify that additional studies are necessary to support the hypothesis.
Regional Board	40	Page 3-14 (Page 56)	Page 56 of 120, the statement "during storm events it is used as a flood control basin to T2-ANZA 14 capture large volumes of storm water..." is not clear.	Removed "T2-ANZA14" from sentence.
Regional Board	41	Section 3.2.4.3, Page 3-16, Page 58/120	Section 3.2.4.3, Page 58 of 120, Page 3-16. Second Paragraph is missing reference to photos that show DWF at XX (left) and XX (right).	Captions have been updated.
Regional Board	42	Table 3-4, Page 3-16 (Page 58)	There is no explanation for the presence/absence of asterisks at the start of the Notes section for each sample.	Asterisks were used to separate statements. They have been replaced by bullets.
Regional Board	43	Figure 3-10, Page 3-17	Figure 3-10 Photo of DWF at XXX (left) and YYY (right)	Captions have been updated.
Regional Board	44	Page 3-18 (Page 60)	Page 60, the statement "The distribution of data between MonroeAg02 and T2-ANZA14 is similar which is consistent with flows from MonroeAg02 contributing to E. coli found at T2-ANZA14" is unclear and needs to be expanded.	Upon further evaluation, statement is not an appropriate interpretation of results and has been removed.
Regional Board	45	Table 3-6, Page 3-18	Table 3-6, identifies the samples from 8/17/2015 with a footnote that states "Preliminary results". It is unclear why it should make a difference and in any case at the time of the report submittal, the results are no longer preliminary.	Results were no longer preliminary at the time of report submittal. Table has been revised to reflect that.
Regional Board	46	Figure 3-11, Page 3-19	Figure 3-11, it is not clear what the red hour-glass symbol at the top of the whisker on MonroeAg01 represents.	The symbol is a typo. Figure has been updated to remove symbol.
Regional Board	47	Page 4-2 (Page 63)	Page 63 of 120 (bottom), please better identify those Tier 1 sites that were not sampled during 2013-14 Tier 2 source evaluations, and when it states that E. coli concentrations were kept the same, is that in Table 4-1 and/or Figure 4-1 and/or others? Is it appropriate to use the 2013 data (keeping it the same)? This paragraph also says that "The results are presented below in Section 3.2.1. Shouldn't this reference Table 4-1? Or is it provided in Section 3.2.1 "above", not below?	Only the Tier 1 sites listed in Table 4-1 were sampled during the 2013-2014 Tier 2 source evaluations. E. coli concentrations that were kept the same were Tier 1 sites that were not sampled during Tier 2 evaluations and are now cited as Figures 3-6, 3-9, 3-11, 3-13, 3-17, 3-19, 3-21, and 3-23 from the 2013 Triennial Report. Sentence regarding "The results are presented below in Section 3.2.1" has been removed as it is redundant from the previous sentence.
Regional Board	48	Table 4-1, Page 4-3 (Page 64)	Table 4-1, Page 64 of 120, Page 4-3, Only 1 out of 12 sites samples met the geometric WLA. Airport drain had the highest at 6007 E. coli. 7 out of 12 sites exceed 1000 E. coli. Not all of these sites are hydrologically connected to MSAR. It would help to add a note identifying which sites ARE hydrologically connected.	All of the sites listed in Table 4-1 are hydrologically connected and have been noted in Table 4-1. Hydrologically disconnected sections are not sampled.
Regional Board	49	Page 4-4 (Page 65)	Page 65, the statements that "many MS4 drainage areas that do not typically cause or contribute any DWF" and "Field observations support" are good enough for prioritization, but are not conclusive enough for making some determinations, particularly that upstream areas are "eliminating all runoff from reaching downstream impaired waters during dry weather" (emphasis added).	Text has been revised.
Regional Board	50	Figure 4-2, Page 4-5	Figure 4-2 1st minor but indicative of report editing, caption "...determined to be Hydrologically Disconnected during Dry Weather." 2nd, the process for declaring an area "Hydrologically Disconnected during Dry Weather" is extremely significant if the intent is to declare that no further action with regards to dry weather discharges is needed for these areas. The evidence presented here is insufficient for RB staff to agree. A start down this road would be for each of the cross-hatched areas indicate name of drainage area, MS4s that drain to the drainage area, the land use proportions for the drainage acreage, locations and retention capacity of the basin creating the condition of hydrologic disconnectivity (assuming it's one or more basins that create the disconnectivity), and then issues such as the maximum daily discharge of de minimus flows due to water district activity, daily flow due to future build-out scenarios, etc.	1. Revised caption. 2. Current understanding based on surveillance suggests hydrologic disconnectivity for the areas listed in Table 4-2 and Figure 4-2. The intent is not to declare no further action as disconnectivity is not assumed to be permanent. It will be important to continue surveillance in these areas to sufficiently verify conditions of hydrologic disconnectivity.

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Regional Board	51	Figure 4-3, Page 4-6	Figure 4-3, sampling periods for 2013/14, 2014/15 are missing and perhaps, 2015/16. Note it is unclear as to date range that constitutes 'dry weather MS4 outfall sampling' and whether the 2015/16 period would be finished when the report was submitted.	Figure 4-3 has been updated to include more recent data.
Regional Board	52	Table 4-2, Page 4-6 (Page 67)	Table 4-2, Page 4-6, 67 of 120. Documentation (i.e. photos) showing no DWF? Think about the amount of data that was collected in the REC1 determination work, not saying that the pool of evidence needs to be the same, but what's presented here is inadequate to be used beyond prioritization of effort. It may be helpful to include photo documentation in an appendix, or a stand alone report documenting no flows.	Text has been added to indicate volume of documentation. Due to the large volume of photos, an appendix of photo documentation is not included, however, photos are available electronically from Permittees and in sources included in footnote. Text has been added to recommend periodic surveillance of the sites to verify continued disconnectivity.
Regional Board	53	Page 4-7	Page 4-7, second to the last paragraph, first sentence. Should be re-written. It states "and thus could be used to approximate quantify". Shouldn't the last word be "quantity of".	Text revised to say "approximately quantify."
Regional Board	54	Figure 4-7 (Page 71)	Page 71, Figure 4-7. Is the downward trend in the Riverside plant due to reclamation or water conservation? Seems like a small difference to say this is due to reclaimed water use. Can we get info from the City of Riverside to provide how much of Riverside's flow is actually reclaimed. Riverside is not real big on reclaimed water use. Very few areas in the City have the purple plumbing that is indicative of reclaimed water usage. They did just make a deal with Western MWD to take some flow from the Orangecrest area and send it to Western's plant for ultimate reuse at the National Cemetery and adjacent golf course.	The downward trend in the Riverside plant is due to conservation with some reclaimed water used for recharge as well.
Regional Board	55	Page 4-10 (Page 71), Last paragraph	Cites Appendix A-2, which shows the daily time series of effluent discharged to the impaired waters. No Appendix A-2	Appendices have been added.
Regional Board	56	Page 4-12 (Page 73)	Change in location/method of IEUA's discharge to Prado Park Lake. Now supplied by the reclaimed water system instead of creek discharge. Would help to show the two locations on a map, or aerial photo, so one can see the change in location.	The location of IEUA's discharge to Prado Park Lake has not changed. The pipeline was changed from a gravity pipeline to a pressurized pipeline. The pipeline is represented by the yellow dashed line on Figure 4-8.
Regional Board	57	Figures 4-9 through 4-11	Figures 4-9 through 4-11. 1) No titles for these figures; 2) It should be made clear where the various values found on these figures specifically originate from and when samples/flow readings were taken that were used to calculate these values; 3) Can you show the calculations resulting in the MS4+POTW Flow-weighted Blend Concentration of 109 cfu/100mL for MWD Crossing (WW-51); and 4) It should be explained why (when examining the SAR R3, Figure 4-9), flows from POTWs have been updated from the 2013 Triennial Report and E. coli geomean values for some MS4 flows have been updated from the 2013 Triennial Report, but the flow values for most of the MS4 flows are all the same as the 2013 Triennial Report.	1) Titles have been added to Figures 4-9 through 4-11. 2) Sources have been added to the text. 3) Text and equations have been added to describe how blended concentrations are estimated. Calculation has been included as Attachment A to Comment Response Table. 4) Text has been added to clarify that new data was not available for all MS4 flows.
Regional Board	58	Page 4-16, Page 77/120, First bullet	Page 77, 4-16. First Bullet: There are concerns on the part of Regional Board staff about the use of the calculated "blend concentration" being used to make statements such as "...MS4 inputs in total are not expected to cause non-compliance in the SAR at MWD crossing". 2015 dry season sampling of SAR at MWD Crossing exhibited 8 exceedances of the "< 10% of samples to exceed 212 cfu/100 mL for any 30-day period" TMDL/WLA criteria and 12 exceedances of the "30-day, 5-sample geomean not to exceed 113 cfu/100 mL" TMDL/WLA criteria. Note that in calculating the "30-day, 5-sample geomeans", if any value used in that calculation is reported as ">" some number, that geomean will be considered exceeding 113 cfu/100 mL as that "<" value cannot be known.	As the ">" qualifier indicates a presence of atypical background bacteria and not a need for additional dilutions to quantify target bacteria concentrations, the geomeans are considered to be appropriate estimates. See above response to comment.
Regional Board	59	Page 4-16, Page 77/120, First bullet	Page 77, 4-16. First Bullet: What are the plans to further reduce the loading from Box Springs. The reports states this is still a significant source, even though we eliminated the human contribution from sewage? Second bullet: SAR at Pedley. The Arlington Greenbelt does contribute E. coli to the SAR. While the groves themselves may not show high E. coli the drainage ditches in the area appear to be either growing E. coli or there is another source we have not identified. These bulleted items appear to identify sources, but then dismisses them as still contributing, but then no mention of further control measures.	As noted elsewhere, the Triennial Report is a summary of findings since previous report. It is not a plan for moving forward. Any such plans and required actions would be developed as needed and implemented through the CBRP. Second bullet has been revised.
Regional Board	60	Figure 4-12	Figure 4-12, some small drainage areas are shown as minor wedges, but not labeled on the pie charts (e.g., T1-PHNX isn't labeled), seems to be adequately addressed in the WW-C7 pie chart. The update of some E. coli values but not others and no change in most MS4 flow values introduces some questions as to the usefulness of this data.	Values are updated wherever new data was available. Figure labels has been updated.
Regional Board	61	Page 4-19 (Page 80)	Last Sentence has 2 issues. Again appears to be directing readers to the wrong section and secondly, rather than just redirection, a short synopsis of the results and key finding would be helpful and reduce reading fatigue.	Section numbering has been revised and a brief summary of findings have been added.
Regional Board	62	Table 4-4, Page 4-21	Table 4-4 DWF reductions needed to meet WLAs for POTW and MS4 flows. Remaining DWF E. coli assumed to come from uncontrollable sources. Are there plans to provide the estimated flow reductions needed to meet the TMDL? If so, we should summarize these plans. If not, provide a plan and schedule for tasks needed to reduce the flows. Do the treatment plants have plans for using more reclaimed water that will meet these projected needed flow reductions?	Tables 4-4 and 4-5 discuss DWF reduction targets and Section 4.1.5.2 discusses the use of outdoor water conservation projects to achieve the targets. As noted elsewhere, the Triennial Report is a summary of findings since previous report. It is not a plan for moving forward. Any such plans and required actions would be developed as needed and implemented through the CBRP.

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Regional Board	63	Page 5-1 (Page 85), 5th bullet	<p>"By process of elimination" uncontrollable sources make up the rest of the problem, so therefore nothing more needs to be done. This is not supported by the data provided, nor the analysis, at this time. The report identifies sources that are probably contributing to the impairment of the MSAR, and yet proposes to eliminate the need for additional control measures, by throwing these remaining sources into an "uncontrollable source" classification. The TMDL is still not being met, and the contemplated revisions to the TMDL to address our recent Basin Plan amendment for recreational standards, is not likely to change this fact.</p>	<p>The intention of the report is not to suggest that bacterial exceedances are due solely to uncontrollable sources and that no additional work is necessary. Rather, it identifies an uncontrollable source and mechanism that could be important to exceedances in the watershed. Additional studies are needed to more clearly identify the role of this uncontrollable source. Text has been added to clarify this point and make text consistent with text in Section 3.2, that additional studies are necessary to support the hypothesis.</p>

Attachment A – Mass Balance Calculation

A	B	C	D	E	F
Site ID	MS4 Outfall	County	<i>E. coli</i> Geomean (cfu/100mL)	Average DWF (cfs)	D*E
Santa Ana River (RIX+Rialto+RWQCP)					
T1-RISD	SW of Riverside Avenue @ SAR	SC	0	0.000	0
T1-WLSD	Wilson Storm Drain	RC	24196	0.018	436
T1-EVAN	City of Riverside Outfall (Lake Evans)	RC	0	0.000	0
T1-BXSP	Box Springs Creek	RC	1260	1.192	1502
T1-RBDX	City of Riverside Outfall at Rubidoux	RC	0	0.000	0
T1-MCSD	Magnolia Center SD	RC	234	0.911	213
T1-PHNX	Phoenix Storm Drain	RC	1466	0.005	7
T1-SNCH	Sunnyslope Channel	RC	326	2.417	789
T1-IDST	City of Riverside Outfall (Industrial/Fremont)	RC	0	0.000	0
Sum				4.5	2946

$Q_{\text{effluent}} = 35 \text{ MGD}$ from Figure 4-7

Conversion factor from MGD to cfs = 1/1.55

$$C_{\text{blended}} = \frac{[\sum_l^j (Q_{\text{inflow}} \times C_{\text{inflow}})]}{Q_{\text{inflow}} + Q_{\text{effluent}}} = \frac{2496 \left[\frac{\text{cfu}}{100 \text{ mL}} \times \text{cfs} \right]}{4.5 \text{ cfs} + \left(\frac{35 \text{ MGD}}{1.55} \right)} = 109 \frac{\text{cfu}}{100 \text{ mL}}$$