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January 26, 2007

To: Municipal Storm Water Copermittees
From: Lisa Kay, Project Manager
Subject: Comments received for Draft 2005-2006 Urban Runoff Monitoring Report

Thank you for your constructive and well thought comments to the "San Diego County Municipal Copermittees 2005-2006 Urban Runoff Monitoring Draft Report". This memo documents comments received (Copermittee) and Weston Solutions, Inc. (Weston) response to address each comment. The comments are numbered and are provided based on the order they were received. Each numbered comment by Copermittee is provided below as a reference:

Comments 1-11	City of San Diego
Comments 12-19	City of Chula Vista
Comments 20-55	City of Del Mar
Comments 56-79	City of Encinitas
Comments 80-91	Port of San Diego
Comments 91-114	City of National City
Comments 115-129	City of Santee
Comments 130-170	County of San Diego

1. City of San Diego: Section 7.2.5, Page 7-19, 3rd paragraph: The description of the labels circles and squares appears to be reversed in comparison to figure 7-5.

Weston: The text was corrected to reflect the correct description of the figure.

2. City of San Diego: Section 7.5.3, Page 7-36, last paragraph: The County of SD DEH has a map of showing the influence of salt water intrusion of groundwater that may affect several miles of the San Dieguito River Watershed. This may help to support the statement that groundwater influences may contribute to dissolved minerals in runoff.

Weston: The map was discussed at the Monitoring Workgroup meeting on November 28, 2006. This map will be considered for the 2007-2008 Annual Report.

3. City of San Diego: Section 8 cover page: The sections cover page title should be Los Penasquitos Creek WMA.

Weston: The cover page was corrected.

4. City of San Diego: Section 8.2.5, Page 8-18, 3rd paragraph: The description of the labels circles and squares appears to be reversed in comparison to figure 8-5.

Weston: The text was corrected to reflect the correct description of the figure.

5. City of San Diego: Section 8.5.1, page 8-31: Please clarify sentence to show that there was no trend in either direction.

Weston: Sentence was clarified to show that there was no trend in either direction.

6. City of San Diego: Section 9.2.5, Page 9-19, 3rd paragraph: The description of the labels circles and squares appears to be reversed in comparison to figure 8-5.

Weston: The text was corrected to reflect the correct description of the figure.

7. City of San Diego: Section 10.1.3, Page 10-5: Please add description of the Bacteria TMDLs for this and other relative sections.

Weston: A description of the Bacteria TMDLs was added to the regulatory sections of each WMA.

8. City of San Diego: Section 10.3.1, Page 10-21: Why is the San Diego River site SDR-1 so low? There is mention in the text that the Tijuana River site at Dairy Mart Road was actually more degraded. The text also refers the reader to Section 12.3 for further explanation, but there is no explanation provided in Section 12.3 about the SDR-1 site. Please provide description in this section.

Weston: The section was edited and only the SDR-1 site was discussed. The references to section 12.3 and the Tijuana site were removed, and more explanation of why the Tijuana site was considered the most degraded was added in section 12.3

9. City of San Diego: Section 10.5.1, Page 10-29: Please change the scale of the y-axis of figure 10-8 so the numbers are readable.

Weston: The scale was changed so the numbers are more readable.

10. City of San Diego: Section 12.3.1, Page 12-20: Please add description of why TJ-DM is not the lowest ranked site based on the text reference in Section 10.3.1 (see comment #8).

Weston: Additional clarification and description of the site characteristics and results were added to the section.

11. City of Chula Vista: Section ES.7, Recommendations: In the second paragraph of this section it is stated, "Several parameters should be added to the analytical constituent list in light of the high proposed 303(d) listings ...". The City of Chula Vista does not agree that localized water quality issues be expanded to watershed or regional levels and affect such monitoring programs. On the contrary, the attempt should be directed from regional and watershed levels toward isolating and identifying localized water quality problems and dealing with their sources at the local level. Many 303(d) listed water segments and TMDL programs are localized and should be addressed at the jurisdictional or watershed levels, as the case may be, and not included in the regional monitoring program.

Weston: Recommendations to monitor for additional analytes based on localized 303(d) listings were removed. This section was considerably revised, see comments 137 and 138.

12. City of Chula Vista: Section ES.7, Recommendations: Again, in the fourth paragraph of this section Weston Solutions provides recommendation to the effect that monitoring under the Regional Water Quality Control Board Order No. R9-2006-076 or Lagoon Order should be combined with monitoring under the regional monitoring program. While both programs can benefit from the findings of other investigations, the City of Chula Vista does not agree that any work outside the scope of the regional monitoring program, as required under the Municipal permit, be included as a component of the regional monitoring program, or the regional monitoring program be revised to accommodate such focused studies.

Weston: References to the lagoon order were removed. This section was considerably revised, see comments 137 and 138.

13. City of Chula Vista: Section 3.4.2, Water Quality Priority Ratings, Long-Term Effectiveness Assessment Methodology: The proposed Water Quality Priority Rating Methodology takes into consideration several factors, including the 303(d) listings. This methodology may not be applicable to the sub-watersheds of the San Diego Bay Watershed Management Area where the 303(d) listed water segments are isolated and mostly within the San Diego Bay itself.

Weston: The Water Quality Priority Rating Methodology was developed in the Baseline Long Term Effectiveness Assessment Report (WESTON, MOE, & LWA, 2005). The ratings are intended to provide managers with a prioritization scale based on the water quality issues within each watershed and sub-watershed. As one of several factors considered, 303(d) listings have a great impact on water quality prioritization because they define impairments to water bodies as well as leads to TMDLs. The current Water Quality Priority Rating Methodology considers 303(d) listings within sub-watersheds to be extremely impacting and therefore causes a sub-watershed's rating to be the highest priority.

As the overall watershed priority ratings are established, the 303(d) listings play an important role through the sub-watershed ratings. The WMA priority rating is a weighted average of the sub-watershed ratings based on sub-watershed areas.

The methodology serves the purpose of identifying water quality priority ratings for pollutants within a watershed. If the 303(d) impacts are isolated and mostly within the San Diego Bay then the ratings would identify those sub-watersheds as having priority issues and give program managers the data to support programmatic enhancements to better prevent water quality problems.

14. City of Chula Vista: Section 3.4.2, Water Quality Priority Ratings, Long-Term Effectiveness Assessment Methodology, Page 3-51, Step 5: Section 3.4.2, Water Quality Priority Ratings, Long-Term Effectiveness Assessment Methodology, Step 5 on Page 3-51 – Comment No. 3 above also applies to this section.

Weston: See response to comment 13.

15. City of Chula Vista: Section 11.5.4, Page 11-61, Table 11-30: Updated Water Quality Priority Ratings for the San Diego Bay WMA – While heavy metals have a low priority rating

(D), it is not clear why this constituent group has been listed as a constituent of concern for the Sweetwater sub-watershed.

Weston: Table 11-30 is the Water Quality Priority Rating for the entire San Diego Bay Watershed and shows all subwatershed scores by row. The high frequency of occurrence rating (three diamonds) is provided for comparison purposes to the San Diego Bay WMA overall priority findings. The high frequency ratings for copper, lead, and zinc are attributable to the Pueblo Watershed assessment findings from Table 11-26. While there are no high frequency ratings in the Sweetwater Watershed for copper, lead, and zinc (all Sweetwater subwatersheds received D ratings for heavy metals), the overall San Diego Bay Rating is listed as the lowest priority "D" overall. This implies that using all available information, the high frequency ratings for copper, lead, and zinc apply to the Point Loma and San Diego Mesa subwatersheds and that resources used to address these COCs should be focused on the local (jurisdictional) level first followed by the watershed level. A footnote was added to the High Frequency of Occurrence Rating row on the table to show the origin of these results.

16. City of Chula Vista: Section 11.5.4, Page 11-62 through 11-65, Tables 11-31 to 11-34: List of potential likely and unknown heavy metal, sediment, pesticide, and bacteria sources for the San Diego Bay WMA – It appears that water quality issues within 303(d) listed segments of the San Diego Bay have been expanded throughout the Watershed Management Area and lists of potential sources have been included in the referenced tables. The City of Chula Vista does not believe that this approach will correctly direct resources toward identifying and eliminating the sources of pollutants of concern in the watershed. Also, some land uses have been included in the tables referenced above that are not significant sources of specified pollutants. For example, automobile wholesale and animal facilities have been listed as potential sources of sediment.

Weston: As stated on page 11-61 of the draft report, there were no high priority rated constituents in the San Diego Bay WMA. However, some water quality issues were identified through the process. Primarily due to 303(d) listings, the following constituents were determined to be water quality issues in the San Diego Bay WMA:

- *Heavy metals*
- *Sediments*
- *Pesticides*
- *Bacteria*

Although the 303(d) listings have an impact on sub-watershed levels, they do not govern the entire watershed (see previous response to comment #13)). The high priority sub-watershed ratings do not expand from the Bay to the entire watershed as stated in the comment. The 303(d) listings are one of the factors in determining a priority rating for the WMAs. Using all of the information available, a water quality priority rating is calculated to give program managers a pollutant based focus on the condition of the WMA.

The water quality priority ratings are one of the factors available to program managers as they develop their watershed and jurisdictional program activities. By providing the sub-watershed and overall watershed water quality priority ratings and the potential sources of the pollutants (BLTEA), a region wide consistent foundation for activity development is formed. The ratings and potential sources are provided for consideration by the jurisdictions, not to dictate where resources should be directed. The respective report sections have been revised to reflect the purpose of inclusion of the tables and the limitations of the available information.

As for the inclusion of some land uses that may not be significant sources of specified pollutants – the development of the BLTEA included a review of a finite number of potential sources. Each potential source was reviewed to identify the activities and land-use associated with each source. After consideration of all the activities and land-uses, the sources were placed into categories of whether they were likely or unlikely to discharge the pollutant types. Additional categories included whether it was known that the source would not discharge the pollutant type or if it was unknown (not enough available information)

The two examples provided in the comment do have the potential to discharge sediment from land-use and activities. Wholesale automobile businesses often have large expanses of outdoor storage facilities that are unpaved. During rainfall events there is a potential for erosion and the discharge of sediments. Animal facilities is a broad category that includes outdoor kennels, public dog parks, etc., where there is a potential to discharge sediments during rainfall events and/or maintenance activities.

17. City of Chula Vista: Section 11.5.4, Page 11-65, Table 11-34: List of potential likely and unknown bacteria sources for the San Diego Bay WMA – This table should be expanded to include the following potential sources of bacteria:

- Wild animals, birds, and other naturally occurring sources
- Pet waste
- Decaying organics

“Sanitary Sewer Overflows” should replace “MS4s” as a potential source of bacteria.

Weston: The tables providing potential sources of pollutant types were developed as a part of the BLTEA process. The respective tables have been revised to note the BLTEA as the source of information and that additional sources including natural background may contribute to water quality issues. The tables were never intended to be an all inclusive (including naturally occurring sources) summary of sources in each WMA. The tables were developed from a finite list of potential sources that were agreed upon by the Copermittee Long-Term Effectiveness workgroup. The basis of the list was identifying sources that can be regulated and have the potential to discharge the pollutant types that are of focus of the urban runoff management programs. Therefore, although naturally occurring sources of bacteria are prevalent, they were not considered a source that could be regulated by the programs.

Pet waste is considered under the home waste disposal category (residential activities) of the bacteria source table.

The MS4 is listed on the bacteria source table with an unknown source loading potential. There is not enough information available to determine if MS4s generate bacteria.

Sanitary Sewer Overflows were not considered in the BLTEA process because, although they are a significant source of bacteria discharges, they are accidental in nature and therefore cannot be regulated in advance. The sanitary sewer system itself is regulated and some components (pump stations, treatment plants, etc.) are considered under the POTWs category, but the many miles of sub-grade sewer infrastructure are not necessarily subject to urban runoff and therefore not considered a source of pollutants.

The results of bacteria source studies conducted on a watershed or jurisdictional level, where available, can be included in this discussion in future reports to augment the BLTEA tables.

18. City of Chula Vista: Section 11.6, Conclusions and recommendations, Page 11-69: It is stated “The parameters organochlorine pesticides, PCBs, iron, and manganese should be added to the analytical constituent list in light of the high proposed 303(d) listings and the limited SWAMP data.” As commented above, the City of Chula Vista does not agree to add parameters to the monitoring program throughout the watershed or sub-watershed based on 303(d) listed isolated water segments present in the watershed or sub-watershed.

Further down the same section and page it is stated “The draft monitoring order calls for two temporary watershed assessment stations for this WMA (one in the Sweetwater Watershed and one in the Otay Watershed). These two stations should be placed with respect to addressing the spatial distribution of heavy metals, sediments, pesticides, bacteria, and toxicity.” It is not clear why such investigations are needed when the report concludes that with the exception of bacteria, other pollutant levels are below Water Quality Objectives in the Sweetwater River sub-watershed and the Otay River sub-watershed is dry most of the time. It would be more appropriate and beneficial to conduct investigations focused at 303(d) listed water segments rather than expand the investigations to watershed and regional levels.

Weston: Recommendations for adding additional analytes based on the 303(d) list were removed.

19. City of Chula Vista: Section 14.3.1, Table 14-2, Page 14-22: Recommended actions from the triad assessment – Evidence of persistent toxicity has been mentioned for the Sweetwater River sub-watershed, and it is recommended to continue the TIE procedure. However, in Section ES.4.8 of the report it has been mentioned “Toxicity to *S. capricornutum* has declined below a frequency of 50% indicating that toxicity in storm water samples from the Sweetwater River MLS is no longer persistent.”, and further down in the same section, “In light of this finding, TIEs are no longer recommended for the Sweetwater River MLS.” Please provide clarification on this apparent inconsistency or revise as necessary.

*Weston: Table 14-2 was revised to reflect that toxicity to *S. Capricornutum* is no longer persistent and that TIE's are no longer recommended.*

20. City of Del Mar: General Comment: Each Section would benefit from a Table of Contents since they are likely to be used and viewed as independent sections by WMA. This will be especially useful if the individual sections are available in the future, as they are now, on an FTP site or website for downloading.

Weston: A table of contents will be provided at the beginning of each WMA section.

21. City of Del Mar: General Comment: The 2006 303(d) List was approved in October by the SWRCB. The report cites the development of the list but does not specify any of the listings. Will any modifications be made in the Final Report now that the list has been approved by the SWRCB?

Weston: *The 2006 303(d) List was approved by the SWRCB on October 26, 2006. The list still requires approval from the U.S. Environmental Protection Agency prior to being finalized, as the 303(d) List applies to federal regulations. The list was not expanded upon since it has not been finalized. The description of the list and where it can be found was provided to alert watershed managers to changes to the list and that subsequent TMDLs may affect their jurisdictions and watersheds.*

22. City of Del Mar: Section ES.2.3 Page ES-2: Change “granted” to “issued” in the first sentence.

Weston: *The word “granted” was changed to “issued” as requested.*

23. City of Del Mar: Section ES.4.4, page ES-11: ABLM. Second paragraph Third sentence. Suggest removing the word “higher” from “higher potential for toxicity”. Also in the ABLM. Second paragraph. Change “Test animals” to “Test organisms”.

Weston: *The word “higher” was left in place because we feel that it accurately describes the issue at hand. The words “Test animals” were changed to “Test Organisms” as requested and through-out the document (see comments #25, 42, 53).*

24. City of Del Mar: Section ES.4.5, page ES-12: Stream Bioassessment. Consider the following change. Both of the sites had Index....the upper range of Very Poor or Poor categories.” The wording implies a subcategory of “lower Poor” which may not be appropriate.

Weston: *All qualitative descriptions such as “upper range” have been removed.*

25. City of Del Mar: Section ES.4.5, page ES-13: ABLM. Second paragraph. Change “test animals” to “test organisms”.

Weston: *The words “Test animals” were changed to “Test Organisms” as requested and through-out the document (see Comments #23, 42, 53).*

26. City of Del Mar: Section ES.4.5, page ES-13: Section ES.4.5, page ES-13. WMA Assessment. First paragraph. Last sentence. “Third party data collected in 2002 under SWAMP indicated that sulfate, manganese, and toxicity were also problems throughout Los Peñasquitos Watershed.” Please consider revising to define “problems” by stating more specifically either the number of exceedances or providing other abbreviated quantification instead of the present statement.

Weston: *The paragraph was revised to reflect the number of samples above the water quality objective for each parameter and the number of observed toxic responses.*

27. City of Del Mar: Section 3.4.1 and 3.4.2: Clarification is sought. Has the inclusion of SWAMP data from 2002 and 2003 monitoring events been discussed? What criteria are used to include “older” data sets? Third party data can have a dramatic change in the water quality priority ratings, according to the methodology.

In addition, not all parameters or pollutants that might be included in third party data sets been included in the pollutant groups or categories in Section 3.4.2. How has this been addressed in this Report? How will this be addressed in the future? The groupings are currently limited to very few pollutants. As an example, color is described as being included in the analysis per Section 7.5.3 (see below), but it is not set as a pollutant in the grouping according to the methodology in Section 3.4.2.

Please clarify why conductivity is included in the grouping with Gross Pollutants? Would it be a better fit with Dissolved Minerals which includes TDS?

Weston: *SWAMP data are included in the annual report at the request of the County of San Diego. Only SWAMP data or other receiving water data from certified laboratories (e.g. Padre Dam Municipal Water District) are included. Priority ratings are based on the long term effectiveness assessment methodologies and incorporate the available data from previous Copermittee sampling and only third party data that has been completed by a certified testing laboratory.*

Color was included since it was on the 303(d) list and was added to the methodology section. Conductivity was removed from the gross pollutant category, because the action level is based on best professional judgment. It is recommended that further discussion be conducted among the Copermittees to further develop the pollutant groupings and an agreed upon methodology as the program continues to advance.

28. City of Del Mar: Section 7.1.3, Page 7-3, First sentence: Seems outdated and may need to be revised. Consultation with the County of San Diego is recommended.

Weston: *Sentence was updated in this and other sections based on information from the Project Clean Water Website.*

29. City of Del Mar: Section 7.1.6, Page 7-5, Third Sentence: “Tidal influence to the Lagoon can be seasonally restricted by sand accumulation.”

Weston: *The text was revised from “is” to “can be” as requested.*

30. City of Del Mar: Section 7.2.2, Page 7-2, Fifth paragraph, Second Sentence: “During the last five years of monitoring, all dissolvedexcept selenium have been detected during one or more monitoring events but have never exceed the WQO.”

Weston: *Added an “s” to event.*

31. City of Del Mar: Section 7.2.2, Page 7-13, First paragraph: “The most common conventional constituent found to be in exceedance for the 2005-2006 monitoring..... by at least 3.9 times during the all three monitoring events....”

Weston: *Revised the sentence to read: “...by at least 3.9 times during each of the three monitoring events...”*

32. City of Del Mar: Section 7.2.3, Page 7-14, Third paragraph: The paragraph readability would be greatly improved by adding numbers from Table 7-5 when describing the comparisons between the two loads.

Weston: *Revised text to include numerical values.*

33. City of Del Mar: Section 7.2.3, Page 7-15, Table 7-5: consider color changes for the highlighted quantities. Readability needs to improve.

Weston: *The text color for the highlighted numbers was changed and the font bolded as requested.*

34. City of Del Mar: Section 7.2.4, Page 7-16, First paragraph, Last two sentences: The two last sentences are stated as facts which may be difficult to verify by the modeling being performed. Is it true that adding BMPs will be reflected in future modeling using this methodology?

Weston: *Discussion of BMP relation to modeling was removed.*

35. City of Del Mar: Section 7.2.5, Page, 7-17, Table 7-6: Footnote (a). “Water Quality Objective for dissolved metal...” should read “Action Level for dissolved metal...” This same comment may apply to each of these tables in each of the WMA sections.

Weston: *Changed “WQO” to “action level” in Table 7-6. This was also addressed throughout the document to ensure the appropriate terminology was used.*

36. City of Del Mar: Section 7.2.5, Page, 7-19, Table 7-7 and Second Paragraph, Last sentence: The turbidity data does not match the description in the text. Table shows the Average Ratio of Exceedance for turbidity as 0.82. The text indicates that it was greater than one. Verify and make necessary corrections. Also, the asterisk footnote should have Water Quality Objective changed to Action Level.

Weston: *Verified that the correct value was 0.82 and removed the reference to the turbidity ratio being greater than one. Changed "WQO" to "action level" in Table 7-7.*

37. City of Del Mar: Section 7.2.6, Page 7-20, Last sentence: "Historically, turbidity concentrations were above the WQO during....."

Weston: *Added the word "Historically" where suggested.*

38. City of Del Mar: Section 7.2.8, Page 7-20, Last sentence: "The sample collected during the January 2, 2006.....to the test organisms, possibly attributed to high turbidity and total suspended solids."

This addition is consistent with previous statements and is reproduced in the summary.

Weston: *The statement summarizes that a toxic response was observed during the January 2, 2006 monitoring event.*

39. City of Del Mar: Section 7.4.1.2, Page 7-28, Sediment Chemistry, First paragraph, Second to last sentence: "All metal concentrations were low and did not exceed the ERM values during 2003, 2005 (should be 2004??) or 2005 samplings of the Lagoon".

Weston: *Changed to: "All metal concentrations were low and did not exceed the ERM values during 2003, 2004 or 2005 samplings of the Lagoon".*

40. City of Del Mar: Section 7.5.1, Page 7-32, First paragraph: The last sentence refers to dry weather results exceeding the WQO. The dry weather monitoring results from the Copermittees are not compared to WQO but instead Action Levels (Methodology in Table 3-14). This is a very significant distinction. However, if the paragraph is referring to SWAMP dry weather data then it may be correct to state it is compared to WQO, but this requires a clearer distinction.

This comment may be found in other WMA sections and should be clarified there as well.

Weston: *Replaced "WQO" with "action level". This was also addressed throughout the document to ensure the appropriate terminology was used.*

41. City of Del Mar: Section 7.5.3, Page 7-35, Table 7-16: The table shows that Gross Pollutants are rated as "B". Paragraph three following the table indicates that the B rating is due to a 303(d) listing for color in Santa Ysabel HA. Yet, the methodology in Section 3.4.2 does not include color as a pollutant in the Water Quality Priority Ratings. The analysis and the subsequent priority rating appear to be inconsistent with the methodology.

Weston: *Color was added to the constituent category in the methods section.*

42. City of Del Mar: Section 7.6, Page 7-38, Last paragraph, Fourth sentence: Suggest removing the word “higher” from “higher potential for toxicity”.
Last complete sentence. Suggest changing “Test animals” to “Test organisms”.

Weston: *The word “higher” was left in place because we feel that it accurately describes the issue at hand. The words “Test animals” were changed to “Test Organisms” as requested through-out the document (see comments #23, 25, 53).*

43. City of Del Mar: Section 8.1.3 – Second sentence. Seems outdated and may need to be revised. Consultation with the County of San Diego recommended.

Weston: *Sentence was updated in this and other sections based on information from Project Clean Water Website (see comment #28).*

44. City of Del Mar: Section 8.1.3, Page 8-4, Second paragraph: Order No. R9-2006-0076 should be consistently entered with -0076 (two zeros).

Weston: *The text was revised from “R9-2006-076” to “R9-2006-0076”.*

45. City of Del Mar: Section 8.2.3, Page 8-13, Third paragraph: The paragraph readability would be greatly improved by adding numbers from Table 8-5 when describing the comparisons between the two loads.

Weston: *Revised text to include numerical values.*

46. City of Del Mar: Section 8.2.3, Page 8-13, Table 8-5: Consider color changes for the highlighted quantities. Readability needs to improve.

Weston: *Colors were changed to improve readability.*

47. City of Del Mar: Section 8.2.4, Page 8-15, First paragraph, Last two sentences: The two last sentences are stated as facts which may be difficult to verify by the modeling being performed. Is it true that adding BMPs will be reflected in future modeling using this methodology?

Weston: *Discussion of BMP relation to modeling was removed.*

48. City of Del Mar: Section 8.2.5, Page 8-16, Table 8-6: Footnote (a). “Water Quality Objective for dissolved metal...” should read “Action Level for dissolved metal...”

Weston: *Changed “WQO” to “action level” in Table 8-6.*

49. City of Del Mar: Section 8.2.5, Page 8-18, Table 8-7: The asterisk footnote should have Water Quality Objective changed to Action Level.

Weston: *Changed "WQO" to "action level" in Table 8-7.*

50. City of Del Mar: Section 8.3.1, Page 8-24, Last characters: Change MSL to MLS.

Weston: *Text was corrected.*

51. City of Del Mar: Section 8.3.2, Page 8-24, Third sentence: Consider the following change. Both of the sites had Index....the upper range of Very Poor or Poor categories." The wording implies a subcategory of "lower Poor" which may not be appropriate.

Weston: *All qualitative descriptions such as "upper range" have been removed.*

52. City of Del Mar: Section 8.6, Page 8-36, Fifth paragraph: Third sentence. Same comment as above for "lower Poor".

May be included in other sections and should be consistent.

Weston: *All qualitative descriptions such as "upper range" have been removed.*

53. City of Del Mar: Section 8.6, Page 8-36, Sixth paragraph, Fifth sentence: Suggest changing "Test animals" to "Test organisms".

Weston: *The words "Test animals" were changed to "Test Organisms" as requested throughout the whole document. See Comments #23, 25, 42.*

54. City of Del Mar: Section 14.1.1.1, Page 14-1, Second bullet, Third sentence: "In contrast, concentrations of TDS....and Tijuana River MLS which have the higher TDS WQO". Please verify, but I believe this to be the case. Also, the last bullet. Toxicity. "WQO exceedances based on the toxicity testing.....at the Tijuana River MLS, as observed in previous years."

Weston: *The Tijuana River Basin Plan WQO for TDS was verified to be 2100 mg/l. The toxicity bullet was reworded for clarification.*

55. City of Del Mar: Section 14.1.4.2, Page 14-8, Third paragraph: "The mean modeled loads.... Watershed indicate that the total dissolved solids load...." Need to correct sentence (the word total is out of place).

Weston: *Corrected text order.*

56. City of Encinitas: Section ES.4.3, Paragraph 4, page ES-8: “This result indicates that the load exceedances were most likely due to the EMC and not storm flow volume.”

The same storm flow volume is used to calculate the EMC loads and the estimated WQO loads. Understanding this, the load exceedances have to be based on the EMC and not the volume. This is inherent to the calculation, and not inferred from the results. This concept may apply to an overall annual loading calculation but does not seem applicable to a per storm event calculation. This conclusion is pervasive through later sections of the Carlsbad WMA Section 6 and may need to be reworded or removed, page 6-18.

Weston: *The EMC Loads and the WQO loads were calculated for each storm separately. This allowed derivation of the load variance. The WQO loads were calculated based on the relevant water quality standard and the mean volume of water for all of three of the storm events. Algebraically these loads are different. We agree that it is better to compare overall annual loading between stations than just the storms monitored. As discussed in Chapter 3, flows were only measured during the sampled storm event. To help determine annual loading continuous flow monitoring is currently being conducted for the entire year. For the 2007-2008 season, constituent concentrations will be sampled during base flow conditions. This will allow estimation of annual loads for an improved comparison between MLS stations.*

57. City of Encinitas: Section ES.4.3, Paragraphs 4-6, page ES-9: Sentences beginning with “Correlated with the SEM:AVS ratio...”

Section 6, page 6-39 states: “It should be noted that the SEM:AVS ratio may inaccurately predict toxicity of a sediment sample...because of environmental factors including grain size, total organic carbon, salinity, and dissolved oxygen, which may interfere with the metal binding properties of AVS (Long et al., 1998).”

This implies that the SEM:AVS ratio may not be suitable for drawing conclusions about the dissolved metals and their relationship to toxicity in all cases. It seems that there may be other compounds in addition to AVS available to bind metals. If this method is accepted in the literature, please provide a reference on page 3-33. If these conclusions regarding dissolved metals are defensible but questionable (based on the statement above) they may be offered as explanations in the report but may not be suitable for the Executive Summary of the report. Please explain and if appropriate, remove from ES Section.

Weston: *It should be noted that the quote from comment 57 on the SEM:AVS ratio was based on the results of the SEM:AVS ratio determined for Buena Vista Lagoon, as opposed to Oceanside Harbor, which was extremely high (82.5) and did not make sense in light of the lack of toxicity to E. estuarius. While the SEM:AVS is a well-used method for determining potential toxicity of bioavailable metals, Weston recognizes the importance of reviewing this ratio in the context of toxicity test results as well as other chemical/physical measurements. If the SEM:AVS ratio indicates potential toxicity, where there is none, then it is important to closely evaluate environmental factors such as dissolved oxygen and salinity, which at their extremes, could affect the integrity of the SEM: AVS. However, as stated above, this is a well-recognized method and as such, should continue to be evaluated.*

We believe the results of the toxicity test and SEM:AVS ratio on Oceanside Harbor samples are valid; however, we agree that there is not strong evidence to suggest that metals were responsible for toxicity, primarily due to the only slight toxicity observed (74% survival). As a result, we have removed these sentences from the Executive Summary, as requested.

In addition, the methods section on AVS:SEM in section 3 was changed to read “It should be noted that this approach works better with metals including cadmium, nickel, and zinc than metals such as copper and mercury (Brumbaugh et al., 1996). In addition, results should be interpreted in light of other environmental factors such as dissolved oxygen and salinity, which at their extremes, may interfere with the determination of this ratio (Long et al., 1988). Nonetheless, a number of studies have demonstrated the usefulness of this method in predicting the toxicity of metals in sediments (Di Toro et al., 1991; Ankley et al., 1991; Casas and Crecelius, 1994).”

Furthermore, the section on Buena Vista Lagoon was also changed to more specifically read “It should be noted that the SEM:AVS ratio may inaccurately predict toxicity of a sediment sample such as in Buena Vista Lagoon, even when toxicity is not observed in toxicity tests, because of environmental factors including grain size, total organic carbon, salinity, and dissolved oxygen, which at their extremes may interfere with the metal binding properties of AVS (Long et al., 1998). Alternatively, the elevated SEM:AVS ratio may indicate the presence and bioavailability of metals that only cause toxicity to invertebrates at extremely elevated concentrations (e.g., nickel or zinc).”

58. City of Encinitas: Section ES.5.5, paragraph 1, page ES-26

Please add “upstream of MLS” to the first sentence to better clarify the scope of the assessment. May read: “...out of 9,103 analytical tests conducted *upstream of the mass loading stations*”.

Weston: *The dry weather assessment was made using all dry weather results, both upstream and downstream of MLS.*

59. City of Encinitas: Section 1.2.6, page 1-8: Should Dry Weather Monitoring also be added to the list of monitoring performed under Order 2001-01?

Weston: *Item was added as a bullet to Section 1.2.6 and a brief description provided in sub-section 1.2.6.6.*

60. City of Encinitas: 3.1.6.2 Toxicity Testing, page 3-6: It is unclear whether the toxicity samples collected are grab or composite samples. Please clarify how samples are collected.

Weston: *Sentence was added to indicate toxicity analyses are performed on samples that are flow-weighted composites.*

61. City of Encinitas: 3.3.5.1 Sediment Chemistry, page 3-32: Is it standard in the method to exclude COCs below the detection limits in the calculation of the ERM-Q? According to

calculations, it is possible to exceed the threshold of 0.10 while all metals are below ER-L values. This information is conflicting in that the data states that all metals are within standards, yet there may still be a negative affect on organisms. As conservative a value as the ER-L appears to be, it doesn't seem to make sense. Has there been any more recent research or studies performed which would further substantiate the use of the 0.10 threshold? Understanding that this has been implemented for several years in the ABLM, perhaps it can be better adapted to future monitoring of this nature.

Weston: *The ERM-Q was calculated on metals only because there were only a few instances of a detectable PAH. Calculating the ERM-Q on just metals is routinely done when only metals have been analyzed. Metals that were recorded as ND were included in the calculation of the ERM-Q at one-half of the detection limit. Please note that the ER-L and ER-M are not standards, they are guidelines and the fact that concentrations are below an ER-L does not mean that there will be no effects but rather that the likelihood of an effect is lower.*

62. City of Encinitas: 3.3.5.2 Sediment Toxicity, page 3-33

Is the control sample set up with only laboratory water or is "clean" sediment used in the control? In an attempt to differentiate between toxicity caused by pollutants in the sediments or caused by the sediment itself, it may be useful in the assessment and is unclear in the methods section.

Weston: *Sediment used in the control replicates is derived from the "natural" sediment from which the test organisms are collected and shipped to our laboratory. Being organisms that normally burrow into the sediment, they must be provided with sediment at all times.*

63. City of Encinitas: Section 3.4.1, Page 3-38, paragraphs 2 and 3: Paragraph 2, the last sentence states that "Wet weather results were compared against the dry weather action levels to determine exceedances in total and fecal coliforms and enterococci."

Paragraph 3, the last sentence states that "Fecal coliform REC-2 standards are applied at Tecolote Creek, Chollas Creek, and Tijuana River, while REC-1 standards are used for all other watersheds."

These statements are conflicting, which standards are used in the watershed assessments? As I understand it, wet weather is compared to REC-1 or REC-2, and dry weather is compared to Action Levels. Please reword as necessary to clarify the application of the standards.

Weston: *For the watershed assessments, total coliform and enterococci are compared to the dry weather action levels since there is no WQO for these parameters. Fecal coliform was removed from the list since it does have a WQO.*

64. City of Encinitas: Section 3.4.1, Page 3-41, paragraph 1: The EMC values and resulting loads represent first flush conditions. Is it valid to calculate Event Mean Concentrations and loads based on first flush only? It seems that the majority of the storm event should be captured to assess a true EMC.

Weston: *Samples are collected with the intent to assess the constituents of storm water runoff. From the methods section 3.1.3.2: “Where practical, the entire event was sampled. At some monitoring stations this was not practical due to the runoff characteristics of the watershed. For example, San Luis Rey and San Diego Rivers are large water bodies that continue to rise following the initial flow of runoff during storm events and it is not uncommon to see a double peak in the hydrographs. The first peak (usually smaller than the second) is the immediate response from runoff. The second peak is the result of groundwater flowing from the unsaturated zone that appears as a much larger peak, usually hours or days after rainfall has stopped. Sampling this flow would dilute the constituents of concern in the composite sample and may skew results when compared with other watersheds that see only immediate runoff response. For large watersheds, the sampling strategy was determined by using best professional judgment to monitor rainfall and runoff and determine the appropriate time to terminate sampling.”*

65. City of Encinitas: Section 6.1.3 Regulatory Water Quality Challenges, page 6-4:

Paragraph 1 in the last sentence listing sources of pollutants should include “other natural sources” in the list. Please add language to include natural loading as a source of pollutants.

Weston: *Revised sentence to include “other natural sources” as potential pollutant sources.*

66. City of Encinitas: Section 6.2.5 2005 Dry Weather Monitoring Data Evaluation, Table 6-9, page 6-23:

“na” values in the Mean column for the table may be better expressed as the true mean, even though the value may be less than the detection limit. This provides better information as to the amount of a constituent than the “na” and a footnote.

Please add these values.

In footnote (a), what is the justification to use a Total Hardness of 400 mg/l to calculate dissolved metal water quality objectives based on CTR? There are CTR based WQOs based on higher total hardness values that should be used appropriately.

Weston: *Due to the low detection frequency of several analytes collected for the dry weather program, min and max results were reported, but not necessarily a mean value. One half the detection limit was used for the purposes of calculating mean values, but when greater than half the data were non-detect, a mean value was not calculated. The results of such a calculation would be spurious and not true representations of the mean value of the data. Additionally, there were several instances of results reported below the reporting limit, but not associated with any quality assurance flag.*

The footnote is a function of the California Toxics Rule and is explained below:

For Footnote (a):

The water quality objectives are based on the guidance provided in 40 CFR Part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California.

“(4) Application of metals criteria. (i) For purposes of calculating freshwater aquatic life criteria for metals from the equations in paragraph (b)(2) of this section, for waters with a hardness of 400 mg/l or less as calcium carbonate, the actual ambient hardness of the surface water shall be used in those equations. For waters with a hardness of over 400 mg/l as calcium carbonate, a hardness of 400 mg/l as calcium carbonate shall be used with a default Water-Effect Ratio

(WER) of 1, or the actual hardness of the ambient surface water shall be used with a WER. The same provisions apply for calculating the metals criteria for the comparisons provided for in paragraph (c)(3)(iii) of this section.”

Since Water Effects Ratios have not been developed for any of the sites, the regulation states to use a WER of 1, and capping the hardness at 400 mg/l as calcium carbonate if the ambient hardness is above 400 mg/l. This provides a conservative approach in determining if waters are protective of the beneficial uses.

67. City of Encinitas: Section 6.2.5.1 Agua Hedionda Dry Weather Data, page 6-24: The last sentence in the first paragraph is incomplete.

Weston: *Sentence was revised to read “Of these, 21 sites are located upstream of the Agua Hedionda Creek MLS and downstream of any reservoirs”*

68. City of Encinitas: Section 6.2.5.2 Escondido Creek Dry Weather Data, page 6-25: Table 6-11 reads “2004 Dry Weather...” and should be for 2005 data.

Weston: *Table heading was changed from “2004” to “2005”.*

69. City of Encinitas: General Comment Regarding Dry Weather Sections:

For the WURMP analysis, it would be helpful if you would provide tables listing the dry weather sites included in the analyses. For example, the City of Encinitas monitors a site at the MLS on Escondido Creek during dry weather, and it is unclear if this site is used in Weston’s assessment.

Weston: *A new appendix was created that includes all dry weather monitoring sites included in the analysis, listed by co-permittee. It should be noted that sites without data were not included in the analysis or appendix. This means that the appendix is not a comprehensive list of all potential dry weather sites, but a list of only sites included in the analysis.*

70. City of Encinitas: Section 6.2.7 TIEs, page 6-28: Pyrethroids will be added to the monitoring under Order 2006-0011. Is there any justification for hypothesizing that the toxicity is from these pesticides other than Chollas? These are two very different systems. This hypothesis is also different from the conclusions from the SEM:AVS ratio analysis presented on page 6-44 and from the conclusions of the Triad Approach presented in Table 14-2. Please remove from discussion.

Weston: *We agree that they are different systems. However, toxicity to *H. azteca* has been observed at Agua Hedionda more frequently. Based on the historical results of diazinon in Agua Hedionda and the observed trends in Chollas in terms of pesticide use and the TIE results, if toxicity is observed to *H. azteca*, it may be explained if pyrethroids are present and may prevent the need to perform TIEs.*

Observed toxicity in the lagoon sediments is a separate data analysis and discussion from the water column toxicity.

71. City of Encinitas: Section 6.5.4 Water Quality Priority Ratings for the Carlsbad WMA, Tables 6-35 (page 6-65), 6-36 (page 6-66), and 6-37 (page 6-67):

These tables were developed through the BLTEA and designed as a management tool to assist in tracking/locating potential sources of pollutants in the watershed. The lists were developed based on inventories and are not founded on scientific data. It seems that moving from water quality data and analyses to source identification is useful, however these tables may not be comprehensive enough or scientifically based enough to be entirely valid. For example, the list for sediment sources includes mobile automobile or vehicle washing as a likely source of sediment. This potential source is not founded. There are several others on each list of this nature. In addition, these lists do not include natural loading for any of the constituents. Recent studies by SCCWRP have shown equivalent sediment and nutrient loads in natural systems when compared to developed systems, during wet weather. Bacteria is similar, in that natural loading accounts for significant amounts of pollutants. These tables do not include these types of sources and are incomplete. These tables are included in the BLTEA which has been submitted to the RWQCB previously and are available to managers and regulators presently. For a lack of scientific validity and a lack of completeness, the tables should be excluded from the report.

If it is determined that the tables will be included in the report, the titles of the tables need to be changed. Currently the titles state "Agua Hedionda WMA" and should be "Carlsbad WMA". In addition, a footnote should be added to address the points mentioned above regarding the non-comprehensive and somewhat unsubstantiated nature of the tables.

Weston: *The titles of the respective tables have been changed to reflect the Carlsbad WMA. Additionally, text has been added to adequately describe the purpose of inclusion of the tables and the limitations of the BLTEA process.*

72. City of Encinitas: Section 6.6 Conclusions and Recommendations, page 6-68:

This section should be modified to reflect any changes made in Section 6. Of particular note is the statement regarding load exceedances related to EMC and WQO loading calculations and statements regarding the SEM:AVS ratios.

Weston: *Conclusions and recommendations were changed as needed and based on other comments received.*

73. City of Encinitas: Section 13.1.1 Statistical Analysis, page 13-5: It is stated that the past four years of data are used in the analysis, but it appear that five years of data are actually included. The same error is made in the last paragraph on page 13-30.

Weston: *Updated text from four years to five years.*

74. City of Encinitas: Section Figure 13-1, page 13-7: The 2005/06 data point for AHC TSS appears low. The mean TSS at AHC for 2005/06 storms was over 1000 mg/l, or ten times the WQO.

Weston: *Figure was updated to include 1000 mg/L at AHC.*

75. City of Encinitas: Section 13.2 Storm Water Modeling, page 13-31:

- a) In describing the figures presented in this section, paragraph 3 states that the figures compare estimated annual concentrations of pollutants. In looking at the figures, it seems that only storm event concentrations can be tracked at this time. If the calculations do not include dry weather estimates, the titles of the figures should be modified to indicate that state that these are annual storm event estimates and not total annual loads. If these are in fact total annual loads, some explanation of the dry weather modeling should be included. This would have significant impacts where particular pollutants are found to be significant in dry weather flows.
- b) Do the calculations in the National Stormwater Quality Data Base account for any natural loading based on geologic formations? For instance, the sedimentary formations have been shown to contribute significantly to minerals, i.e. TDS, and to TSS. Inclusion in the land use based estimates may significantly increase these expected concentrations where open space is a significant contributor to the land use.

Weston: *Titles of the figures were revised to indicate wet weather loads rather than annual loads. Natural loading is accounted for in the NSQ database. The source of the data will be discussed in more detail.*

76. City of Encinitas: Section 13.6 Dry Weather Data Analysis Results, Page 13-66,

paragraph 2 and Table 13-7: Table 13-7 and the preceding discussion do not provide useful information when looking at exceedance data. Without normalization of the data, the comparisons of exceedances per watershed are meaningless and do not necessarily provide an equitable representation of the dry weather data. The discussion on the following page is sufficient, where the data is normalized. Table 13-7 and the preceding discussion should be removed or changed to include normalization of the exceedance data.

Weston: *Deleted the specific references to percent exceedence from section, and added total number of samples and action levels to table 13-7.*

77. City of Encinitas: Section 13.6, Page 13-67, Table 13-8: How are exceedances for conductivity and turbidity calculated? According to established dry weather action levels, both are listed as best professional judgment.

Weston: *Text in section 13.6 was updated to indicate where the action levels for exceedence were obtained. Turbidity action levels are from the San Diego Basin plan (20NTU) and the conductivity action level is based on the IC/ID initiation value of 5000 us/cm. The Dry Weather Workgroup list of Action levels [DW Monitoring Field Sheet (4/19/2006)] states that "Values > 5 mS/cm may indicate IC/ID, however; EC may be highly elevated in some regions due to high-TDS groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values < 0.75 mS/cm may indicate excessive potable water discharge or flushing" Additionally, these values were presented in the 2002-03 Co-Permittee Stormwater Report (MEC 2003) as the action levels used to calculate exceedence ratios. A conductivity of 5 ms/cm was adopted region-wide to provide regional comparisons.*

78. City of Encinitas: Section 13.6, Tables 13-9 (page 13-67) and Table 13-11 (page 13-70): In each table, the % of Total Exceedances column can be misleading, as the data is not normalized. There is no way to tell if the reason for residential areas and outlet structures accounting for the majority of the exceedances is due to a greater number of sample locations in these areas. Normalizing the data by dividing the number of exceedances by the number of samples collected or the number of analysis to get a percentage provides a more valuable representation of the data and should be used instead. These tables would be more helpful if represented as in Figure 13-39, page 13-71.

Weston: *The number of sites for each land use and conveyance type were included in tables 13-9 and 13-11. This will enable the reader to determine the proportion of samples for each type. Text was also updated to make inferences about the proportion of samples from each land use or conveyance and how that may have affected the proportion results. It should also be noted that the percentage of total exceedances is a relative proportion of samples per all exceedances.*

79. City of Encinitas: Section 14.3 Recommendations, page 14-20: The Copermittees will be required to implement a monitoring program for pyrethroids under the upcoming permit, Order 2006-0011. Has there been a more recent agreement to include monitoring for pyrethroids in this years monitoring?

Weston: *Synthetic pyrethroid analysis is being performed during the 2006-07 monitoring season in samples from Chollas Creek, Tecolote Creek, and Agua Hedionda. This is performed for sites with more frequent toxicity results for H. azteca and sites with historically higher detections for diazinon.*

80. Port of San Diego: General Comment: The use of the term “Constituent of Concern” is not consistent throughout the report and does not conform with the Copermittees’ agreed upon definition. COC are those constituents determined to have a high frequency of occurrence within a watershed, or for which there is other information to indicate the constituent may contribute to water quality problems within a watershed. Language in the draft report must be modified to support this definition. For example, on page ES-2, the first paragraph incorrectly identifies all stormwater constituents as COC.

Weston: *Discussion where wording was used incorrectly was changed throughout the document. The term constituent is used to describe analytical tests (e.g. parameter, analyte, etc...). The term constituent of concern or the abbreviation (COC) was corrected where used inappropriately. However, the term “constituent of concern” or “COC” is used to describe any analytical test that is identified as having either a low, medium, or high frequency of occurrence based on the Watershed Assessment Framework Methodology developed with the Copermittees.*

81. Port of San Diego: General Comment: Where appropriate, language in the draft report must clearly identify instances where statistically significant trends fall below the WQO.

Weston: *Instances where statistically significant trends fall below the WQO have been clearly identified.*

82. Port of San Diego: General Comment: The Port is referenced as both the Port of San Diego and as the San Diego Unified Port District. Please check language throughout the report to ensure the Port is consistently referred to as the Port of San Diego.

Weston: *References to the San Diego Unified Port District were changed to the Port of San Diego.*

83. Port of San Diego: The Stormwater Monitoring Summary for the San Diego Bay WMA on page ES-17 needs additional clarification and organization. The Pueblo San Diego Watershed contains more than just the Chollas sub-watershed, as described in the first sentence of this paragraph. The fourth sentence describing shifts in the use of pesticides and shifts in observed toxicity is confusing. Please clearly define the shifts in pesticide use and observed toxicity that are referred to in this sentence (i.e., how is pesticide use and/or observed toxicity changing?). Finally, the third paragraph is very confusing. The second sentence references the increasing trend in the acute and survival endpoints for *C. dubia*, but it is difficult to determine whether the increasing trend is good or bad. This paragraph provides a lot of information relating to diazinon and pyrethroid pesticides, but provides no explanation for any of the other trends mentioned in the first and last sentences. Additional explanation of the other observed trends is needed.

Weston: *The first sentence was deleted as it was described in the previous paragraph. The fourth sentence elaborated on the observed shift in pesticide usage, since diazinon has decreased to a low frequency of occurrence COC. The third paragraph was revised to add clarification and expand on other trends observed. Also see comment #92.*

84. Port of San Diego: Results of the long-term trend analyses do not indicate a significant decreasing trend for diazinon in the Chollas Creek sub-watershed, and data presented in different sections of the report seem contradictory. Figure 11-3 contains data ranging from 1998 through 2006 and seems to clearly indicate a decreasing trend. Figure 13-5 contains data from 2001 through 2006 and also depicts a decreasing trend. The scatter plot on page 27 of Appendix C, however, contains data points near zero (year 2000 – 2002), which may explain why a statistically significant trend was not reported. Please confirm that the data in these figures are correct.

Weston: *Detection limits from historical data were updated for the trend calculation, and Figure 13-5 and Appendix C updated to reflect the change. Figure 11-3 is correct as presented.*

85. Port of San Diego: The second sentence of the last paragraph on page 11-6 references a report describing COC for the Pueblo San Diego Watershed (San Diego County, 2002). This reference, however, is not included in the literature-cited section.

Weston: *Also see comment # 43. This was updated to 2006 and added to the references section.*

86. Port of San Diego: In Figure 11-8, the symbols representing dry weather field and analytical samples are reversed from what is described in the last paragraph on page 11-39.

Weston: *See comment #1. Symbol references were corrected.*

87. Port of San Diego: The first paragraph of Section 11.2.8, Watershed Water Quality Monitoring Summary, on page 11-41 needs additional clarification. First, the Pueblo San Diego Watershed contains more than just the Chollas sub-watershed, as described in the first sentence of this paragraph. Second, the fourth sentence describing shifts in the use of pesticides and shifts in observed toxicity is confusing. Please clearly define the shifts in pesticide use and observed toxicity that are referred to in this sentence (i.e., how is pesticide use and/or observed toxicity changing?). Finally, while this section is entitled “Watershed Water Quality Monitoring Summary,” it only summarizes the MLS data. It seems appropriate in this section to summarize all monitoring data included in Section 11.2.

Weston: *See comments #92 and 83. 1. Reworded to Pueblo Watershed only. 2. Pesticide shift discussion was expanded. 3. The section summarized TIE and SWAMP data only. The dry weather summary was also added.*

88. Port of San Diego: In the “Water Quality Priority Ratings for the San Diego Bay WMA” on page 11-69, the last paragraph recommends adding several new constituents to the annual monitoring program. While additional monitoring may be warranted in isolated areas, it is premature to add these constituents to the monitoring program for the entire San Diego Bay WMA. Therefore, the deletion of the third and fourth sentences in the paragraph is recommended.

Weston: *Sentences were deleted as requested.*

89. Port of San Diego: The last two sentences of the third paragraph of Section 13.2.1 (page 13-31) state that land use is the primary factor influencing water quality. Please describe other factors that were analyzed as part of the stormwater model and how they were determined not to influence water quality. In addition, the last two sentences of the fourth paragraph state that when estimated values are greater than measured values, it may be a result of BMPs within the watershed. This seems like an over simplification of the modeling results and provides little meaningful information. Additional insight on the significance of comparing measured values within the San Diego region to national averages of stormwater data, and the meaning of those differences, would be helpful.

Weston: *Items were reworded to state that land use is the most sensitive variable in this model. The discussion of the connection between BMPs and the model was removed. Additional information was provided on the NWQ database and the San Diego Region.*

90. Port of San Diego: Additional clarification is needed in the static stormwater-modeling summary on page 13-41. Although the first paragraph states that the model may be used as a predictive tool to estimate improvements to water quality resulting from different BMPs, it is not clear how this would be done, or whether the Copermittees have or are collecting the information necessary for such an analysis. In addition, it is unclear how the model supports the “intuitive concepts” listed here.

Weston: *The discussion of the connection between BMPs and the model was removed.*

91. Port of San Diego: The first paragraph of Section 13.6 on page 13-66 associates water quality objectives (WQO) with the dry weather monitoring (DWM) program. The DWM program has no WQO, and all such references should be changed to dry weather action levels.

Weston: *WQO was changed to action levels accordingly.*

92. City of National City: In Section 11 (e.g., pg 11-41 and pg 11-66) and the Executive Summary (.e.g., pg ES-17), the report states that the SD Bay WMA is made up of the Sweetwater Watershed, the Otay Watershed, and the Chollas sub-watershed within the Pueblo San Diego Watershed. This implies that some parts of the Pueblo San Diego Watershed are not included in the SD Bay WMA. The text should state that the SD Bay WMA is made up of the Sweetwater Watershed, the Otay Watershed, and the Pueblo San Diego Watershed.

Weston: *See comments 83 and 87. The text was revised to indicate the Pueblo Watershed only.*

93. City of National City: Pg 11-3, last paragraph. National City is not in the Otay HU. Please delete National City from the list of jurisdictions in the Otay HU.

Weston: *National City was removed as requested.*

94. City of National City: Pg 11-7, bulleted list of TMDLs adopted or under development. Please add the following (or similar text): “TMDLs for the mouths of Chollas Creek, Paleta Creek (Seventh Street Channel), and Switzer Creek are under development. These TMDLs are generally related to sediment toxicity.”

Weston: *TMDL item was added as requested.*

95. City of National City: Pg 11-12, third paragraph. The first sentence should read “The third storm monitored at the **Chollas Creek** MLS...”

Weston: *Sentence was corrected. The second storm event did not produce sufficient rainfall. Therefore, the third storm event was the second fully monitored storm.*

96. City of National City: Pg 11-22, bulleted list. It appears that some of the listed frequencies of occurrence (percentages) do not match the numbers in parentheses. For example, TSS says “73% (n=30/40).” Similarly, in the text two paragraphs below, the fecal coliform exceedance rate should be 84%, and on page 11-24, “32 of 27 monitoring events” is listed as 92% when it should be 87%. Other percentages should probably also be checked to ensure they are correct.

Weston: *Percentages were checked for accuracy and corrected.*

97. City of National City: On pg 11-26, second paragraph, and pg 11-67, sixth paragraph, please add text (could use same text as on page 11-58) to the effect that although increasing trends were observed for pH and total and dissolved phosphorus, no WQO exceedances have been observed for those constituents in the five years of wet weather monitoring at the Sweetwater MLS.

Weston: *Sentence was added to both paragraphs as requested.*

98. City of National City: On pg 11-26, second paragraph from bottom, the first clause in the sentence beginning “Toxicity to the freshwater...” appears to be missing a couple words.

Weston: *The sentence was corrected by adding “algae S. capricornutum”.*

99. City of National City: The phrase “elevated TDS or other ions comprising TDS” appears several times in reference to the Sweetwater River TIE. Is this phrase intended to mean the cause could be either (a) elevated TDS (i.e., all ions that make up TDS as a collective entity) or (b) perhaps not all ions that make up TDS but rather just certain specific ions within the overall group that makes up TDS?

Weston: *The cause of toxicity was likely associated with elevated TDS. High TDS may cause toxicity to S. capricornutum and may be due to single or multiple ions comprising TDS. An example could be due to elevated sodium chloride alone or due to multiple ions such as sodium, magnesium, manganese, aluminum, calcium, chloride, and sulfate combined. The analytes listed above were not measured under this program. Since toxicity was evident in only one sample event, additional TIEs were not performed.*

100. City of National City: Pg 11-35, first paragraph. Revise sentence stating “...by each jurisdiction in their annual jurisdictional urban runoff monitoring report (JURMP)” to “...by each jurisdiction in its Jurisdictional Urban Runoff Management Program (JURMP) Annual Report.”

Weston: *Sentence was corrected and added to each WMA section.*

101. City of National City: Pg 11-44, last paragraph. First sentence should probably read "...may have contained constituents that affected the bioassessment site."

Weston: *Sentence was corrected.*

102. City of National City: Pg 11-59, last paragraph. Please consider revising as follows:

- Revise the sentence beginning with "A TIE was performed..." to read "A TIE was performed for the first storm event of the 2005-2006 monitoring season."
- After the sentence beginning with "Results were not conclusive..." add a sentence along the lines of "No toxicity was observed in the second and third storm events of the 2005-2006 storm season."
- Move the sentence beginning with "historical data evaluations have shown..." to the end of the paragraph.

Weston: *Sentences were revised as requested.*

103. City of National City: Pg 11-47, last paragraph of Section 11.3.1 states "toxicity to *Selenastrum capricornutum* has been an issue at the site, and may indicate that water quality could prevent the colonization of highly sensitive organisms." This sentence seems to be somewhat in conflict with the conclusion that "Historical data evaluations have shown that toxicity to *Selenastrum capricornutum* is no longer persistent" and should be rephrased or deleted.

Weston: *Toxicity to S. Capricornutum has been an issue in previous years in storm water. While no longer considered "persistent" it may still be an indicator that water quality may prevent the colonization of highly sensitive organisms.*

104. City of National City: Pg 11-69, last paragraph. Please delete the sentence beginning with "the parameters organochlorine pesticides...should be added to the annual constituent list..." and the following sentence, as the 2006 303(d) list is not yet in effect.

Weston: *Sentence was deleted. Also see comment #88.*

105. City of National City: Section 13.6 (Dry Weather Data):

(Some comments may also apply to dry weather data discussions in WMA sections)

The methods section does explain that the turbidity exceedances were calculated based on the more stringent Basin Plan WQO, not the dry weather action level, because the dry weather action level is not numeric (i.e., best professional judgment). This results in a higher percent exceedance than reported by jurisdictional dry weather programs. It would be helpful to add some text that again reminds the reader of this information in Section 13.6 when turbidity exceedance rates are being discussed, at minimum for the conclusions in Section 13.6.1 and perhaps as footnotes to the tables.

Weston: *Updated table 13-7 to include action levels. Also inserted text into section 13.6 to reflect where the turbidity action level is taken from, as well as the rationale behind using a conductivity action level of 5000 us/cm. This action level is based on the result necessary to initiate an IC/ID follow-up investigation.*

106. City of National City: Section 13.6 (Dry Weather Data): The action level for conductivity is “best professional judgment.” A number of conductivity exceedances are noted in the tables in Section 13.6. Was a numeric action level applied to determine the number of exceedances (similar to process used for turbidity), or is the number of exceedances based on talking to Copermittees and finding which data points they considered to be action level exceedances? If a numeric action level was used, what was it?

Weston: *See comment response #78.*

107. City of National City: Section 13.6 (Dry Weather Data): When calculating the numbers of exceedances, were follow-up (“IC/ID”) visits excluded or included? Most likely they were excluded to avoid skewing the percent exceedances toward the high end (because more samples would be present for the sites that had exceedances than for the sites that did not have exceedances), but it would be helpful to add a sentence or two clarifying the procedure.

Weston: *Only dry weather monitoring results were included in the analysis. Text in section 13.6 was updated to indicate this.*

108. City of National City: Section 13.6 (Dry Weather Data): Adding a “percent of total sites” column to tables 13-9 and 13-11 would be helpful.

Weston: *Added a column for total number of samples for each land use and conveyance to tables 13-9 and 13-11. This will enable the reader to determine how sample size may have affected %total exceedence.*

109. City of National City: Section 13.6 (Dry Weather Data): Exceedance rate ranking...” or something similar may be a more appropriate title for Table 13-10.

Weston: *Updated title to “Constituent exceedance ranking by land use category (2002 – 2005 dry weather monitoring data).*

110. City of National City: Section 13.6 (Dry Weather Data): Section 13.6.1 of the report refers to total coliform as the “constituent of greatest concern for all land uses and conveyance types.” While total coliform does have the highest exceedance rate, it is doubtful that it is the constituent of greatest concern.

Weston: *Updated text to indicate that total coliform is the constituent with the greatest number of exceedences for both land uses and conveyance types.*

111. City of National City: Global or Affects Multiple Sections: In sections discussing dry weather monitoring, the term “WQO” is sometimes erroneously used in place of “action level.”

Weston: *Updated WQO to action levels.*

112. City of National City: Global or Affects Multiple Sections: Pollutant Load Estimates (Measured EMC compared to WQO load)

- These loads are based on measured pollutant concentrations (C) or the WQO and flow rates (Q) for the three monitored storms at each MLS. Are calculations based on average flow times average pollutant concentration, e.g., $((Q_1+Q_2+Q_3)/3)*((C_1+C_2+C_3)/3)$, average load, e.g., $((Q_1C_1)+(Q_2C_2)+(Q_3C_3)/3)$, or a different approach? It would be helpful if the report could clarify the methodology, as results from the two different methods shown above would give different numbers.
- It appears that the same flow is used when calculating the measured (EMC based) load and the WQO load. Therefore, any difference between the load estimates based on the measured EMC and those based on the WQO is solely due to differences between the EMC and the WQO. If that is that case, then it would seem that the ratio of the EMC load to the WQO load should be the same as the ratio of the EMC to the WQO, since the flow values would cancel out (i.e., $(C_{EMC}*Q)/(C_{WQO}*Q)=(C_{EMC}/C_{WQO})$). In some cases, though, the ratio of the mean (measured) load to the mean WQO load is not the same as the ratio between the measured EMCs and the WQO. For example, for the Sweetwater River the mean (measured) TDS load for 2005-2006 is about four times the mean WQO load, but the mean of the EMCs measured in 2005-06 for TDS is about 1.5 times the WQO. Perhaps including more information about calculation methods would explain how this can be the case.

Weston: *The EMC Loads were calculated for each storm separately, using the volume of water measured during each storm with the EMC measured for that same storm. This allowed derivation of the of the load variance. The WQO loads were calculated based on the relevant water quality standard and the mean volume of water for all of three of the storm events. Algebraically these loads are different.*

113. City of National City: Global or Affects Multiple Sections: Pollutant Load Modeling (Comparison with NSQD data based load estimates)

- Section 13 refers to measured and modeled annual loads. It appears that these loads are for loads from rain events only (wet weather). The methods section states that the measured loads were calculated using concentrations found during the 2005-06 storm season. It appears that the loads presented in Section 13 are for the entire wet season, not just for the three monitored storms. If that is true, then it seems the measured load may have been estimated by applying the

- measured concentrations from three storms (via average or median EMC across the three storms) to all storms during the year and is not a completely direct measurement based method. It would be helpful to include some clarification on the method used in this instance, and it may be advisable to title the figures “Estimated Annual Wet Weather [Pollutant Name] Load” or something similar rather than “Annual [Pollutant Name] Load.”
- The comparison between hypothetical, land use based modeled loads and measured loads appears intended to help evaluate whether pollutant discharges to MLS are higher or lower than what might be expected. To properly make such judgments, it would be helpful to have some understanding of the inherent uncertainty associated with the modeling and load estimation methods. This would help with judging whether differences between modeled and measured loads are large enough to be deemed potentially significant. If possible, please include some information about the level of uncertainty associated with the load estimates in this section.
 - It may be helpful to include in the methods sections a list of the runoff coefficients (C) assigned to the different land use values for modeling purposes.

Weston: *Figures were revised to indicate wet weather loads. More information will be included to discuss uncertainty. The runoff coefficients used will be discussed in the methods section.*

114. City of National City: Global or Affects Multiple Sections: The third sentence of the first paragraph on page 13-88 states, “Of particular note is the notable decline in Diazinon exceedances and the significant decreasing trends as a result of the EPA ban on this pesticide.” Although the ban likely influenced diazinon concentrations in recent stormwater samples, it is likely not the only factor in the decreasing trends. Please add language stating that factors other than the EPA ban may have impacted diazinon concentrations.

Weston: *Added education and outreach efforts.*

115. City of Santee: Page 1-3, Section 1.2.1, Paragraph 2, Sentence 3: Change the word “utilized” to “used”. **Paragraph 2: Comments on land use sampling station sites and mass loading sites:** “Where are these? Would it be helpful to put a Thomas Guide Reference or name the jurisdictions where they are located? Otherwise it is not useful to the reader. Refer to the figure where these locations are shown.”

Weston: *Changed “utilized” to “used” as requested. Referenced figure 1-1.*

116. City of Santee: Page 1-4, Section 1.2.2, Paragraph 2, Bullet 1, Sentence 1: Delete the word “important”. **Comment:** Superfluous (RWQCB thinks they’re all important).

Weston: *Deleted the word “important”.*

117. City of Santee: Page 1-9, Section 1.2.6.1, Paragraph 6, Sentences 3 and 4: Change the word “utilized” to “used” in both sentences.

Weston: *Changed “utilized” to “used” as requested*

118. City of Santee: Page 1-11, Paragraph 1, last sentence: Change “questions and answers” to “the information”.

Weston: *Changed as requested.*

119. City of Santee: Page 1-12, Section 1.2.8: Change the word “storm” to “wet”.

Weston: *Changed as requested.*

120. City of Santee: Page 1-14, Section 1.2.9.1, Paragraph 2, Sentence 1: Change “ELISA methodology” to “the ELISA method”.

Weston: *Changed as requested.*

121. City of Santee: Page 1-15, Section 1.2.9.3, Sentence 3: Change “utilized for analysis” to “used for assessment”.

Weston: *Changed as requested.*

122. City of Santee: Page 1-16, Section 1.3, Paragraph 2, Sentence 2: Delete “needed as a result of public comments received by the regional board”. The sentence should read “A second revision was prepared in June 2006.”

Weston: *Changed as requested.*

123. City of Santee: Page 1-21, Section 1.3.3, Paragraph 1, Sentence 1: Change “nearly the same” to “similar” and add the word “but” before the word “with”. **Sentence 2:** Change the word “utilized” to “used”. **Section 1.3.5, Paragraph 1, Sentence 2:** Change the word “utilized” to “used”.

Weston: *Changed as requested.*

124. City of Santee: Page 14-5, Section 14.1.1.3, Paragraph 2, Sentence 2: Change the word “measurement” to “measurements”.

Weston: *Changed as requested.*

125. City of Santee: Page 14-3, Section 14.1.4.7, Paragraph 1: Comment on Last Sentence: This is a positive? Maybe that needs to be stated (plus in WMA section).

Weston: *Added wording to clarify priority ratings.*

126. City of Santee: Page 14-17, Section 14.2, Paragraph 1, Sentence 1: Change “issuance” to “issue process”. **Sentence 3:** Change “put forth” to “presented”.

Weston: *Changed as requested.*

127. City of Santee: Page 14-18, Paragraph 3, Sentence 2: Change the word “utilizes” to “uses”.

Weston: *Changed as requested.*

128. City of Santee: Page 14-22, Section 14.3.2, Paragraph 1, Sentence 2: Change the word “programmatic” to “program”.

Weston: *Changed as requested.*

129. City of Santee: Page 14-23, Paragraph 1, Sentence 2: Add the word “program” before the word “managers”. **Paragraph 2, Sentence 3:** Change the word “reside” to “are”. **Paragraph 5, Sentence 1:** Change “programmatic specific” to “program-specific”.

Weston: *Changed as requested.*

130. County of San Diego: General Comments: Please, include PCBs, PAHs and Pesticides (if detected) results in the Summary of Chemistry, Toxicity and Benthic Community Structure tables for each watershed section. Also, capitalize the table titles.

Weston: *Tables will be changed to include PCBs, PAHs and Pesticides (if detected) and the table titles capitalized. See comments #148,149.*

131. County of San Diego: General Comments: Please include O/E ratios in Tables presenting Selected Biological Metrics and Physical Measures for each watershed section.

Weston: *A row with O/E values was added to each WMA section table.*

132. County of San Diego: General Comments: In the “Water Quality and Priority Ratings” for each watershed, clarify/elaborate on the statement: *“The dissolved minerals category did not exist in the BLTEA report and was developed to address constituents that*

did not apply to the other constituent categories and to better assess the sediment category.” - How does it better address constituents that did not apply to the other constituent categories? How does it contribute to the better assessment of the sediment category?

Weston: TDS was previously included in the sediment category. TDS is a measurement of dissolved minerals. There are several 303(d) listings for TDS and other mineral elements that do not fit the other categories in the LTEA method. This may need to be discussed within the monitoring workgroup to determine the appropriate categories.

133. County of San Diego: ABLM Assessment Report Appendix J, Section 4.0-

Conclusions: Please consider modifying the first two sentence to: Based on the sediment chemistry and toxicology results, the overall health of sediments throughout San Diego County is good. However, the benthic infauna scores do not follow this trend and generally only fair.

Weston: As shown in Figure 3-1 of Appendix J, 50% of the toxicity and 39% of the chemistry observations over the three year period were classified as "good". Conversely, 50% of the toxicity and 61% of the chemistry observations were classified as either "fair" or "poor". An overall assessment of "fair" is appropriate.

134. County of San Diego: ABLM Assessment Report Appendix J, Section 5.0

Recommendations: Delete second paragraph that begins with “In addition to the Bight program....”

Weston: This paragraph was deleted as requested.

135. County of San Diego: Executive Summary, ES.2.1 Storm Water Methods:

Remove only from the last line.

Weston: Removed “only” as requested.

136. County of San Diego: Executive Summary, ES-7 Recommendations: Remove.

These are items that would need to be discussed with Copermitees and are inappropriate to have in this report. Replace with: “The recommended actions from the triad assessments are summarized in Section?. (ARE THERE any recommendations for TIES? Based on TIE results, pyrethroids will be monitored at the following three locations Chollas.....(complete).All watersheds should continue water quality monitoring to gather long-term trend information. Under the new permit, additional upstream monitoring stations will provide increased spatial coverage and provide a linkage with the jurisdictional IC/ID program and complement the TMDLs efforts.

Weston: Changed section as requested and added TIE and pyrethroid recommendations from section 14.3.

137. County of San Diego: Section 14- Conclusions and Recommendations:

Please delete references to the Lagoon 13267 Order. This is not part of the regional Monitoring Program and may cause confusion.

Weston: *Deleted references to the Lagoon 13267 letter.*

138. County of San Diego: Section 14- Conclusions and Recommendations:
Modify 14.3.2- 2007 – 2010 Recommendations to Recommendations

Weston: *Modified as requested.*

139. County of San Diego: Section 14- Conclusions and Recommendations: Remove current section except for the one paragraph on the ABLM program and add the info recommended for the Conclusions to the Executive Summary.

Weston: *Modified as requested and added ABLM info to the Executive Summary.*

140. County of San Diego: Section 4. Santa Margarita WMA, p. 4-10: Why was there no mention of Unionized Ammonia? Table 4-3 shows 33% frequency above WQO with concentration above 25 ug/L in 2001-2002.

Weston: *The estimate of unionized ammonia was made for an undetectable concentration of ammonia measured with an extremely high detection limit. The unionized ammonia was estimated for a concentration of 4 mg/L which is much higher than any measured concentrations reported for this MLS. The estimate has been changed to NA and no exceedance of WQO for unionized ammonia is noted.*

141. County of San Diego: Section 4. Santa Margarita, p. 4-10, last paragraph, starting with the 3rd sentence: “The largest single exceedance was for turbidity, which exceeded the WQO by 17 times during the February 28, 2006 storm event. The second single largest exceedance was for TSS, which exceeded the WQO by 5 times. (...) The largest average exceedances were for turbidity and TSS, which exceeded the WQO by approximately 16 and 7 times, respectively.” Please change to: “During the February 28, 2006 storm event, turbidity exceeded WQO more often than the remaining COCs: 17 times. The total suspended solids were second; they exceeded their WQO 5 times. (...) The highest average exceedances for Oct 01 through Apr 05 were also in turbidity and TSS, the levels of which were found 16 and 7 times above WQOs respectively.”

Weston: *Replaced sentences as suggested.*

142. County of San Diego: Section 4. p. 4-12, 2nd paragraph, 2nd sentence: “This comparison shows that fecal coliform, total copper, total lead, dissolved copper and

dissolved lead calculated loads were above the WQO load.” TSS is not mentioned but table 4-4 shows exceedance. This exceedance also not highlighted in table 4-4.

Weston: *Highlighted TSS in table, and made reference to the result in the text.*

143. County of San Diego: Section 4. p. 4-13, second paragraph: The color of the bars in Figure 4-4 are not red and blue; please update colors on Figure 4-4 or modify discussion.

Weston: *Text references to color were modified in all sections. The legend in the figure is used to explain the information presented.*

144. County of San Diego: Section 4. p. 4-13, last paragraph, 1st sentence: “Loads based on measured concentrations were all higher than those based on modeled land use concentrations, ...” This statement is not true. Figure 4-4 shows four COCs with measured loads higher than or approximately equal to the measured loads.

Weston: *Text was corrected.*

145. County of San Diego: Section 4. p. 4-16, Figure 4-6

The pie has no colored slices....

Weston: *The sentences: “Pie symbols appear at dry weather stations that have had water quality objective exceedances. The colored slices of the pie show the different constituent groups that contributed to the exceedances” were removed.*

146. County of San Diego: Section 4. p. 4-20, first sentence states:

*“The benthic community was dominated in the October survey by the Hydropsychid caddisflies Hydropsyche and Cheumatopsyche, and the damselfly Argia (**Error! Reference source not found.**)”*

Table 4-8 indicates that *Argia* constituted only 5% of the community. *Baetis*, which also constituted 5% is not mentioned. Please, remove *Argia* from this statement.

Weston: *This description was corrected to include Chironomids and Hydropsychids as the dominant organisms.*

147. County of San Diego: Section 4. p. 4-20, 4th sentence states:

“The percent of Hydropsychid caddisflies decreased from about 40 percent of the community in October to about 2 percent in May, while the percent Baetid mayflies increased from about 8 percent to 45 percent of the community.”

These percentages do not match table 4-8.

Weston: *The values in the description were correct, but were calculated from appendix tables that do not list the actual percentages. The text was changed to reflect number of individuals, and reference to the appropriate appendix tables was added.*

148. County of San Diego: Section 4. p. 4-26, Table 4-10: It would be nice to have data for PCBs, PAHs and Pesticides also presented in this table.

Weston: *Tables were changed to include PCBs, PAHs and Pesticides (if detected). See comments #130, 149.*

149. County of San Diego: Section 4. p. 4-30, Table 4-13: It would be nice to have data for PCBs, PAHs and Pesticides also presented in this table.

Weston: *Tables were changed to include PCBs, PAHs and Pesticides (if detected). See comments #130, 148.*

150. County of San Diego: Section 4. p. 4-31, 6th paragraph, 3rd sentence states:

“Among the three sites assessed in Oceanside Harbor during the 2005 Program, Site 2L-3 had the greatest abundance and species richness, but Site 3M-1 had the greatest diversity and dominance.”

According to Table 4-14, dominance was equal for 3M-I and 3R-I.... Replace the above sentence with the following:

“Among the three sites assessed in Oceanside Harbor during the 2005 Program, Site 2L-3 had the greatest abundance and species richness, but Site 3M-1 had the greatest diversity.”

Weston: *Replaced as requested.*

151. County of San Diego: Section 4. p. 4-36, Figure 4-12.

The stacked bar for 200/2004 should have “1” not “0” label for pesticides. Also remove all “0” from the X-axis.

Weston: *Figure was corrected in all WMAs. See comment #9.*

152. County of San Diego: Section 4. p. 4-39, Table 4-20- in a footnote to this table- please make clear the limitations of this table and cite the source.

Weston: *See comment #71. Footnote was added and discussion of limitations was added.*

153. County of San Diego: Section 4. p. 4-40, 4th paragraph, 1st sentence:

“Loads based on measured concentrations were all higher than those based on modeled land use concentrations, ...”

This statement is not true. Figure 4-4 shows four COCs with modeled loads higher than or approximately equal to the measured loads.

Weston: *Text was corrected.*

154. County of San Diego: Section 4. p. 4-41- last paragraph that continues into p. 4-41

Please delete all but the first two sentences of this paragraph.

Weston: *Paragraph was revised as requested.*

155. County of San Diego: Section 5. p. 5-3. First paragraph, fourth sentence:

“Land use within the watershed is classified primarily as undeveloped (39.6%). Other uses include agricultural (20.6%), tribal lands (13.4%) residential (11%), parks (8%), military (2.8%), and transportation (2.2%).”

Please, replace “11%” and “8%” with “11.3%” and “8.1%”

Weston: *Replaced “11%” and “8%” with “11.3%” and “8.1%”.*

156. County of San Diego: Section 5. p. 5-6, third paragraph, 7th sentence states:

“The storm produced a total of 0.64” of rainfall.”

This is inconsistent with table 5-3, which states that there was 0.62” of rainfall. Please, indicate correct value at both locations.

Weston: *Changed the 7th sentence to read 0.62” of rainfall.*

157. County of San Diego: Section 5. p. 5-10, 2nd paragraph:

“Conventional constituents that have had concentrations detected above their WQO historically include:

- *pH*
- *Biochemical Oxygen Demand (BOD)*
- *Total Suspended Solids (TSS)*
- *Turbidity”*

Please, add Diazinon to this list

Weston: *Diazinon is not a conventional constituent and is addressed with the other pesticides in the 5th paragraph.*

158. County of San Diego: Section 5. p. 514, first paragraph, second sentence states:

“Measured nitrate loads also appear high.”

Please, replace with:

“Measured nitrate and nitrite loads also appear high.”

Weston: *Replaced “Measured nitrate loads also appear high.” with “Measured nitrate and nitrite loads also appear high.”*

159. County of San Diego: Section 5. p. 5-16, first paragraph, second sentence states:

“Dry weather exceedances occurred for enterococci, fecal coliform, total coliform, ortho-phosphate, nitrate, and turbidity.”

There is no mention of pH and Ammonia that, according to Table 5-7 also showed exceedances.

Weston: *Changed sentence to read “Dry weather exceedances occurred for enterococci, fecal coliform, total coliform, ortho-phosphate, nitrate, ammonia, turbidity, and pH.”*

160. County of San Diego: Section 5. p. 5-16, 4th paragraph.

According to the table in Appendix H, there was also an exceedance in Turbidity but it is not mentioned in the text...

Weston: *Added a sentence “Turbidity was observed at a level above the WQO at the upstream San Luis Rey River site.”*

161. County of San Diego: Section 5. p. 5-26, 3rd paragraph, 1st sentence states:

*“Unlike(...)infauna community collected in the 2005 sampling of the San Luis Rey River Estuary was dominated by polychaetes, with **Polydora cornuta** and *Scoelepsis sp.* SD1 making up the majority...”*

Table 5-12 lists *Polydora nuchalis* not *Polydora cornuta*.

Weston: *Table 5-12 corrected to read “Polydora cornuta”. See comments #162,164.*

162. County of San Diego: Section 5. p. 5-27, last paragraph, second to last sentence states:

*“The benthic community was dominated by three polychaete worms: **Polydora cornuta**, **Scoelepsis sp. SD1**, and the **Capitella capitata complex**.”*

Table 5-12 lists *Polydora nuchalis* not *Polydora cornuta*.

Weston: [Table 5-12 corrected to read “Polydora cornuta”. See comments #161,164.](#)

163. County of San Diego: Section 5. p. 5-33- Tables 5-17 and 5-18: clearly state the limitations of these Source tables.

Weston: [Additional text has been added to adequately describe the purpose of inclusion of the tables and the limitations of the BLTEA process. Also see comments 13, 14, 16, 17, and 71.](#)

164. County of San Diego: Section 5. p. 5-36, first sentence states:

*“The benthic community was dominated by three polychaete worms: **Polydora cornuta**, **Scoelepsis sp. SD1**, and the **Capitella capitata complex**.”*

Table 5-12 lists *Polydora nuchalis* not *Polydora cornuta*.

Weston: [Table 5-12 corrected to read “Polydora cornuta”. See comments #161,162.](#)

165. County of San Diego: Section 5. p. 5-30, Figure 5-10:

Please, remove “0”s from the X-axis.

Weston: [Figure was corrected in all WMAs. See comment #9 and151.](#)

166. County of San Diego: Section 12, p. 12-7, section 12.2.1 states:

*“Three storm events were monitored at the MLS on Tijuana River during the 2004-2005 storm season. These storm events occurred on October 27, 2004, February 11 and 18, 2005. The results from these storms are discussed in the following section (12.2.1) and presented in **Error! Reference source not found**. A comparison of these results to previous years is provided in Section 12.2.2.”*

Should be revised to reflect 2005-2006 stormwater monitoring as follows:

“Three storm events were monitored at the MLS on Tijuana River during the 2005-2006 storm season. These storm events occurred on October 18, 2005, February 19 and 28, 2006. The results from these storms are discussed in the following section (12.2.1) and

presented in Table 12-3. A comparison of these results to previous years is provided in Section 12.2.2.”

Weston: *Text was revised.*

167. County of San Diego: Section 12, p. 12-13, last sentence reads:

*“For each of the three storm events, the mean and coefficient of variation were calculated and are reported in Table 12-5. **Error! Reference source not found.**”*

But table 12-5 has only one set of columns for the mean and cv (not three sets as it would be for each of the three storm events).

Weston: *The “cv” is the coefficient of variation, which is calculated by dividing the standard deviation by the mean. There is only one column for all three events because the standard deviation and mean are calculated by incorporating all three events.*

168. County of San Diego: Section 12, p. 12-16, section 12.2.5, second sentence reads:

“Dry weather monitoring reports are provided separately by each jurisdiction in their annual jurisdictional urban run off monitoring report (JURMP).”

Please change “run off” to “runoff”

Weston: *Text was revised in all sections. See comment #100.*

169. County of San Diego: Section 12, Page 12-22: In Table 12-8, the % Intolerant Taxa for Campo Creek Oct. '05 and May '06 should be rounded down to zero to agree with the text or the text should quote the actual percentages listed in this table. Also, “0” should be entered for Cobble for the Oct. '05 Campo Creek event.

Weston: *Highly intolerant organisms were collected at the site and the error in the text was corrected. Zero values for substrate composition were not entered in any of the tables throughout the report, so they were also left out of this table for consistency reasons.*

170. County of San Diego: Section 12, Page 12-32: fifth line from top of page should refer to Table 12-14, not Table 12-10. The data in the bar graph (Fig. 12-10) on p. 12-32 is consistent with the data in Table 12-10.

Weston: *Cross-reference to table was corrected.*

Thank you so much to everyone who took the time and effort to read and comment on this report. Your edits and comments will make this document more useful to all. On behalf of the entire team we appreciate the opportunity to work for you!

Sincerely,

A handwritten signature in black ink that reads "Lisa Marie Kay". The signature is written in a cursive, flowing style.

Lisa Marie Kay
Water Resources Practice Leader