

ATTACHMENT 1

Bureau of Sanitation's Detailed Discussion of Major Concerns Regarding the April 20, 2010 on the Proposed Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load For Bacteria in the Los Angeles River

1. Clarify how multiple MS4s can demonstrate compliance with final WLAs

The Los Angeles (LA) River Watershed has three MS4s and over 2,000 other types of NPDES permits (Table 4-1 in Staff Report). However, the final WLAs for MS4s are based on allowable numbers of Exceedance Days. In this manner, the TMDL makes MS4s wholly responsible for attainment of WQOs in the LA River segments and tributaries. That is, if the numbers of exceedances in a segment or tributary are higher than allowable, then MS4s that discharge to that segment or tributary are out of compliance regardless of whether the other 2,000 permittees have addressed their discharges. For example, MS4s could be deemed out of compliance if a major industrial NPDES discharger was continually exceeding their TMDL-required permit limits for *E. coli*. Similarly, in LA River segments that have multiple MS4s (e.g., Segment A), an MS4 that knowingly disregarded the TMDL requirements (“bad actor”) could lead to non-compliance for MS4s that had addressed loading from their outfalls (“good actors” because they had a sufficient number of effective BMPs across their jurisdictions). The only possible exception is if MS4s can “demonstrate the non-compliance is only due to upstream contributions” (Table 9-5 in Staff Report and Table 7-39.4 of the Basin Plan Amendment). However, the TMDL Staff Report provides no additional details on how an MS4 could provide this demonstration. Note that because of the prioritized order of implementation, this demonstration is *expected* to be necessary at the end of most implementation phases (e.g., when the implementation phase for Segment A is complete and compliance with final WLAs is required, implementation for upstream Segment B will still be ongoing, and thus Segment B is *expected* to contribute to downstream exceedances).

REQUEST: The TMDL Staff Report and BPA should describe three “equivalent conditions” that represent MS4 compliance with final dry weather WLAs, which is similar to the approach taken in the LA River Trash TMDL. These three conditions correspond to: average concentrations of MS4 runoff being less than the WQO; zero flow from the MS4; or loading rates from the MS4s not causing or contributing to WQO exceedances. Furthermore, the language will allow “good actors” to demonstrate their actions address their discharges such that they are not causing or contributing to exceedances of the final WLAs. Please insert the following paragraph at the top of page 5 of the Tentative Basin Plan amendment (after the paragraph that begins with “The WLAs for” and ends with “allowable exceedances”), and into Section 9.4.5 of the Staff Report:¹

This TMDL involves many responsible parties, and the dry weather implementation schedule includes actions at some downstream segments prior to upstream segments. MS4s can demonstrate compliance with the final WLAs – and differentiate their dry weather discharges from discharges from upstream sources and/or discharges from other responsible parties – by demonstrating one of the following equivalent conditions:

¹ The corresponding changes to the Implementation Schedule are combined with Request #3, below.

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1. MS4 loading of *E. coli* to the corresponding LA River segment or tributary during dry weather is less than or equal to the loading rates detailed in the tables below. **[note: these tables are described in comment #2]**
2. Flow-weighted concentration of *E. coli* in MS4 discharges during dry weather is less than or equal to 235 MPN/100mL, based on a weighted-average using flow rates from all measured outfalls.
3. Zero discharge during dry weather

2. Adjust Interim Waste Load Allocations to be representative of an interim, not final, water quality condition

The interim Waste Load Allocations (WLAs) in the Staff Report are based on the final WLAs of the Technical Report. These WLAs are designed such that if the *E. coli* loading rates of MS4 discharges are below those values, then MS4 discharges will not cause or contribute to WQO exceedances. As such, the interim WLAs are representative of a final water quality condition (not an interim condition). It is important to establish interim requirements that acknowledge the uncertainty associated with developing bacteria load reduction strategies in a highly urbanized watershed. That being said, the Bureau would support a requirement that bacteria implementation strategies be designed to attain the *final* WLAs (or their equivalent conditions); the interim WLAs would serve as a minimum performance measure of those implementation actions.

The following request, coupled with Request #1, would establish *E. coli* loading rates from MS4s that can be used to demonstrate WLA compliance under both interim and final conditions. Establishment of these loading rates would allow MS4s to discriminate their *E. coli* discharges from those by other NPDES Permittees, and eliminate the need for the vague language in Table 9-5 of the Staff Report and Table 7-39.4 of the Basin Plan Amendment requiring MS4s to “demonstrate the non-compliance is only due to upstream contributions.” As above, the language below will allow “good actors” to demonstrate their actions address their discharges such that they are not causing or contributing to exceedances of the final WLAs.

REQUEST: The TMDL Staff Report should incorporate appropriate interim WLAs that are representative of interim rather than final conditions. Please insert the following paragraphs at the top of page 6 of the Tentative Basin Plan amendment (just below the language inserted for Request #1) and into Section 9.4.5 of the Staff Report:

In addition, MS4 dischargers are assigned interim WLAs for dry weather to account for variability in bacteria discharges. Interim dry weather WLAs are set at 1.5 times the final WLAs. Responsible agencies can demonstrate compliance with these interim WLAs by demonstrating one of the three (3) equivalent conditions above, with the equivalent interim *E. coli* loading rates detailed in the Interim MS4 *E. coli* Loading Rates table below.

It is expected that MS4s will implement a suite of BMPs/actions that are designed to attain the *final* WLAs; the *interim* WLAs represent a minimum performance threshold

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that must be attained after that suite of actions is implemented, per the implementation schedule.

The E. coli loading rates for the interim and final equivalent conditions are as follows²:

River Segment or Tributary	<u>Final</u> E. coli Load from MS4s during Dry Weather (10⁹ MPN/Day)
Los Angeles River Segment A	274
Los Angeles River Segment B	471
Los Angeles River Segment C	421
Los Angeles River Segment D	413
Los Angeles River Segment E	29
Aliso Canyon Wash	21
Arroyo Seco	22
Bell Creek	13
Bull Creek	8
Burbank Western Channel	78
Compton Creek	6
Dry Canyon	6
McCoy Canyon	6
Rio Hondo	2
Tujunga Wash	9
Verdugo Wash	46

² The corresponding changes to the Implementation Schedule are combined with Request #3, below.

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River Segment or Tributary	<u>Interim</u> <i>E. coli</i> Load from MS4s during Dry Weather (10⁹ MPN/Day)
Los Angeles River Segment A	411
Los Angeles River Segment B	707
Los Angeles River Segment C	632
Los Angeles River Segment D	620
Los Angeles River Segment E	44
Aliso Canyon Wash	32
Arroyo Seco	33
Bell Creek	20
Bull Creek	12
Burbank Western Channel	117
Compton Creek	9
Dry Canyon	9
McCoy Canyon	9
Rio Hondo	3
Tujunga Wash	14
Verdugo Wash	69

3. Acknowledge inherent variability of bacteria sources during determination of compliance with WLAs

The stakeholder Technical Report details an intensive dry weather approach to bacteria TMDL implementation, called a Load Reduction Strategy (LRS). The components of an LRS describe a scientific process by which MS4 bacteria discharges can be monitored, identified, and controlled with BMPs. As such, the LRS provides reasonable assurance that MS4 WLAs will be attained. The described BMP implementation process is so intensive, that the Technical Report proposed that MS4 compliance could be based on developing and implementing an LRS, referred to as “action-based compliance.” Action-based compliance is not a component of the draft Staff Report; instead the Staff Report requires strict compliance with WLAs, regardless of the implemented actions or the observed conditions in the Watershed.

A major concern of the Bureau with respect to dry weather implementation is the inherent variability of bacteria sources. In particular, the Bacteria Source Identification (BSI) Study demonstrated that “outlier” discharges are not uncommon; a storm drain outfall that was not problematic during previous monitoring events suddenly exhibits exceptionally high *E. coli* loading rates and then in the next event is not problematic. The Bureau very much wants to avoid the situation that an “Unexpected Discharge” is observed during WLA compliance monitoring, and the City is found to be in violation even though we acted in good faith and

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implemented a large suite of bacteria control BMPs that were well-designed and executed. Of course, these types of discharges would need to be addressed upon their discovery, which can be included in the implementation schedule.

REQUEST: The TMDL Staff Report and BPA should incorporate language that acknowledges Unexpected Discharges. Please insert the following paragraphs at the top of page 7 of the Tentative Basin Plan amendment (prior to the paragraph that begins with "General NPDES Permits" and ends with "geometric mean target"), and into Section 9.4.5 of the Staff Report:

Variability of bacteria sources is also addressed through categorization of some MS4 bacteria discharges as "unexpected." Unexpected Discharges are those outfalls that [1] exhibit *E. coli* loading rates that are less than 25th percentile during the monitoring events used to develop implementation strategies, but then [2] exhibit greater than 90th percentile loading rates during later monitoring events used to compare MS4 loading to the interim and final WLAs. These types of discharges are very challenging for MS4s to control, and thus are excluded from the calculations used to compare MS4 loading to interim and final WLAs for compliance purposes. However, MS4s are required to take action to abate identified Unexpected Discharges, per the implementation schedule.

The combined requested changes from Request #1, #2, and #3 would also affect the implementation schedule table (Table 7-39.4 in the BPA and Table 9-5 in the Staff Report). As an example, the requested changes to the schedule for Segment B are shown below. Note that the table also includes deletion of the row specific to "Complete Implementation of LRS". In order to provide more flexibility to MS4s with regards to monitoring and BMP implementation, the schedule should only specify the date on which LRS completion and WLA attainment must be demonstrated.

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7-39.4. Los Angeles River Bacteria TMDL: Implementation Schedule

Implementation Action	Responsible Parties	Deadline
SEGMENT B (upper and middle Reach 2 – Figueroa Street to Rosecrans Avenue)		
First phase – Segment B		
Submit a Load Reduction Strategy (LRS) for Segment B (<i>or submit an alternative compliance plan</i>)	MS4 and Caltrans NPDES Permittees discharging to Segment B	2.5 years after effective date of the TMDL
Approve LRS (or alternative compliance plan)	Regional Board, Executive Officer	6 months after submittal of LRS
Complete implementation of LRS	MS4 and Caltrans NPDES Permittees discharging to Segment B, if using LRS	7 years after effective date of the TMDL
Achieve interim WLA, or and demonstrate <u>both completion of compliance with LRS and attainment of equivalent interim condition.</u> <u>Identify Unexpected Discharges, if any.</u>	MS4 and Caltrans NPDES Permittees discharging to Segment B, if using LRS	10 years after effective date of the TMDL
<u>Demonstrate that Unexpected Discharges have been controlled.</u>	<u>MS4 and Caltrans NPDES Permittees discharging to Segment B, if using LRS</u>	<u>13 years after effective date of the TMDL</u>
Achieve final WLA or demonstrate that non-compliance is due to upstream contributions with equivalent condition	MS4 and Caltrans NPDES Permittees discharging to Segment B, if using alternative compliance plan	10 years after effective date of the TMDL
Second phase, if necessary – Segment B (LRS only)		
Submit a new LRS	MS4 and Caltrans NPDES Permittees discharging to Segment B	11 years after effective date of the TMDL
Approve LRS	Regional Board, Executive Officer	6 months after submittal of a second LRS
Complete implementation of LRS	MS4 and Caltrans NPDES Permittees discharging to Segment B, if using LRS	14.5 years after effective date of the TMDL
Demonstrate completion of compliance with LRS and submit results of LRS compliance monitoring.	MS4 and Caltrans NPDES Permittees discharging to Segment B, if using LRS	16.5 years after effective date of the TMDL
Achieve final WLAs in Segment B or demonstrate that non-compliance is only due to upstream contributions <u>compliance with equivalent condition.</u> <u>Identify Unexpected Discharges, if any.</u>	MS4 and Caltrans NPDES Permittees discharging to Segment B, if using LRS	16.5 years after effective date of the TMDL
<u>Demonstrate that Unexpected Discharges have been controlled.</u>	<u>MS4 and Caltrans NPDES Permittees discharging to Segment B, if using LRS</u>	<u>19.5 years after effective date of the TMDL</u>

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4. Include Process for Development and Implementation of Special Studies to Address Outstanding Issues and a Corresponding Reopener

Special studies are an important aspect of TMDL implementation as they fill data gaps for both technical and policy issues. The CREST stakeholder group identified optional special studies in the stakeholder Technical Report that could support TMDL implementation, basin planning, and reopeners. Additionally, the draft Staff Report acknowledges the potential need for special studies and reopeners.

Over the course of TMDL implementation, the TMDL may be re-considered to incorporate new information from TMDL special studies, or address revisions to water quality standards, such as adoption of revised water quality objectives based on recommendations of USEPA (draft Staff Report, page 45).

In addition, early reduction of MS4 bacteria discharges to segment B/Reach 2 will provide a better starting point for concurrently conducting optional special studies to more fully characterize all sources within this segment (draft Staff Report, page 62).

However, neither optional special studies nor reopeners to consider new information are identified in the Tentative Basin Plan amendment. Over half of the TMDLs adopted in the region acknowledge the potential value in conducting special studies and contain special study and corresponding reopener provisions. Specifically, bacteria TMDLs in the region (Ballona Creek, Los Angeles Harbor, and Marina Del Rey Harbor) include special studies similar in nature to those presented in the Technical Report.

Also presented in the Technical Report is an approach to integrating the special studies with the Basin Plan priorities adopted by the Regional Board on April 1, 2010 in Resolution R10-001. The outcome of the following two priorities could have a significant impact on the implementation of the Los Angeles River Bacteria TMDL:

1. Determine how bacteria water quality objectives should be applied in compliance determination based on more recent monitoring results.
2. Reconsider the application of REC-1 and REC-2 beneficial uses in specific instances, where appropriate.

Because of the significance of the potential outcomes of these two Triennial Review priorities, the stakeholder Technical Report suggests the formation of LA River Water Quality Standards Work Group (LARWQSWG). It was proposed that if stakeholders form a LARWQSWG, then the Regional Board would coordinate with stakeholders and participate in the process. The LARWQSWG would be a stakeholder process tasked with [1] identifying approaches to implementing the Triennial Review priorities, [2] developing science based information to support evaluating changes to the Basin Plan, and, if appropriate, and [3] supporting Regional Board staff to develop Basin Plan amendments for the Regional Board's consideration.

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The optional special studies presented in the Technical Report provide an opportunity to address outstanding issues in the TMDL and Basin Plan in a cooperative manner. Additionally, the LAWQSWG process would provides the opportunity for stakeholders to share the workload burden of developing the scientific information to support Regional Board decisions. Lastly, it is imperative that a firm date for a reopener for the Regional Board be set to provide stakeholders investing in developing scientific information reasonable assurances that such information will be heard. If information is not developed at the time of the scheduled reopener there would be no burden on the Regional Board staff. Lastly, numerous stakeholders have requested that the issues intended to be addressed through the optional studies be addressed *prior* to TMDL adoption. The Bureau understands such an approach is infeasible. However, inclusion of optional special studies and an explicit reopener, as well as supporting the formation of a work group, would provide stakeholders with confidence that the Regional Board is willing to consider outstanding issues in the early stages of TMDL implementation.

REQUEST: Revise the Basin Plan amendment to include the optional special studies, particularly studies related to uncharacterized bacteria sources and information related to a stakeholder working group to support Basin Planning for recreational uses, as presented in the stakeholder Technical Report. Additionally, include at least one explicit reopener provision five years after the effective date of the TMDL. Section 9.5 of the Staff Report should include the optional special studies discussion from Section 8.4 of the Technical Report. Insert the following paragraph at the end of the Compliance Monitoring section of the Basin Plan Amendment (which should be re-named to “Compliance Monitoring and Special Studies”).

Optional Special Studies

Stakeholders are encouraged to develop special studies to evaluate the assumptions of this TMDL and to support the Basin Plan Triennial Review process. Two types of studies were highlighted by stakeholders as high priority, as described in the Staff Report:

- Studies to assess recreational beneficial use designations, including formation of a Water Quality Standards Working Group.
- Studies designed to characterize loadings from natural or in-stream sources and evaluate whether a Natural Source Exclusion is applicable.

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In addition, please insert the following rows at the end of Table 7-39.4 in the BPA and Table 9-5 in the Staff Report, below the row with the header “All Los Angeles River Segments and Tributaries”:

All Los Angeles River Segments and Tributaries		
<u>Responsible parties and agencies shall provide to the Regional Board results of optional special studies.</u>	<u>Interested responsible parties</u>	<u>Within 5 years of the effective date of the TMDL</u>
<u>The Regional Board shall reconsider the Basin Plan and/or provisions of the TMDL including evidence provided through special studies.^{3,4}</u>	<u>Regional Board</u>	<u>Within 1 year after submittal of the results of special studies</u>
Submit implementation plan for wet weather with interim milestones	All responsible parties	Within 10 years of the effective date of the TMDL
Achieve final dry-weather WLAs and LAs, <u>or equivalent conditions</u>	All responsible parties	25 years after effective date of the TMDL
Achieve final wet-weather WLAs and LAs	All responsible parties	25 years after effective date of the TMDL

³ In the case that special studies are presented to the Regional Board Executive Officer, but the Executive Officer determines that insufficient data have been provided to support a Basin Plan amendment, the decision to *not* initiate a Basin Plan amendment shall be established in concurrence with the Regional Board.

⁴ If special studies are completed after the 5-year mark, the Regional Board Executive Officer shall consider, on a case-by-case basis and in concurrence with the Regional Board, whether the information developed supports the initiation of a Basin Plan amendment process.