

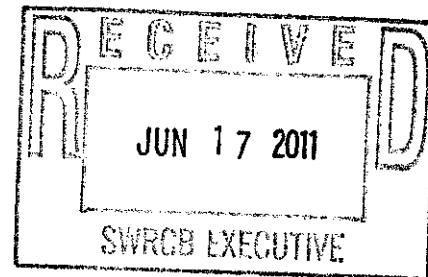
**DEPARTMENT OF TRANSPORTATION**  
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June 20, 2011

Jeanine Townsend  
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California State Water Resources Control Board  
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**Re: Comment Letter – Los Angeles Water Board Indicator Bacteria**

Dear Ms. Townsend:

The California Department of Transportation (Caltrans) appreciates the opportunity to provide comments on the proposed approval of an amendment to the Los Angeles Regional Water Quality Control Board (LARWQCB) Basin Plan that would establish a Total Maximum Daily Load (TMDL) for Indicator Bacteria in the Los Angeles River Watershed. Caltrans strongly supports the State Water Resources Control Board's (SWRCB) and LARWQCB efforts to protect human health and achieve the highest standard of water quality possible. Earlier, Caltrans submitted comments to the LARWQCB on June 4, 2010, requesting several changes to the TMDL. Some of the comments/concerns were not addressed before the approval of the Basin Plan Amendment (BPA) by the LARWQCB and these are as follows:

**1) Not a Source of Waste Loads to the Los Angeles River**

The June 4, 2010 letter submitted by Caltrans included our concern that any bacterial indicator loads from Caltrans roadways located in the Los Angeles River watershed are from natural background sources, such as wildlife and birds. The Response to Comments released by the LARWQCB on July 2010 identifies domestic pets, horses, and direct human inputs—all of which contribute to indicator bacteria loads in urban runoff, in addition to leaks and overflows from wastewater collection systems, illicit connections, failing septic systems, and sediments. Caltrans does not allow anthropogenic activities (e.g., domestic waste), domestic pets (e.g., cats and dogs), and livestock (cows, horses, pigs, etc.) within the state highway right-of-way that could contribute pathogens from these sources. The LARWQCB references a system/antidegradation approach that recognizes natural sources and focuses this TMDL on anthropogenic sources. Any potential bacteria discharge would be due to natural sources.

The Response to Comments released by the LARWQCB also states that “the U.S. EPA does not distinguish between human and nonhuman sources of bacteria in its recommended water quality criteria for bacteria in ambient waters.” The response includes a citation from a U.S. EPA document released in 2009 but does not include the reference information for the document. This document is also not included as a reference in the staff report. The response also states that “No recreational water quality criteria have been established by the U.S. EPA for these pathogens as reliable indicators of human health risk.” Although the indicators and epidemiological studies do not currently distinguish between human and non-human sources of bacterial indicators, the U.S. EPA has recognized that the criteria and implementation guidance need to “provide a way for addressing and discounting pathogen and indicator data not associated with anthropogenic sources of fecal contamination” and discusses approaches “for discounting those waters that were identified as having limited or no anthropogenic fecal loading, thereby avoiding those waters being listed as impaired inappropriately” (U.S. EPA 2007). Dischargers should not be required to address loads from non-anthropogenic sources. The U.S. EPA is currently conducting a review of bacterial indicators and will release new recommendations in 2012.

*Discharges of indicator bacteria from Caltrans roadways located in the Los Angeles River watershed are from natural background sources. Caltrans requests that the waste load allocations assigned to Caltrans in the TMDL be set equal to existing loads or that Caltrans be removed as a stakeholder in this TMDL. The TMDL should also include a requirement for the LARWQCB to review the bacterial indicators included in this TMDL once the U.S. EPA recommendations are released. In addition, justification should be provided for the unsubstantiated claim that several types of permitted discharges are not sources of bacterial indicators.*

## **2) Need for Consistent Stormwater Program**

The requirements in this TMDL for Caltrans are not consistent with those of TMDLs for the same pollutant in other regions of the state. For example a TMDL established by San Francisco Bay Regional Water Quality Control Board for Pathogens in Richardson Bay acknowledges that the source of bacteria in highway runoff is wildlife” and that “the Water Board will not hold discharging entities responsible for uncontrollable coliform discharges originating from wildlife/natural background sources.” Other TMDLs for bacterial indicators where the requirements for Caltrans are different include TMDLs for Bacterial Indicators in San Lorenzo River Watershed (Central Coast Region), Coachella Valley Storm Channel (Colorado Region), and the San Diego Beaches and Creeks Project I TMDL.

Caltrans is required to maintain a statewide stormwater program approach for transportation throughout the state. The US EPA’s Finding of Violation and order for compliance (EPA docket #CWA-09-2011-0001) cited Caltrans for implementing an inconsistent program. Varying requirements for bacteria TMDLs from the same land



use type (highway transportation) restricts Caltrans' ability to use a comprehensive statewide approach.

*Caltrans requests that the TMDL have consistent requirements for bacterial indicator TMDLs for Caltrans throughout the state. The approach taken by the San Francisco Regional Board should be recognized as valid, and applied for bacterial indicator TMDLs, as it recognizes that sources of bacterial indicators from Caltrans roadways originate from wildlife/natural background sources.*

### **3) Alternative Compliance Schedule**

The June 4, 2010 letter submitted by Caltrans included our concern that the TMDL Compliance Schedule includes a fragmented approach that is cumbersome for Caltrans to comply with and that would lead to duplication of time, effort, and funds. The LARWQCB response to our comment does not address the requirement for Caltrans to provide one complete approach instead of a fragmented approach. Instead, the LARWQCB offers an alternative where Caltrans must move up the deadlines on each of the segments in order to coordinate the schedules. This is not a feasible alternative and places a disproportional burden on Caltrans. Caltrans is generally less than 2 percent of the area within each of the sub watersheds and is approximately 1 percent of the area in the total watershed. Further, Caltrans load is insignificant compared to the total loads. Caltrans should be allowed to comply with the TMDL by implementing a consistent and structured program for its facilities within the Los Angeles River watershed. Caltrans would benefit from an independent comprehensive, uniform approach consistent with our statewide monitoring and program requirements.

*Caltrans requests that the BPA include an alternative compliance schedule that allows Caltrans to develop a watershed-wide approach, rather than an inconsistent approach that varies by watershed. We suggest assigning one set of reasonable compliance dates that are commensurate with the amount of work and time required to achieve compliance (rather than pushing all compliance dates for other segments forward to match up with the first segment deadlines that must be met.)*

*In addition, Caltrans requests that the compliance schedule for this TMDL be made consistent with other Bacterial Indicator TMDLs within the surrounding areas (i.e., Malibu Creek and Ballona Creek). This would allow all affected dischargers, including Caltrans, to implement a truly consistent approach for Bacterial Indicators in the region.*

### **4) Complying with Dry Weather Conditions**

The June 4, 2010 letter submitted by Caltrans included our concern that Caltrans already meets dry weather flow waste load allocations and should not be required to implement controls and monitor for dry weather conditions. The LARWQCB response does not adequately address our concern and leaves the TMDL requirements unchanged.

Caltrans' existing program meets dry weather flows, and has insignificant dry weather discharge potential, which should exclude Caltrans from being required to implement controls and monitor for this TMDL. The BPA requires dry weather monitoring. Caltrans' area is approximately 1% of the Los Angeles River watershed, and the facilities that would have potential to discharge would be considerably less, making the dry weather impact insignificant. Caltrans facilities typically do not have dry weather discharges. Caltrans conducted field investigations of facilities within the Los Angeles River, Ballona Creek, Santa Monica Bay, Malibu Creek, and Marina Del Rey watersheds to document if any dry weather runoff occurred from Caltrans facilities and activities, such as landscape irrigation. Over 59 miles of roadway and a maintenance station were inspected over a two-year period from April through October. Areas with landscaping were mapped, and any instances of dry weather flow were noted. Only eight occurrences of dry weather runoff from Caltrans irrigation systems at four locations were identified. Steps were taken to eliminate these discharges. Other observations of dry weather runoff were identified, primarily originating from run-on from commercial and residential facilities. The local MS4 Permittees were informed of the their discharges.

Caltrans has an IC/ID program in place to follow-up on any observances of dry weather runoff from its facilities and submit notice of observances of dry weather runoff to the appropriate MS4 jurisdictions. Caltrans will continue to perform prompt maintenance on all reported dry weather discharges to quickly address and correct any problems. As a result, Caltrans is currently meeting the waste load allocations during dry weather periods and will continue to perform maintenance as needed to eliminate any non-stormwater discharges.

*Caltrans' existing IC/ID program already meets dry weather flows, and has insignificant dry weather discharge potential. Therefore, we request to be exempted from implementation and monitoring during dry weather conditions.*

##### **5) Clarify REC-1 and REC-2 Significance**

The problem statement identifies the concerns for recreating in waters with elevated bacterial indicators, but the LARWQCB Basin Plan implies that there is minimal to no recreation activity within almost all of the Los Angeles River segments. The LARWQCB adopted the *Amendment to the Water Quality Control Plan for the Los Angeles Region to Suspend the Recreational Beneficial Uses in Engineered Channels during Unsafe Wet Weather Conditions* (SWRCB Resolution No. 2003 0071), in 2003. Table 2-1A of this BPA, identifies almost of all the TMDL segments requiring waste load allocations or load allocations having access prohibited by Los Angeles County in channelized areas.

*Caltrans requests that the LARWQCB clearly represent what TMDL segments are subject to the BPA for suspension of recreational beneficial uses during unsafe wet weather conditions and include justification for engineered segments of the Los Angeles*



Ms. Townsend  
June 20, 2011  
Page 5

*River not subject to the suspension. If there are planned projects to remove public access recreation restrictions within the TMDL segments, they should be appropriately documented. Historical recreation of the TMDL segments should only provide a basis for attaining REC-1 or REC-2 standards if there are plans for removal of public access restrictions.*

We request that the State Water Board resolve our concerns prior to the adoption of this BPA.

Again, thank you for the opportunity to comment. If you have any questions, please contact Joyce Brenner of my staff at (916) 653-2512.

Sincerely,



G. SCOTT MCGOWEN, P.E.  
Chief Environmental Engineer  
Division of Environmental Analysis

c: Joyce Brenner, Office Chief, Program Implementation  
Bruce Fujimoto, SWRCB, bfujimoto@waterboards.ca.gov  
Jai Paul Thakur, Department of Transportation, District 7

References Cited:

U.S. EPA, 2007. Report of the Experts Scientific Workshop on Critical Research Needs for the Development of New or Revised Recreational Water Quality Criteria. June 15, 2007.

Attachments:

1. Caltrans June 04, 2010 Comments Letter to LARWQCB on LA River Bacterial Indicators TMDL.
2. LARWQCB Response to Comments July 2010, Los Angeles River Watershed Bacteria TMDL.

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*Flex your power!  
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June 4, 2010

California Regional Water Quality Control Board  
Los Angeles Region  
320 West Fourth Street, Suite 200  
Los Angeles, CA 90013

**ATTN: Mr. Man Voong**

**Re: Comments on Los Angeles River Bacterial Indicators TMDL**

The California Department of Transportation (Caltrans) appreciates the opportunity to comment on the proposed amendment to the Water Quality Control Plan for the Los Angeles Region (Basin Plan) to incorporate a Total Maximum Daily Loads (TMDL) to reduce indicator bacteria exceedances observed in the impaired waterbodies of the Los Angeles River Watershed. Caltrans strongly supports the Regional Board's efforts to protect human health and achieve the highest standard of water quality possible. Caltrans has reviewed the TMDL and BPA and has concerns in the following areas.

**Dry Weather Conditions**

Caltrans facilities typically do not have dry weather discharges. Caltrans conducted field investigations of facilities within the Los Angeles River, Ballona Creek, Santa Monica Bay, Malibu Creek, and Marina Del Rey watersheds to document if any dry weather runoff occurred from Caltrans facilities and activities, such as landscape irrigation. Over fifty-nine miles of roadway and a maintenance station were inspected over a two period from April through October. Areas with landscaping were mapped and any instances of dry weather flow were noted. Only eight occurrences of dry weather runoff from Caltrans irrigation systems at four locations were identified. Steps were taken to eliminate these discharges and a program has been implemented to identify and address future discharges. Other observations of dry weather runoff were identified, primarily originating from runoff from commercial and residential facilities. The local MS4 Permittees were informed of the discharges.

**Source of Waste Loads to the Los Angeles River**

Any bacterial indicator loads from Caltrans roadways located in the Los Angeles River watershed are from natural background sources, such as wildlife and birds. Caltrans completed a study in May 2002<sup>1</sup> on the presence of human pathogens in urban storm drains. The study found that highway facilities, including park and rides and maintenance stations, do not appear to be a significant source of pathogens in urban drainage. In addition, during the dry weather inspection study described above, no homeless encampments, illegal discharges, or other

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<sup>1</sup> Caltrans (2002) *Management of Pathogens Associated with Storm Drain Discharge - Results of Investigations of the Presence of Human Pathogens in Urban Storm Drains*. (CTSW-RT-02-2005). May 2002

Mr. Man Voong  
June 4, 2010  
Page 2

obvious sources of bacterial indicators were observed. We request that the waste load allocations assigned to Caltrans in the TMDL be set equal to existing loads.

In addition, the BPA states that "Discharges from general NPDES permits, general industrial stormwater permits, general construction stormwater permits, industrial waste water permits, and WDR permits are not a significant source of bacteria to the river." However, no justification is provided for this assumption. Please include a discussion of the basis for this conclusion, and how this applies to both wet and dry weather conditions.

### **Compliance Schedule**

The TMDL outlines a complicated and cumbersome compliance schedule. The BPA establishes different requirements for the different subwatersheds defined in the TMDL (as shown in table 9-1 of the staff report). The WLAs must be met as early as 10 years and late as 25 years after the adoption of the TMDL, depending on the method of compliance and the segment. Caltrans has a very small amount of area in each of the subwatersheds and the Caltrans load is insignificant compared to the total loads in each. Caltrans comprises a very small portion of the overall watershed, as well as each of the subwatersheds. Caltrans should be allowed to comply with the TMDL by implementing a consistent and structured program for its facilities within the Los Angeles River watershed. This should include developing one complete approach rather than piecemeal monitoring and implementation plans submitted for each subwatershed.

We hope these comments are helpful. If you have any questions or concerns, please contact me at (916) 653-2512.



Joyce Brenner  
Office Chief  
Stormwater Implementation

cc: G. Scott McGowen, Keith Jones  
Department of Transportation Headquarters Division of Environmental Analysis

Paul Thakur  
Department of Transportation, District 7



**Response to Comments July 2010**  
**Los Angeles River Watershed Bacteria TMDL**

No.	Author	Comment	Response
1.4	Boeing	wildlife or eliminate habitat to avoid or reduce those exceedances. In addition, while additional treatment processes, including ultraviolet sterilization or other disinfection treatment methods, could be employed to meet TMDL targets, these processes have the potential to greatly increase energy use at the site, introduce chemicals for treatment, require construction of significant volumes of on-site storage, and/or alter flow patterns of runoff leaving the site. These measures could yield potentially significant environmental impacts whose harm could outweigh any purported benefit, especially given the available evidence that indicator bacteria concentrations likely would rebound after treated water is discharged to natural channels.	Revisions to water quality objectives are not being considered in this action.  A natural sources exclusion approach, which is an alternative implementation procedure for the single sample bacteria objectives contained in the Basin Plan, may be used in some cases, and where supported by adequate data, to account for natural sources. See response to comment 16.10.
<b>2 California Department of Transportation (Caltrans): June 04, 2010</b>			
2.1	Caltrans	The California Department of Transportation (Caltrans) appreciates the opportunity to comment on the proposed amendment to the Water Quality Control Plan for the Los Angeles Region (Basin Plan) to incorporate a Total Maximum Daily Loads (TMDL) to reduce indicator bacteria exceedances observed in the impaired waterbodies of the Los Angeles River Watershed. Caltrans strongly supports the Regional Board's efforts to protect human health and achieve the highest standard of water quality possible. Caltrans has reviewed the TMDL and BPA and has concerns in the following areas.	Comment noted.
2.2	Caltrans	<b>Dry Weather Conditions</b>  Caltrans facilities typically do not have dry weather discharges. Caltrans conducted field investigations of facilities within the Los Angeles River, Ballona Creek, Santa Monica Bay, Malibu Creek, and Marina Del Rey watersheds to document if any dry weather runoff occurred from Caltrans facilities and activities, such as landscape irrigation. Over fifty-nine miles of roadway and a maintenance station were inspected over a two period from April through October. Areas with landscaping were mapped and any instances of dry weather flow were noted. Only eight occurrences of dry weather runoff from Caltrans irrigation systems at four locations were identified. Steps were taken to eliminate these discharges and a program has been implemented to	Comment noted.  If Caltrans facilities are an insignificant load to watershed, the currently assigned interim and final allocations are wholly appropriate. Further, if Caltrans demonstrates no discharge from its facilities and activities during dry weather to the MS4, it will be considered in compliance with the dry weather allocations.



**Response to Comments July 2010  
Los Angeles River Watershed Bacteria TMDL**

No.	Author	Comment	Response
		<p>identify and address future discharges. Other observations of dry weather runoff were identified, primarily originating from runoff from commercial and residential facilities. The local MS4 Permittees were informed of the discharges.</p> <p><b>Source of Waste Loads to the Los Angeles River.</b></p> <p>Any bacterial indicator loads from Caltrans roadways located in the Los Angeles River watershed are from natural background sources such as wildlife and birds. Caltrans completed a study in May 2002 on the presence of human pathogens in urban storm drains. The study found that highway facilities, including park and rides and maintenance stations do not appear to be a significant source of pathogens in urban drainage. In addition, during the dry weather inspection study described above no homeless encampments, illegal discharges, or other obvious sources of bacterial indicators were observed. We request that the waste load allocations assigned to Caltrans in the TMDL be set equal to existing loads.</p> <p>In addition, the BPA states that "Discharges from general NPDES permits, general industrial stormwater permits, general construction stormwater permits, industrial waste water permits, and WDR permits are not a significant source of bacteria to the river." However, no justification is provided for this assumption. Please include a discussion of the basis for this conclusion and how this applies to both wet and dry weather conditions.</p>	<p>The US EPA does not distinguish between human and nonhuman sources of bacteria in its recommended water quality criteria for bacteria in ambient waters, recognizing that both may pose health risks as indicated by epidemiological studies conducted in recreational waters (EPA 2009). The technical report referred to by the commenter examined 12 known pathogens. No recreational water quality criteria have been established by the US EPA for these pathogens as reliable indicators of human health risk for protecting ambient water. US EPA continues to recommend the use of E. coli in states' water quality standards and TMDL programs.</p> <p>The Staff Report provides a source assessment for both dry and wet weather.</p>
2.3	Caltrans	<p><b>Compliance Schedule</b></p> <p>The TMDL outlines a complicated and cumbersome compliance schedule. The BPA establishes different requirements for the different subwatersheds defined in the TMDL (as shown in table 9-1 of the staff report). The WLAs must be met as early as 10 years and late as 25 years after the adoption of the TMDL, depending on the method of compliance and the segment. Caltrans has a very small amount of area in each of the subwatersheds and the Caltrans load is insignificant compared to the total loads in each. Caltrans comprises a very small portion of the overall watershed, as well as each of the subwatersheds. Caltrans should be allowed to comply with the TMDL by implementing a consistent and structured program for its facilities within the Los Angeles River watershed. This should include developing one complete approach rather than piecemeal monitoring and implementation plans submitted for each subwatershed.</p>	<p>The TMDL allows responsible parties to use alternative compliance strategies, subject to approval by the Executive Officer. Nothing prevents a responsible party from planning and executing a strategy to comprehensively address all watershed areas under its authority earlier than the required TMDL deadlines. However, any alternative compliance strategies implemented by responsible parties must demonstrate compliance with final waste load allocations within each segment by the specific compliance deadline.</p>
2.4	Caltrans	<p>We hope these comments are helpful. If you have any questions or concerns, please contact me at (916) 653-2512.</p>	<p>Comment noted.</p>