



Los Angeles Regional Water Quality Control Board

October 29, 2014

Los Cerritos Channel Watershed Management Group
(See Distribution List)

REVIEW OF THE LOS CERRITOS CHANNEL WATERSHED MANAGEMENT GROUP'S DRAFT WATERSHED MANAGEMENT PROGRAM, PURSUANT TO PART VI.C OF THE LOS ANGELES COUNTY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT (NPDES PERMIT NO. CAS004001; ORDER NO. R4-2012-0175) AND PART VII.C OF THE LONG BEACH MS4 PERMIT (NPDES PERMIT NO. CAS004003; ORDER NO. R4-2014-0024)

Dear Los Cerritos Channel Watershed Management Group:

The Regional Water Board has reviewed the draft Watershed Management Program (WMP) submitted on June 30, 2014 by the Los Cerritos Channel Watershed Management Group. This program was submitted pursuant to the provisions of NPDES Permit No. CAS004001 (Order No. R4-2012-0175), which authorizes discharges from the municipal separate storm sewer system (MS4) operated by 86 municipal Permittees within Los Angeles County (hereafter, LA County MS4 Permit). The LA County MS4 Permit allows Permittees the option to develop either a Watershed Management Program (WMP) or Enhanced Watershed Management Program (EWMP) to implement permit requirements on a watershed scale through customized strategies, control measures, and best management practices (BMPs). Development of a WMP or EWMP is voluntary and may be developed individually or collaboratively.

NPDES Permit No. CAS004003 (Order No. R4-2014-0024) authorizes MS4 discharges from the City of Long Beach (hereafter, Long Beach MS4 Permit). The Long Beach MS4 Permit similarly allows for the City of Long Beach to develop either a WMP or EWMP to implement permit requirements, with the option of collaborating with LA County MS4 Permit Permittees. For simplicity, this letter and its enclosures cite provisions in the LA County MS4 Permit, though the City of Long Beach is a member of the Los Cerritos Channel Watershed Management Group and is permitted under its own individual permit.

The purpose of a WMP or EWMP is for a Permittee to develop and implement a comprehensive and customized program to control pollutants in MS4 discharges of stormwater and non-stormwater to address the highest water quality priorities. These include complying with the required water quality outcomes of Part V.A (Receiving Water Limitations) and Part VI.E and Attachments L through R (Total Maximum Daily Load (TMDL) Provisions) of the LA County MS4 Permit. If a Permittee opts to develop a WMP or EWMP, the WMP or EWMP must meet the requirements, including conducting a Reasonable Assurance Analysis (RAA), of Part VI.C (Watershed Management Programs) of the LA County MS4 Permit and must be approved by the Regional Water Board.

As stated above, on June 30, 2014, the Los Cerritos Channel Watershed Management Group (Group) submitted a draft WMP to the Regional Water Board pursuant to Part VI.C.4.c of the LA County MS4 Permit.

The Regional Water Board has reviewed the draft WMP and has determined that, for the most part, the draft WMP includes the elements and analysis required in Part VI.C of the LA County MS4 Permit. However, some revisions to the Group's draft WMP are necessary. The Regional Water Board's comments on the draft WMP, including detailed information concerning necessary revisions to the draft WMP, are found in Enclosure 1 and Enclosure 2. The LA County MS4 Permit includes a process through which necessary revisions to the draft WMP can be made (Part VI.C.4 in the LA County MS4 Permit). The process requires that a final WMP, revised to address Regional Board comments identified in the enclosures, must be submitted to the Regional Water Board not later than three months after comments are received by the Permittees on the draft program. Please make the necessary revisions to the draft WMP as identified in the enclosures to this letter and submit the revised WMP as soon as possible and no later than **January 29, 2015**.

The revised WMP must be submitted to losangeles@waterboards.ca.gov with the subject line "LA County MS4 Permit – Revised Draft LCC WMP" with a copy to Ivar.Ridgeway@waterboards.ca.gov and Chris.Lopez@waterboards.ca.gov.

If the necessary revisions are not made, the MS4 Permittees within the LCC Watershed Management Area will be subject to the baseline requirements in Part VI.D of the Order and shall demonstrate compliance with receiving water limitations pursuant to Part V.A and with applicable interim and final water quality-based effluent limitations (WQBELs) in Part VI.E and Attachment Q pursuant to subparts VI.E.2.d.i.(1)-(3) and VI.E.2.e.i.(1)-(3), respectively.

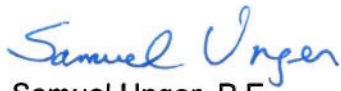
Until the draft Los Cerritos Channel WMP is approved, the Permittees are required to:

- (a) Continue to implement all watershed control measures in its existing storm water management programs, including actions within each of the six categories of minimum control measures consistent with Title 40, Code of Federal Regulations, section 122.26(d)(2)(iv);
- (b) Continue to implement watershed control measures to eliminate non-storm water discharges through the MS4 that are a source of pollutants to receiving waters consistent with Clean Water Act section 402(p)(3)(B)(ii); and
- (c) Target implementation of watershed control measures in (a) and (b) above to address known contributions of pollutants from MS4 discharges to receiving waters.

In addition on June 30, 2014, the Group submitted a draft Coordinated Integrated Monitoring Program (CIMP) to the Regional Water Board pursuant to Part IV.C of Attachment E of the LA County MS4 Permit. The Regional Water Board review and comments on the draft CIMP will be provided under separate cover.

If you have any questions, please contact Mr. Chris Lopez of the Storm Water Permitting Unit by electronic mail at Chris.Lopez@waterboards.ca.gov or by phone at (213) 576-6674. Alternatively, you may also contact Mr. Ivar Ridgeway, Chief of the Storm Water Permitting Unit, by electronic mail at Ivar.Ridgeway@waterboards.ca.gov or by phone at (213) 620-2150.

Sincerely,



Samuel Unger, P.E.
Executive Officer

Enclosures:

- Enclosure 1 – Summary of Comments and Necessary Revisions
- Enclosure 2 – Comments on Reasonable Assurance Analysis

cc: Richard Watson, Richard Watson & Associates, Inc.

Los Angeles Regional Water Quality Control Board

Enclosure 1 to October 29, 2014 Letter Regarding the Los Cerritos Channel Watershed Management Group's Draft Watershed Management Program

Summary of Comments and Necessary Revisions to the Draft Watershed Management Program

LA County MS4 Permit Provision*	Regional Water Board Staff Comment and Necessary Revision
<p>Part VI.C.5.a.ii.(2)-(3) (Category 2 and 3 Pollutants – Receiving Water Limitations)</p>	<p>The Group should clearly identify the applicable receiving water limitations for the Category 2 and 3 pollutants it has identified in Tables 2-11 and 2-12 of the draft WMP by referring back to Table 2-3. Table 2-12 includes a column for "Standard of Exceedance" and identifies the document where the standard is found, but not the standard itself. However, it appears that all of the applicable receiving water limitations are included in Table 2-3, including those for the "Low Priority Pollutants" listed in Table 2-13.</p>
<p>Part VI.C.5.a.iv.(2) (Prioritization – Ammonia)</p>	<p>The draft WMP notes that ammonia has been proposed for delisting and therefore will not be addressed. To justify this position, the Group should present the data demonstrating that there is no longer an impairment due to ammonia to support delisting.</p>
<p>Part VI.C.5.b.iv.(1)(a)(ii) (Minimum Control Measures – Industrial/Commercial Facilities Program)</p>	<p>The Group proposes to alter the commercial and industrial facility inspection frequencies in Parts VI.D.6.d and VI.D.6.e of the LA County MS4 Permit.</p> <p>The proposed modification includes a prioritization process in which the member Cities rate applicable facilities as high, medium, or low priority. High priority facilities are inspected more frequently and low priority facilities are inspected less frequently. The prioritization scheme included in Figure ICF-1 prioritizes facilities by their potential water quality impact. However, the draft WMP also notes that Cities "may follow an alternative prioritization method provided it results in a similar three-tiered scheme." The revised WMP should ensure, and explicitly state, that any alternative prioritization method used by a City must also be based on water quality impact.</p> <p>Furthermore, the draft WMP also notes that Cities can prioritize and reprioritize facilities at any time based on their discretion. The Group should revise their draft WMP to clearly state when the initial prioritization of facilities will occur. Additionally, the Group should be explicitly clear that</p>

LA County MS4 Permit Provision*	Regional Water Board Staff Comment and Necessary Revision
	<p>during any reprioritization, the ratio of low priority to high priority facilities must always remain at 3:1 or lower to maintain inspection frequencies identified in the draft WMP.</p>
<p>Part VI.C.5.a.iv.(2)(a) (Prioritization)</p>	<p>Where data indicate impairment or exceedances of RWLs and the findings from the source assessment implicate discharges from the MS4, the Permit requires a strategy for controlling pollutants that is sufficient to achieve compliance as soon as possible. Although Section 5.0 describes compliance with RWLs and Section 6.0 includes an implementation schedule, the program needs to more clearly demonstrate that the compliance schedule described in Section 5.0 ensures compliance is "as soon as possible."</p>
<p>Part VI.C.5.b.iv.(4)(b)-(c) (Selection of Watershed Control Measures)</p>	<p>The RAA identifies potential areas for green street conversion and assumes a 30% conversion of the road length in the suitable areas; however, the specific locations and projects are not identified. Although it may not be possible to provide detailed information on specific projects at this time, the WMP should at least commit to the construction of the necessary number of projects within specific subbasins to ensure compliance with permit requirements per applicable compliance schedules.</p>
<p>Watershed Control Measures Part VI.C.5.b.iv.(4)(c)</p>	<p>The draft WMP does not include clear information on the nature, scope, and timing of implementation of all its watershed control measures.</p> <p>Regional Water Board staff recognizes the amount of information that the Group has provided on watershed control measures in its draft WMP. However, this information at times lacks specificity or is interspersed within different sections of the draft WMP (e.g. street sweeping is discussed in the draft WMP's chapter on strategy, but not in the chapter on control measures).</p> <p>Regional Water Board staff suggests that the Group construct a concise table or other organized listing of all its discussed control measures that contains the required information. This would clarify the descriptions that the Group includes in Sections 3 and 4 of its draft WMP.</p>

LA County MS4 Permit Provision*	Regional Water Board Staff Comment and Necessary Revision
<p>Part VI.C.5.b.iv.(4)(c) (Watershed Control Measures – Enhanced Street Sweeping)</p>	<p>The description of the enhanced street sweeping program lacks detail. It is discussed in Section 3 as part of the group's strategy, but details regarding implementation do not appear to be included in Section 4. In particular, since the City of Long Beach does not use vacuum or regenerative street sweepers, as indicated in Table 3-3, the WMP should be clear as to what enhancement to street sweeping the City of Long Beach will implement.</p>
<p>Part VI.C.5.b.iv.(4)(c) (Watershed Control Measures – SB 346 Copper Reductions)</p>	<p>The draft WMP appears to rely mostly on the phase-out of copper in automotive brake pads, via approved legislation SB 346, to achieve the necessary copper load reductions. Given the combination of other Cu sources identified in various LA TMDLs such as building materials, other vehicle wear, air deposition from fuel combustion and industrial facilities, and that SB 346 progressively phases out Cu content in brakes of new cars (5% by weight until 2021, 0.5% by weight until 2025), then other structural and non-structural BMPs may still be needed to reduce Cu loads sufficiently to achieve compliance deadlines for interim and/or final WQBELs.</p>

LA County MS4 Permit Provision*	Regional Water Board Staff Comment and Necessary Revision
<p>Part VI.C.5.b.iv.(4)(d) (Watershed Control Measures – Milestones)</p>	<p>The MS4 Permit requires that the WMP provide specificity with regard to structural and non-structural BMPs, including the number, type, and location(s), etc. adequate to assess compliance. In a number of cases, additional specificity on the number, type and general location(s) of watershed control measures as well as the timing of implementation for each is needed.</p> <p>Section 6 of the draft WMP includes a four-phase WMP implementation schedule for control measures (MCMs, source control measures, stormwater capture, etc.). Some of these actions are listed as, “encourage the use of ...” (e.g., p. 6-6); greater specificity is required as to what actions will be taken by the group to encourage these actions by others.</p> <p>Items in the schedule only reference the year (or years) that a measure or milestone will be implemented. This should be revised to include more specific and/or exact dates where appropriate. Furthermore, some items discussed as control measures do not appear to have milestones within the implementation schedule (e.g., enhanced street sweeping in Table 6-4).</p> <p>Additionally, many items in the implementation schedule are ongoing measures that are not new interim milestones (e.g. MCMs, implementation of SB 346, enhanced street sweeping, etc.). For transparency, Regional Water Board staff recommends that ongoing measures clearly be separated from interim milestones for structural controls and non-structural BMPs in the implementation schedule.</p> <p>Regional Water Board staff recognizes uncertainties may complicate establishment of specific implementation dates, however there should at least be more specificity on actions within the current and next permit terms to ensure that the following interim requirements are met: (1) a 10% reduction in metals loads during wet weather and a 30% reduction in dry weather by 2017 and (2) a 35% reduction in metals loads during wet weather and a 70% reduction during dry weather by 2020.</p>

LA County MS4 Permit Provision*	Regional Water Board Staff Comment and Necessary Revision
<p>Part VI.C.5.b.iv.(4)(e) (Watershed Control Measures – Permittee Responsibilities)</p>	<p>For MCMs and NSW discharge screening control measures, the draft WMP clearly lists responsibilities in Table 4-3. However, for other control measures, it is harder to identify Permittee responsibilities.</p> <p>The WMP Implementation Schedule groups together all actions that are being implemented. Although City specific items are marked (e.g. Skylinks Golf Course), it is hard to clearly read amongst the other group actions. The WMP could be improved by including a separate schedule for each City.</p> <p>Table 6-8 also breaks down control measure implementation; however, this is broken up into sub-basins rather than by City, making the responsibilities not immediately clear.</p>
<p>Part VI.C.5.b.iv.(5)(c) (Selection of Watershed Control Measures)</p>	<p>For waterbody-pollutant combinations not addressed by TMDLs, the MS4 Permit requires that the plan demonstrate using the reasonable assurance analysis (RAA) that the activities and control measures to be implemented will achieve applicable receiving water limitations as soon as possible. The RAA demonstrates the control measures would be adequate to comply with the limitations/deadlines for the “limiting pollutants” for TMDLs and concludes that this will ensure compliance for all other pollutants of concern. However, it does not address the question of whether compliance with limitations for pollutants not addressed by TMDLs could be achieved in a shorter time frame.</p>
<p>Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis – Limiting Pollutants)</p>	<p>The RAA identifies zinc and <i>E. coli</i> as the limiting pollutants for wet weather and dry weather, respectively. They note that these two pollutants will drive reductions of other pollutants.</p> <p>If the Group believes that that this approach demonstrates that activities and control measures will achieve applicable receiving water limitations, it should explicitly state and justify this for the category 2 and 3 pollutants. (This appears to have been done for category 1 pollutants and <i>E. coli</i> in Tables 5-6 and 5-9 and Figure 5-13, but not for other categories 2 and 3 pollutants.)</p>

LA County MS4 Permit Provision*	Regional Water Board Staff Comment and Necessary Revision
<p>Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis – New Non-Structural Controls)</p>	<p>The draft WMP assumes a 10% pollutant reduction from new non-structural controls. Although 10% is a modest fraction of the overall controls necessary, additional support for this assumption should be provided, particularly since the group appears to be relying almost entirely on these controls for near-term pollutant reductions to achieve early interim milestones/deadlines. Additionally, as part of the adaptive management process, the Permittees should commit to evaluate this assumption during program implementation and develop alternate controls if it becomes apparent that the assumption is not supported.</p>
<p>Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis – Irrigation Reductions)</p>	<p>For dry weather, the WMP assumes a 25% reduction in irrigation (RAA, section 7.1.2). Additional support should be provided for this assumption, particularly since the group appears to be relying almost entirely on this non-structural BMP for near-term pollutant reductions to meet early interim milestones/deadlines. Additionally, as part of the adaptive management process, the Permittees need to commit to evaluate this assumption during program implementation and develop alternate controls if it becomes apparent that the assumption is not supported.</p>
<p>Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis – Regional BMPs)</p>	<p>Section 1.4.2 of Attachment A to the RAA points out that additional potential regional BMPs were identified to provide the remaining BMP volume noted in Table 9-5. It indicates they can be found in Section 3 of the WMP. It is unclear if the RAA is referring to the "First Order Major BMP Sites" listed in Table 4-5 and the "Second Order Major BMP Sites" listed in Table 4-6. The RAA should clarify that sufficient sites were identified. Additionally, the WMP should mention how these sites relate to the RAA.</p>

LA County MS4 Permit Provision*	Regional Water Board Staff Comment and Necessary Revision
<p>Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis – Permitted Industrial Facilities)</p>	<p>The draft WMP, including the RAA, excludes stormwater runoff from non-MS4 facilities within the WMA from the stormwater treatment target. In particular, industrial facilities that are permitted by the Water Boards under the Industrial General Permit or an individual stormwater permit were identified and subtracted from the treatment target.</p> <p>Regional Water Board staff recognizes that this was done with the assumption that these industrial facilities will retain their runoff and/or eliminate their cause/contribution to receiving water exceedances, as required by their respective NPDES permit. However, it is important that the Group's actions under its Industrial/Commercial Facilities Program—including tracking critical industrial sources, educating industrial facilities regarding BMP requirements, and inspecting industrial facilities—ensure that all industrial facilities are implementing BMPs as required.</p>

LA County MS4 Permit Provision*	Regional Water Board Staff Comment and Necessary Revision
<p>Part VI.C.5.b.iv.(5) (Reasonable Assurance Analysis – Caltrans Facilities)</p>	<p>The draft WMP, including the RAA, takes a similar approach for areas under the jurisdiction of the California Department of Transportation (Caltrans). Caltrans facilities that are permitted under the Caltrans MS4 permit (Order No. 2012-0011-DWQ) were also identified and subtracted from the treatment target.</p> <p>It should be noted that the Amendment to the Caltrans Permit (Order WQ 2014-0077-DWQ) includes provisions to address TMDL requirements throughout the state. Revisions to Attachment IV of the Caltrans Permit require that Caltrans prioritize all TMDLs for implementation of source control measures and BMPs, with prioritization being “consistent with the final TMDL deadlines to the extent feasible.”</p> <p>Additionally, the Caltrans Permit also includes provisions for collaborative implementation through Cooperative Implementation Agreements between Caltrans and other responsible entities to conduct work to comply with a TMDL. By contributing funds to Cooperative Implementation Agreements and/or the Cooperative Implementation Grant Program, Caltrans may receive credit for compliance units, which are needed for compliance under the Caltrans Permit.</p> <p>In a similar manner, the LA County MS4 Permit includes provisions for Permittees to control the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements with other MS4 owners—such as Caltrans—to successfully implement the provisions of the Order (see Parts VI.A.2.a.viii and VI.A.4.a.iii). Therefore, the Group should ensure that it is closely coordinating with appropriate Caltrans District staff regarding the identification and implementation of watershed control measures to achieve water quality requirements (i.e. applicable Receiving Water Limitations and WQBELs).</p> <p>Regional Water Board staff recognizes that the Group has taken the initial steps for such collaboration since Caltrans participates in the Group and the draft WMP notes Caltrans in its strategies for runoff reduction and total suspended solids reduction.</p>
<p>Part VI.C.5.b.iv.(6) (Legal Authority)</p>	<p>Attachment D to the draft WMP includes a copy of legal certifications for all Group members except for Long Beach. The legal certifications for Long Beach should be submitted in the revised WMP.</p>

LA County MS4 Permit Provision*	Regional Water Board Staff Comment and Necessary Revision
<p>Part VI.C.5.c.iii.(3) (Compliance Schedules – Bacteria)</p>	<p>The draft WMP proposes a final compliance date of September 2040 for <i>E. coli</i> and <i>Enterococcus</i>. However, the Group does not provide sufficient justification for this date. Additionally, milestones and a schedule of dates for achieving milestones are not defined for these two pollutants.</p> <p>In revising its draft WMP, the Group should evaluate compliance schedules of bacteria TMDLs that have been established within the region and modify the proposed compliance schedule for these pollutants to include interim milestones and dates for their achievement and a final compliance date that is as soon as possible. Justification for the final compliance date as well as interim milestones should also be included.</p>
<p>Part VI.C.5.c.iii.(3) (Compliance Schedules – Ammonia and pH)</p>	<p>The draft WMP does not propose milestones or final compliance dates for ammonia and pH, which were both identified as Category 2 pollutants. The WMP should include milestones and compliance dates for these pollutants and address them through watershed control measures, or alternatively, provide the data to support delisting (in the case of ammonia) and to support that exceedances of pH outside the acceptable range are due to natural causes.</p>
<p>Figures and Symbols in Draft WMP</p>	<p>Some figures in the draft WMP are distorted. Examples include:</p> <ul style="list-style-type: none"> - Figures 1-2 and 1-3 (on pages 1-6 and 1-8, respectively) have legends that are missing information - Table 4-4 (on page 4-13) does not display Figure ICF- 1 - Mathematical symbols used on pages 5-4 and 5-5 do not correctly display

*Equivalent provisions are also found in the Long Beach MS4 Permit

Los Angeles Regional Water Quality Control Board

TO: Los Cerritos Channel Watershed Management Group

FROM: C.P. Lai, Ph.D., P.E. and Thanhloan Nguyen
LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

DATE: October 29, 2014

SUBJECT: COMMENTS ON REASONABLE ASSURANCE ANALYSIS REPORT FOR LOS CERRITOS CHANNEL WATERSHED MANAGEMENT AREA

This memorandum contains comments on the Reasonable Assurance Analysis (RAA), submitted on June 29, 2014, by the Los Cerritos Channel Watershed Management Group.

- A. General comments on the draft Reasonable Assurance Analysis (RAA) of the Watershed Management Program (WMP).
1. The Los Cerritos Channel Watershed Management Area (LCC WMA) is subject to interim and final water quality-based effluent limitations pursuant to Attachment Q, Part A "Los Cerritos Channel Metals TMDL" for both wet and dry weather conditions. By September 30, 2017, which aligns with the end of Phase 1 of the proposed implementation schedule in the draft WMP, the LCC WMA is required to demonstrate that 30% of the total drainage area served by the storm drain system is effectively meeting the dry weather metals WLAs and 10% of the total drainage area served by the storm drain system is effectively meeting the wet-weather metals WLAs. For the most part, during Phase 1 the selected watershed control measures to address water quality priorities and achieve applicable WQBELs include existing planning for implementation of SB 346 to remove copper in brake pads and other ongoing non-structural BMPs and source control measures. There is uncertainty in the ability of these BMPs to meet the required reductions by the end of Phase 1. Additional support for the anticipated pollutant load reductions from these non-structural BMPs and source control measures over the next two to three years should be provided to increase the confidence that these measures can achieve the near-term interim WQBELs by September 2017.
 2. LCC WMA is also subject to Category 2 priority pollutants, including coliform bacteria. The LCC WMP proposes to address bacteria with the same runoff reduction and stormwater capture measures proposed for Category 1 pollutants as well as ongoing implementation of minimum control measures. However, this might not be effective enough in reducing bacteria loading. The LCC WMP acknowledges that it will address bacteria more directly during the second and third adaptive management cycles. The LCC WMP should include a more specific strategy to implement pollutant controls necessary to address this and other Category 2 pollutants earlier.

- B. Modeling comments regarding analysis of copper, lead, zinc, DDT, PCB, PAH, and bacteria concentrations/loads in Attachment A of the draft Los Cerritos Channel WMP:
1. The model predicted stormwater runoff volume is used as a surrogate for required pollutant load reductions for wet weather conditions. Thus, the predicted flow volume becomes a very important parameter for evaluating required volume reductions and BMP scenarios; however, there was not available flow data for Los Cerritos Channel to conduct a hydrology calibration assessment. The necessary hydrology data should be collected for Los Cerritos Channel so that model calibration/validation can be conducted during the adaptive management process.
 2. While we understand that there is significant reliance on a volume-based approach, the predicted baseline concentrations and loads for all modeled pollutants of concern, including TSS, should be presented in summary tables for wet weather conditions. This model output should be available, since it is the basis for the percent reductions in pollutant load presented in Table 5-6. (See Table 5. Model Output for Both Process-based BMP Models and Empirically-based BMP Models, pages 20-21 of the RAA Guidelines).
 3. Further, the differences between baseline concentrations/loads and allowable concentrations/loads should be presented in time series for each pollutant under long-term continuous simulation and as a summary of the differences between pollutant concentrations/loads and allowable concentrations/loads for the critical wet weather period. (See Table 5. Model Output for Both Process-based BMP Models and Empirically-based BMP Models, pages 20-21 of the RAA Guidelines).
 4. We note that modeling was not conducted for organics (DDT, PCBs, and PAHs). It is not clear why these pollutants were not modeled or why previous modeling of these pollutants could not be used, such as that conducted during the development of the Dominguez Channel and Greater LA and Long Beach Harbor Waters Toxic Pollutants TMDL. An explanation for the lack of modeling is needed.
 5. The report presents the existing runoff volumes, required volume reductions and proposed volume reductions from BMP scenarios to achieve the 85th percentile, 24-hour volume retention standard for each major watershed area. The same information on the runoff volume associated with the 85th percentile, 24-hour event and the proposed runoff volume reduction from each BMP scenario also needs to be presented for each modeled subbasin (e.g., a series of tables similar to 8-1 through 8-4 and 9-4 through 9-7). See Table 5 of the RAA Guidelines. Additionally, more explanation is needed as to what constitutes the "incremental" and "cumulative" critical year storm volumes in tables 9-4 through 9-7 and how these values were derived from previous tables.
 6. The report needs to present the same information, if available, for non-stormwater runoff. Alternatively, the report should include a commitment to collect the necessary data in each watershed area, through the non-stormwater outfall screening and monitoring program, so that the model can be re-calibrated during the adaptive management process to better characterize non-stormwater flow volumes and to demonstrate that proposed volume retention BMPs will capture 100 percent of non-stormwater that would otherwise be discharged through the MS4 in each watershed area.

7. The ID number for each of the subwatersheds from the model input file should be provided and be shown in the simulation domain to present the geographic relationship of subwatersheds, within each watershed area, that are simulated in the LSPC model.