**State of California**
**California Regional Water Quality Control Board, Los Angeles Region**

**RESOLUTION NO. R10-007**
**July 09, 2010**

**Amendment to the *Water Quality Control Plan for the Los Angeles Region* to Incorporate a Total Maximum Daily Load for Indicator Bacteria in the Los Angeles River Watershed**

**WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region, finds that:**

1. The Federal Clean Water Act (CWA) requires the California Regional Water Quality Control Board, Los Angles Region (Regional Board) to establish water quality standards for each waterbody within its region. Water quality standards include beneficial uses, water quality objectives that are established at levels sufficient to protect those beneficial uses, and an antidegradation policy to prevent degrading waters. Waterbodies that do not meet water quality standards are considered impaired.

2. CWA section 303(d)(1) requires each state to identify the waters within its boundaries that do not meet water quality standards. Those waters are placed on the state's "303(d) List" or "Impaired Waters List". For each listed water, the state is required to establish the Total Maximum Daily Load (TMDL) of each pollutant impairing the water quality standards in that waterbody. Both the identification of impaired waters and TMDLs established for those waters must be submitted to the United States Environmental Protection Agency (U.S. EPA) for approval pursuant to CWA section 303(d)(2). For all waters that are not identified as impaired, the states are nevertheless required to create TMDLs pursuant to CWA section 303(d)(3).

3. During the 1998 Water Quality Assessment, the Los Angeles River Reaches 1, 2, 4, and 6, Arroyo Seco Reaches 1 and 2, Bell Creek, Compton Creek, Rio Hondo Reaches 1 and 2, Tujunga Wash, and Verdugo Wash Reaches 1 and 2 were included on the 303(d) list for high coliform count. In 2002, Dry Canyon Creek and McCoy Canyon Creek were added to the 303(d) list. In 2006, Aliso Canyon Wash was added to the 303(d) list. In July 2009, the Regional Board approved the Los Angeles Region Integrated Report Clean Water Act Section 305(b) Report and Section 303(d) List of Impaired Waters adding Bull Creek to the 303(d) list.

4. A consent decree between U.S. EPA, Heal the Bay, Inc. and Santa Monica BayKeeper, Inc. was approved on March 22, 1999, which resolved litigation between those parties relating to the pace of TMDL development in the Los

Angeles Region. The court order directs the U.S. EPA to ensure that TMDLs for all 1998-listed impaired waters in the Los Angeles Region be established within 13 years of the consent decree. The consent decree combined waterbody pollutant combinations in the Los Angeles Region into 92 TMDL analytical units. Analytical Unit 15 lists consists of segments of the Los Angeles River and tributaries with impairments related to coliform bacteria. Based on the consent decree schedule, TMDLs must be approved or established by U.S. EPA by March 2012.

5. The elements of a TMDL are described in 40 CFR 130.2 and 130.7 and section 303(d)(1)(C) and (D) of the CWA, as well as in U.S. EPA guidance documents (Report No. EPA/440/4-91/001). A TMDL is defined as the sum of the individual waste load allocations for point sources, load allocations for non-point sources and natural background (40 CFR 130.2). TMDLs must be set at levels necessary to attain and maintain the applicable narrative and numeric water quality standards with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality (40 CFR 130.7(c)(1)). 40 CFR 130.7 also dictates that TMDLs shall take into account critical conditions for stream flow, loading and water quality parameters. TMDLs typically include one or more numeric "targets", i.e., numerical translations of the existing water quality standards, which represent attainment of those standards, contemplating the TMDL elements described above. Since a TMDL must represent the "total" load, TMDLs must account for all sources of the relevant pollutants, irrespective of whether the pollutant is discharged to impaired or unimpaired upstream reaches.

6. Neither TMDLs nor their targets or other components are water quality objectives, and thus their establishment does not implicate California Water Code section 13241. Rather, under California law, TMDLs are programs to implement existing standards (including objectives), and are thus established pursuant to Cal. Water Code section 13242. Moreover, they do not create new bases for direct enforcement against dischargers apart from the existing water quality standards they translate. Like most other parts of the Water Quality Control Plan for the Los Angeles Region (Basin Plan), TMDLs are not generally self-implementing. The targets merely establish the bases through which load allocations (LAs) and waste load allocations (WLAs) are calculated. The LAs and WLAs may be implemented in any manner consistent with the Water Quality Control Policy for Addressing Impaired Waters: Regulatory Structure and Options, adopted by the State Water Resources Control Board (State Board) on June 16, 2005 (Resolution 2005-0050). Federal regulations also require that National Pollutant Discharge Elimination System (NPDES) permits be consistent with the assumptions and requirements of available WLAs (40 C.F.R. 122.44(d)(vii)(B)).

7. The Los Angeles River Bacteria TMDL does not dictate whether an NPDES municipal separate storm sewer system (MS4) permit expresses the TMDL's waste load allocations (WLAs) as best management practices or numeric effluent

limitations. The means of expression will be determined when NPDES MS4 permits are revised to incorporate provisions consistent with the assumptions and requirements of the WLAs to effectively implement the TMDL. Federal regulations require that NPDES permits must contain requirements necessary to achieve water quality standards (40 CFR § 122.44(d)(1)) and that water quality based effluent limitations are set consistent with the assumptions and requirements of any available WLA for the discharge (40 CFR § 122.44(d)(1)(vii)(B)).

While federal regulations allow the permitting authority to specify – as conditions of a NPDES permit – the use of BMPs to control or abate the discharge of pollutants in stormwater pursuant to Clean Water Act section 402(p) (40 CFR § 122.44(k)(2)), this is only supportable as an expression of a TMDL's WLA where the permit's administrative record substantiates that the BMPs are expected to be sufficient to fully implement the WLA in the TMDL, consistent with the implementation schedule established in the TMDL (US EPA 2002). Iterative approaches without such a record to substantiate them shall not qualify for consideration as an expression of a TMDL's WLA. Furthermore, this does not substitute for the permitting authority's obligation to include other requirements such as numeric effluent limitations that may be necessary to achieve water quality standards.

The State Board recently addressed the issue of translating TMDL waste load allocations into effluent limitations in NPDES MS4 permits and concluded that, "whether a future municipal storm water permit requirement appropriately implements a storm water wasteload allocation will need to be decided based on the regional water quality control board's findings supporting either the numeric or non-numeric effluent limitations contained in the permit" (Order WQ 2009-008).

8. As envisioned by Cal. Water Code section 13242, the TMDL contains a "description of surveillance to be undertaken to determine compliance with objectives." The Compliance Monitoring element of the TMDL recognizes that monitoring will be necessary to assess the progress of pollutant load reductions and improvements in water quality in the Los Angeles River Watershed. The TMDL establishes the types of information that will be necessary to secure. The Regional Board's Executive Officer will ensure that appropriate entities develop and submit monitoring programs and technical reports necessary to achieve the purposes of the TMDL. The Executive Officer will determine the scope of these programs and reports, taking into account any legal requirements, including this TMDL, and if necessary issue appropriate orders to appropriate entities.

9. Upon establishment of TMDLs by the State or U.S. EPA, the State is required to incorporate, or reference, the TMDLs into the State Water Quality Management Plan (40 CFR 130.6(c)(1), 130.7). The Basin Plan and applicable statewide plans serve as the State Water Quality Management Plans governing the watersheds

under the jurisdiction of the Los Angeles Regional Board. Attachment A to this resolution contains the language to be incorporated into the Basin Plan for this TMDL.

10. The Los Angeles River flows for 55 miles from the Santa Monica Mountains at the western end of the San Fernando Valley to the Long Beach Harbor and into the Pacific Ocean. The entire watershed includes a total stream length of 837.62 miles and 4.6 square miles of lake area. The predominant land uses in the Los Angeles River watershed include open space, residential, industrial, and commercial, and agricultural land uses.

11. The Regional Board's goal in establishing the TMDL for Indicator Bacteria in Los Angeles River Watershed is to protect the water contact recreation (REC-1) and non-contact water recreation (REC-2) beneficial uses.

12. To address large natural storm flows coming from the headwaters of the Los Angeles River, the Regional Board has included several opportunities to reconsider the TMDL to expand the application of the High Flow Suspension provisions of Chapter 2, which may include an expansion of the spatial extent of the suspension to tributaries affected by these large storm flows from the headwaters.

13. Regional Board Staff have prepared a detailed technical document that analyzes and describes the specific necessity and rationale for the development of this TMDL. The technical document entitled "Total Maximum Daily Loads for Indicator Bacteria in Los Angeles River Watershed" is an integral part of this Regional Board action and was reviewed, considered, and accepted by the Regional Board before acting. Further, the technical document provides the detailed factual basis and analysis supporting the problem statement, numeric targets (interpretation of the narrative and numeric water quality objectives, used to calculate the waste load and load allocations), source analysis, linkage analysis, waste load allocations (for point sources), load allocations (for non-point sources), margin of safety, and seasonal variations and critical conditions of this TMDL.

14. On July xx, 2010, prior to the Board's action on this resolution, a public hearing was conducted on this TMDL. Notice of the hearing was published in accordance with the requirements of Cal. Water Code Section 13244. This notice was published in the xxx on xxxx xx, 2010.

15. The Los Angeles River Watershed Indicator Bacteria TMDL is based on the original work conducted by the "Cleaner Rivers through Effective Stakeholder-led TMDLs" (CREST) stakeholder group, a stakeholder effort initiated by the City of Los Angeles for the purpose of developing TMDLs to restore and protect water quality in the Los Angeles River. CREST conducted a groundbreaking study of the stormdrain system inputs to the Los Angeles River referred to as the "Bacteria Source Identification" study (BSI study). This study sampled every

storm drain in selected reaches of the Los Angeles River and comprehensively documented the bacterial inputs and variability from urban areas. With stakeholders, the City of Los Angeles' CREST team developed a detailed dry-weather implementation plan complete with schedule and costs.

16. The public has had a reasonable opportunity to participate in the review of the amendment to the Basin Plan. The CREST stakeholder group conducted quarterly CREST Technical Working Group meetings and steering committee meetings, and a CREST implementation workshop for this TMDL. Regional Board staff has actively participated the CREST public meetings and monthly meetings with CREST development team. A draft of the TMDL was released for public comment on xxxx xx, 2010; a Notice of Hearing and Notice of Filing were published and circulated 45 days preceding Board action; Regional Board staff responded to oral and written comments received from the public; and the Regional Board held a public hearing on July xx, 2010 to consider adoption of the TMDL.

17. In amending the Basin Plan to establish this TMDL, the Regional Board considered the requirements set forth in Sections 13240 and 13242 of the California Water Code.

18. Because the TMDL implements existing narrative and numeric water quality objectives (i.e., water quality objectives in the Basin Plan), the Regional Board (along with the State Board) has determined that adopting a TMDL does not require the Regional Board to consider the factors of Cal. Water Code section 13241. The consideration of the Water Code section 13241 factors, by section 13241's express terms, only applies "in establishing water quality objectives." Here the Regional Board is not establishing water quality objectives, but as required by section 303(d)(1)(C) of the Clean Water Act is adopting a TMDL that will implement the previously established objectives that have not been achieved. In making this determination, the Regional Board has considered and relied upon a legal memorandum from the Office of Chief Counsel to the State Board's basin planning staff detailing why TMDLs cannot be considered water quality objectives. (See Memorandum from Staff Counsel Michael J. Levy, Office of Chief Counsel, to Ken Harris and Paul Lillebo, Division of Water Quality: *The Distinction Between a TMDL's Numeric Targets and Water Quality Standards*, dated June 12, 2002.)

19. While the Regional Board is not required to consider the factors of Cal. Water Code section 13241, it nonetheless has developed and received significant information pertaining to the Cal. Water Code section 13241 factors and has considered that information in developing and adopting this TMDL. Section 13241 at a minimum requires that water quality objectives ensure reasonable protection of beneficial uses. The past, present and probable future beneficial uses of water have been considered in that the Los Angeles River Watershed is designated for a number of beneficial uses including REC-1 and REC-2 in the

Basin Plan. The environmental characteristics of the watershed are spelled out at length in the Basin Plan and in the technical documents supporting this Basin Plan amendment, and have been considered in developing this TMDL. Water quality conditions that reasonably could be achieved through the coordinated control of all factors which affect water quality in the area have been considered. This TMDL provides several compliance options, including structural methods such as low-flow diversions and various swale and infiltration systems, as well as non-structural alternatives such as outreach and education. These options provide flexibility for responsible parties to reduce loading of indicator bacteria to the river and its tributaries. The implementation of the compliance options should ensure that the Los Angeles River and tributaries attain and continue to maintain water quality standards for indicator bacteria. Attainment of the water quality standards through the compliance options is a reasonably achievable water quality condition for the watershed. However, to the extent that there would be any conflict between the consideration of the factor in Water Code section 13241, subdivision (c), if the consideration were required, and the Clean Water Act, the Clean Water Act would prevail. Economic considerations were considered throughout the development of the TMDL. Some of these economic considerations arise in the context of Public Resources Code section 21159 and are equally applicable here. The implementation program for this TMDL recognizes the economic limitations on achieving immediate compliance and allows a flexible implementation schedule of 25 years. The need for housing within the region has been considered, but this TMDL is unlikely to affect housing needs. Whatever housing impacts could materialize are ameliorated by the flexible nature of this TMDL and the 25-year implementation schedule.

20. The amendment is consistent with the State Antidegradation Policy (State Board Resolution No. 68-16), and the federal Antidegradation Policy (40 CFR 131.12), in that it does not allow degradation of water quality, but requires restoration of water quality and attainment of water quality standards.

21. Pursuant to Public Resources Code section 21080.5, the Resources Agency has approved the Regional Boards' basin planning process as a "certified regulatory program" that adequately satisfies the California Environmental Quality Act (CEQA) (Public Resources Code, § 21000 et seq.) requirements for preparing environmental documents (14 Cal. Code Regs. § 15251(g); 23 Cal. Code Regs. § 3782). The Regional Board staff has prepared "substitute environmental documents" for this project that contain the required environmental documentation under the State Board's CEQA regulations. (23 Cal. Code Regs. § 3777.) The substitute environmental documents include the TMDL staff report entitled "Total Maximum Daily Loads for Indicator Bacteria in the Los Angeles River Watershed", the environmental checklist, the comments and responses to comments, the basin plan amendment language, and this resolution. The project itself is the establishment of a TMDL for Indicator Bacteria in the Los Angeles River Watershed. While the Regional Board has no discretion to not establish a TMDL (the TMDL is required by federal law), the Board does exercise discretion

in assigning waste load allocations and load allocations, determining the program of implementation, and setting various milestones in achieving the water quality standards. The CEQA checklist and other portions of the substitute environmental documents contain significant analysis and numerous findings related to impacts and mitigation measures.

22. A CEQA Scoping meeting was conducted on March 10, 2010 at the Junipero Serra Building Meeting Room, 7th Floor, to solicit input from the public and interested stakeholders in determining the appropriate scope, content and implementation options of the proposed TMDL. This meeting fulfilled the requirements under CEQA (Public Resources Code, Section 21083.9). A notice of the CEQA Scoping meeting was sent to interested parties on February 11, 2010.

23. In preparing the substitute environmental documents, the Regional Board has considered the requirements of Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187, and intends those documents to serve as a tier 1 environmental review. This analysis is not intended to be an exhaustive analysis of every conceivable impact, but an analysis of the reasonably foreseeable consequences of the adoption of this regulation, from a programmatic perspective. The "Lead" agencies for tier 2 projects will assure compliance with project-level CEQA analysis of this programmatic project. Project level impacts will need to be considered in any subsequent environmental analysis performed by other public agencies, pursuant to Public Resources Code section 21159.2.

24. The foreseeable methods of compliance for this TMDL entail sub-regional structural best management practices (BMPs) such as low flow diversions, vegetated treatment systems and vegetated bioswales, local infiltration systems, local capture system, equestrian related BMPs, and media filtration, as well as regional structural BMPs such as diversion to stormwater treatment plants, regional infiltration systems, regional detention facilty, regional natural treatment systems, and riparian enhancement treatment. Foreseeable methods of compliance also include non-structural BMPs, such as administrative controls, outreach and education.

25. Consistent with the Regional Board's substantive obligations under CEQA, the substitute environmental documents do not engage in speculation or conjecture, and only consider the reasonably foreseeable environmental impacts, including those relating to the methods of compliance, reasonably foreseeable feasible mitigation measures to reduce those impacts, and the reasonably foreseeable alternative means of compliance, which would avoid or reduce the identified impacts.

26. The proposed amendment could have a potentially significant adverse effect on the environment. However, there are feasible alternatives, feasible mitigation

measures, or both, that if employed, would substantially lessen the potentially significant adverse impacts identified in the substitute environmental documents; however such alternatives or mitigation measures are within the responsibility and jurisdiction of other public agencies, and not the Regional Board. Cal. Water Code section 13360 precludes the Regional Board from dictating the manner in which responsible parties comply with any of the Regional Board's regulations or orders. When the parties responsible for implementing this TMDL determine how they will proceed, the parties responsible for those parts of the project can and should incorporate such alternatives and mitigation into any subsequent projects or project approvals. These feasible alternatives and mitigation measures are described in more detail elsewhere in the substitute environmental documents. (14 Cal. Code Regs. § 15091(a)(2).)

27. From a program-level perspective, incorporation of the alternatives and mitigation measures specified will forseeably reduce impacts to less than significant levels.

28. The substitute documents for this TMDL, and in particular the Environmental Checklist and staff's responses to comments, identify broad mitigation approaches that should be considered at the project level.

29. To the extent significant adverse environmental effects could occur, the Regional Board has balanced the economic, legal, social, technological, and other benefits of the TMDL against the unavoidable environmental risks and finds that specific economic, legal, social, technological, and other benefits of the TMDL outweigh the unavoidable adverse environmental effects, such that those effects are considered acceptable. The basis for this finding is set forth in the substitute environmental documents. (14 Cal. Code Regs. § 15093.)

30. Health and Safety Code section 57004 requires external scientific peer review for certain water quality control policies. Scientific portions of this TMDL are drawn exclusively from the Santa Monica Bay Beaches Bacteria TMDLs. As a result, the scientific portions of this TMDL have already undergone external, scientific peer review. Remaining portions of the TMDL, such as the implementation strategy, are not scientifically based, and therefore, not subject to the peer review requirements of section 57004. As a result, the Regional Board has fulfilled the requirements of Health and Safety Code section 57004, and the proposed amendment does not require further peer review.

31. The regulatory action meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b). As specified above, federal law and regulations require that TMDLs be incorporated, or referenced, in the state's water quality management plan. The Regional Board's Basin Plan is the Regional Board's component of the water quality management plan, and the Basin Plan is how the Regional Board takes quasi-legislative, planning actions. Moreover, the TMDL is a program of implementation for existing water quality objectives, and is, therefore, appropriately a component of

the Basin Plan under Water Code section 13242. The necessity of developing a TMDL is established in the TMDL staff report, the section 303(d) list, and the data contained in the administrative record documenting the indicator bacteria impairments for the Los Angeles River Watershed.

32. The Basin Plan amendment incorporating a TMDL for bacteria in Los Angeles River Watershed must be submitted for review and approval by the State Board, the State Office of Administrative Law (OAL), and the U.S. EPA. The Basin Plan amendment will become effective upon approval by OAL and U.S. EPA. A Notice of Decision will be filed with the Resources Agency.

33. If during the State Board's approval process Regional Board staff, the State Board or State Board staff, or OAL determine that minor, non-substantive modifications to the language of the amendment are needed for clarity or consistency, the Executive Officer should make such changes consistent with the Regional Board's intent in adopting this TMDL, and should inform the Board of any such changes.

34. Considering the record as a whole, this Basin Plan amendment is expected to result in an effect, either individually or cumulatively, on wildlife resources.

**THEREFORE, be it resolved that pursuant to sections 13240 and 13242 of the Cal. Water Code, the Regional Board hereby amends the Basin Plan as follows:**

1. The Regional Board hereby approves and adopts the CEQA substitute environmental documentation, which was prepared in accordance with Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187, and directs the Executive Officer to sign the environmental checklist.

2. Pursuant to Sections 13240 and 13242 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendments to Chapter 7 of the Water Quality Control Plan for the Los Angeles Region, as set forth in Attachment A hereto, to incorporate the elements and implementation schedule of the TMDL for indicator bacteria in the Los Angeles River Watershed.

3. The Executive Officer is directed to forward copies of the Basin Plan amendment to the State Board in accordance with the requirements of section 13245 of the California Water Code.

4. The Regional Board requests that the State Board approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the California Water Code and forward it to the OAL and the U.S. EPA.

5. If during the State Board's approval process, Regional Board staff, the State Board or State Board staff, or the OAL determine that minor, non-substantive modifications to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Board of any such changes.

6. The Executive Officer is authorized to request a "No Effect Determination" from the Department of Fish and Game, or transmit payment of the applicable fee as may be required to the Department of Fish and Game.

I, Samuel Unger, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on July 09, 2010.

Samuel Unger

Samuel Unger
Interim Executive Officer

8-30-10
Date

11-10

# Attachment A to Resolution No. R10-007

**Amendment to the Water Quality Control Plan - Los Angeles Region to incorporate the Los Angeles River Watershed Bacteria TMDL**

Proposed for adoption by the California Regional Water Quality Control Board, Los Angeles Region on July, 9, 2010.

**Amendments:**

**Table of Contents**
Add:

Chapter 7. Total Maximum Daily Loads (TMDLs) Summaries
7-28 Los Angeles River Watershed Bacteria TMDL

**List of Figures, Tables and Inserts**
Add:

Chapter 7. Total Maximum Daily Loads (TMDLs)
Tables
7-39 Los Angeles River Watershed Bacteria TMDL
7-39.1. Los Angeles River Watershed Bacteria TMDL: Elements
7-39.2. Los Angeles River Watershed Bacteria TMDL: Responsible Parties for Waste Load Allocations Assigned in the Los Angeles River Watershed Bacteria TMDL
7-39.3. Los Angeles River Watershed Bacteria TMDL: Implementation Schedule

**Chapter 7. Total Maximum Daily Loads (TMDLs) Summaries**
Add:
7-39 Los Angeles River Watershed Bacteria TMDL

This TMDL was adopted by:
The Regional Water Quality Control Board on July 09, 2010.

This TMDL was approved by:

The State Water Resources Control Board on [Insert Date].
The Office of Administrative Law on [Insert Date].
The U.S. Environmental Protection Agency on [Insert Date].

The following table includes the elements of this TMDL.

**Table 7-39.1. Los Angeles River Watershed Bacteria TMDL: Elements**

| Element | Findings and Regulatory Provisions |
|---|---|
| **Problem Statement** | Elevated bacteria indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use at the 303(d) listed waterbodies within the Los Angeles River Watershed. Recreating in waters with elevated bacteria indicator densities has been associated with adverse health effects. Specifically, local and national epidemiological studies demonstrate a causal relationship between adverse health effects and recreational water quality, as measured by bacteria indicator densities. |
| **Numeric Target** (Interpretation of the numeric water quality objective, used to calculate allocations) | The TMDL has a multi-part numeric target based on the bacteriological water quality objectives for fresh water to protect the water contact recreation use set forth in Chapter 3. These targets are the most appropriate indicators of public health risk in recreational waters.<br><br>The numeric targets for this TMDL are:<br><br>1. Geometric Mean Target<br>a. *E. coli* density shall not exceed 126/100 mL.<br><br>2. Single Sample Target<br>b. *E. coli* density shall not exceed 235/100 mL.<br><br>The Basin Plan includes objectives for both *E. coli* and fecal coliform. Fecal coliform objectives were retained in Chapter 3 after adoption of the *E. coli* objective. However, it has been demonstrated that *E. coli* comprise the majority of fecal coliform and the numeric targets for this TMDL are only the Basin Plan objectives for *E. coli*.<br><br>The Basin Plan objectives and these targets are based on an acceptable health risk for fresh recreational waters of eight illnesses per 1,000 exposed individuals as recommended by the US EPA (USEPA, 1986).<br><br>This TMDL uses a "reference system/anti-degradation approach" to implement the water quality objectives per the implementation provisions in Chapter 3. On the basis of the historical exceedance frequency at Southern California reference reaches, a certain number of daily exceedances of the single sample bacteria objectives are permitted. The allowable number of exceedance days is set such that (1) bacteriological water quality at any site is at least as good as at the reference site(s) and (2) there is no degradation of existing bacteriological water quality. This approach recognizes that there are natural sources of bacteria that may cause or contribute to exceedances of the single sample objectives and that it is not the intent of the |

| Element | Findings and Regulatory Provisions |
|---|---|
| | Regional Board to require treatment or diversion of natural coastal creeks or to require treatment of natural sources of bacteria from undeveloped areas.<br><br>For the single sample target, each river segment and tributary is assigned an allowable number of exceedance days for dry weather and wet weather (defined as days with 0.1 inch of rain or greater and the three days following the rain event.)<br><br>The geometric mean target may not be exceeded at any time. |
| **Source Analysis** | Bacteria sources in the Los Angeles River Watershed include anthropogenic and non-anthropogenic sources and point and non-point sources. Each of these sources contributes to the elevated levels of bacteria indicator densities in the Los Angeles River Watershed during dry and wet weather. There are currently five major National Pollutant Discharge Elimination System (NPDES) permits or Waste Discharge Requirements (WDRs) for discharges to the Los Angeles River Watershed. Of these, three are Water Reclamation Plants (WRPs), including the Donald C. Tillman WRP, Los Angeles-Glendale WRP, and Burbank WRP.<br><br>There are three Municipal Separate Storm Sewer System (MS4) NPDES permits in the watershed, including the County of Los Angeles and the Incorporated Cities Therein, except the City of Long Beach; the City of Long Beach; and the California Department of Transportation (Caltrans) (referenced hereafter as the MS4 Permittees), which regulate municipal stormwater and urban runoff discharges.<br><br>Discharges from storm drains and tributaries contribute roughly 13% of the flow in the Los Angeles River, while the three WRPs contribute roughly 72% of the flow in the river during dry weather. However, discharges from storm drains contribute almost 90% of the *E. coli* loading from point sources to the river during dry weather. During wet weather, WRP discharges may account for as little as 1% of the total flow in the river. While there are many sources of indicator bacteria to the MS4, discharges from the MS4 are the principal source of bacteria to the Los Angeles River and its tributaries in both dry weather and wet weather.<br><br>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.<br><br>Non-point sources include wildlife, direct human discharges, septic |

<table>
<tr><th>Element</th><th>Findings and Regulatory Provisions</th></tr>
<tr><td></td><td>systems, equestrian activities, and birds. Though sanitary sewer overflows are frequent within the watershed they are estimated to account for only 2% of the total dry-weather load and a small portion of the wet-weather load. Non-point sources may also include in-channel sources such as re-growth or re-suspension from sediments; the relative contribution of such sources is unknown.</td></tr>
<tr><td>Waste Load Allocations (for point sources)</td><td>Waste load allocations (WLAs) are expressed as allowable exceedance days.<br><br>The allowable number of exceedance days for dry weather and wet weather is based on the more stringent of two criteria (1) exceedance days in the designated reference system and (2) exceedance days based on historical bacteriological data in the subject reach. This ensures that bacteriological water quality is at least as good as that of a largely undeveloped system and that there is no degradation of existing water quality.<br><br>For this TMDL, the mainstem of the Los Angeles River was broken down into segments for allocations due to the availability of flow data.<br><br>• Segment A includes Reaches 1 and a portion of Reach 2<br>• Segment B includes a portion of Reach 2<br>• Segment C includes Reach 3 and a portion of Reach 4<br>• Segment D includes a portion of Reach 4 and Reach 5<br>• Segment E includes Reach 6<br><br>For each segment and tributary, allowable exceedance days are set on an annual basis as well as for dry weather and wet weather days.<br><br>Certain reaches and tributaries of the Los Angeles River are subject to a High Flow Suspension (HFS) of the recreational beneficial uses as identified in Chapter 2. The HFS applies during specified conditions as defined in Chapter 2. During these conditions, the REC-1 and REC-2 beneficial uses are suspended for the affected reaches and tributaries.<br><br>For MS4 dischargers, the final dry-weather WLAs and wet-weather WLAs for the single sample targets are listed below.<br><br>
<table>
<tr><th>Allowable Number of Exceedance Days</th><th>Daily Sampling</th><th>Weekly Sampling</th></tr>
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| Element | Findings and Regulatory Provisions |
|---|---|

| | | |
|---|---|---|
| Dry Weather | 5 | 1 |
| Non-HFS[1] Waterbodies Wet Weather | 15 | 2 |
| HFS Waterbodies Wet Weather | 10 (not including HSF days) | 2 (not including HSF days) |

The final WLAs for the geometric mean target during any time at any river segment and tributary in the Los Angeles River Watershed is zero (0) days of allowable exceedances.In addition, MS4 dischargers are assigned interim WLAs for dry weather. Interim dry weather WLAs are assigned for specific river segments and tributaries and are listed in the table, below.

| River Segment or Tributary | *E. coli* Load ($10^9$ MPN[2]/Day) |
|---|---|
| Los Angeles River Segment[3] A | 301 |
| Los Angeles River Segment B | 518 |
| Los Angeles River Segment C | 463 |
| Los Angeles River Segment D | 454 |
| Los Angeles River Segment E | 32 |
| Aliso Canyon Wash | 23 |
| Arroyo Seco | 24 |
| Bell Creek | 14 |
| Bull Creek | 9 |
| Burbank Western Channel | 86 |
| Compton Creek | 7 |
| Dry Canyon | 7 |
| McCoy Canyon | 7 |
| Rio Hondo | 2 |
| Tujunga Wash | 10 |
| Verdugo Wash | 51 |

Unexpectedly high-loading outfalls may be excluded from interim compliance calculations under the following circumstances: If an outfall which was 1) loading *E. coli* at a rate less than the 25th percentile of outfalls during the monitoring events used to develop the LRS, but, at the time of compliance monitoring, is 2) loading *E. coli* at a rate greater than the 90th percentile of outfalls, and 3) actions are taken prior to the

[1] HFS stands for high flow suspension as defined in Chapter 2.
[2] MPN stands for most probable number.
[3] The segments are defined in the Staff Report.

| Element | Findings and Regulatory Provisions |
|---|---|
| | end of the first phase (i.e. 10 years after the beginning of the segment or tributary specific phase) such that the outfall is returned to a loading less than the 50th percentile of the outfalls at compliance monitoring, then the 90th percentile data from the outfall can be excluded from the compliance loading calculations. Likewise, if an outfall which was 1) the subject of a dry weather diversion is found, at the time of compliance monitoring, to be 2) contributing greater than the 90th percentile loading rate, and 3) actions are taken such that the outfall is returned to a loading less than the 50th percentile of the outfalls at compliance monitoring, and a maintenance schedule for the diversion is submitted with the compliance report, then the 90th percentile data from the outfall can be excluded from the compliance loading calculations.<br><br>MS4 dischargers can demonstrate compliance with the final dry weather WLAs by demonstrating that final WLA are met instream or by demonstrating one of the following conditions at outfalls to the receiving waters:<br>1. 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;<br>2. Zero discharge during dry weather;<br>3. Demonstration of compliance as specified in the MS4 NPDES permit which may include the use of BMPs where the permit's administrative record supports that the BMPs are expected to be sufficient to implement the WLA in the TMDL, the use of calculated loading rates such that loading of *E. coli* to the segment or tributary during dry weather is less than or equal to a calculated loading rates that would not cause or contribute to exceedances based on a loading capacity representative of conditions in the River at the time of compliance or other appropriate method.<br><br>In addition, individual or subgroups of MS4 dischargers can differentiate their dry weather discharges from other dischargers or upstream contributions by demonstrating one of the following conditions at outfalls to the receiving waters or at segment, tributary or jurisdictional boundaries:<br>1. Flow-weighted concentration of *E. coli* in individual or subgroup MS4 discharge during dry weather is less than or equal to 235 MPN/100mL, based on a weighted-average using flow rates from all measured outfalls;<br>2. Zero discharge from individual or subgroup MS4 dischargers during dry weather;<br>3. Demonstration that the MS4 loading of *E. coli* to the segment or tributary during dry weather is less than or equal to a calculated loading rates that would not cause or contribute to exceedances |

<table>
<tr><th>Element</th><th>Findings and Regulatory Provisions</th></tr>
<tr><td></td><td>based on the loading capacity representative of conditions in the River at the time of compliance.<br><br>The interim and final WLAs are group-based, shared among all MS4s that drain to a segment or tributary. However, WLA may be distributed based on proportional drainage area, upon approval of the Executive Officer.<br><br>General NPDES permits, individual NPDES permits, the Statewide Industrial Storm Water General Permit, the Statewide Construction Activity Storm Water General Permit, and WDR permittees in the Los Angeles River Watershed are assigned WLAs of zero (0) days of allowable exceedances of the single sample target for both dry and wet weather and no exceedances of the geometric mean target. Compliance with an effluent limit based on the water quality objective can be used to demonstrate compliance with the WLA. In addition, permits which include stormwater effluent limitations for sites, which are measured in receiving waters, are assigned WLA for those sites in accordance with the table for MS4 dischargers listed above, where the subwatershed drained is open natural land and a demonstration has been made to the Regional Board that any exceedances are due to natural sources.<br><br>The WLAs for the three WRPs in the watershed, which include D.C. Tillman, Los Angeles-Glendale, and Burbank WRP, are set equal to a 7-day median of 2.2 MPN/100 mL of E. coli or a daily max of 235 MPN/100mL to ensure zero (0) days of allowable exceedances. No exceedances of the geometric mean target shall be permitted.</td></tr>
<tr><td>Load Allocations (for non-point sources)</td><td>Load allocations (LAs) are expressed as the number of daily or weekly sample days that may exceed the single sample target identified under "Numeric Target."<br><br>Lands not covered by a MS4 permit, such as the US Forest Service lands, California Department of Parks and Recreation lands, or National Park Service lands are assigned LAs. The dry-weather LAs and wet-weather LAs for the single sample target are listed in the table, below.
<table>
<tr><th>Allowable Number of Exceedance Days</th><th>Daily Sampling</th><th>Weekly Sampling</th></tr>
<tr><td>Dry Weather</td><td>5</td><td>1</td></tr>
<tr><td>Non-HFS[4] Waterbodies Wet Weather</td><td>15</td><td>2</td></tr>
<tr><td>HFS Waterbodies Wet Weather</td><td>10 (not including HSF days)</td><td>2 (not including HSF days)</td></tr>
</table></td></tr>
</table>

| Element | Findings and Regulatory Provisions |
|---|---|
| | Onsite Wastewater Treatment Systems are assigned LAs of zero (0) days of allowable exceedances for both dry and wet weather for the single sample target and geometric mean target.<br><br>In addition, sewer collection systems are assigned LAs of zero (0) days of allowable exceedances for both dry and wet weather for the single sample target and the geometric mean target.<br><br>The LAs for the geometric mean target for any responsible party during any time at any river segment and tributary in the Los Angeles River Watershed is zero (0) days of allowable exceedances. |
| **Implementation** | The regulatory mechanisms used to implement the TMDL will include general NPDES permits, individual NPDES permits, MS4 Permits covering jurisdictions within the Los Angeles River Watershed, the Statewide Industrial Storm Water General Permit, the Statewide Construction Activity Storm Water General Permit, the Statewide Stormwater Permit for Caltrans Activities, and the authority contained in Sections 13263 and 13267 of the Cal. Water Code. For each discharger assigned a WLA, the appropriate Regional Board Order shall be reopened or amended when the order is reissued, in accordance with applicable laws, to incorporate the applicable WLA as a permit requirement.<br><br>LAs for onsite wastewater treatment systems will be implemented through WDRs or waivers of WDRs. LAs for other nonpoint sources such as horses/livestock, aquaculture, irrigated agriculture,and golf courses, will be implemented through the Nonpoint Source Implementation and Enforcement Policy.<br><br>This TMDL will be implemented through the mechanisms above in accordance with the implementation schedule. The implementation schedule is detailed in Table 7-39.3.<br><br>MS4 Permittees may achieve the WLAs by employing any viable and legal implementation strategy. A recommended implementation approach is called the "MS4 Load Reduction Strategy" (LRS) and requires coordinated effort by all MS4 Permittees within a segment or tributary. Each LRS must quantitatively demonstrate that the actions contained within the LRS are sufficient to result in attainment of the *final* WLAs. The *interim* WLAs represent a minimum threshold that must be attained after those actions are taken, per the implementation schedule. An LRS shall be approved by the Regional Board Executive Officer prior to implementation.<br><br>Individual MS4 Permittees or subgroups of MS4 Permittees may choose |

| Element | Findings and Regulatory Provisions |
|---|---|
| | to develop and implement alternative implementation strategies for dry weather implementation, then the group-based WLAs may be distributed based on proportional drainage area, upon approval of the Executive Officer. The implementation approaches herein, including the use of an MS4 Load Reduction Strategy, can still be followed based on the proportional WLAs. For MS4 Permittees that choose to *not* follow a MS4 Load Reduction Strategy, the compliance schedule to attain final WLAs is shorter because only one implementation phase is allowed.<br><br>For the wet weather WLA, responsible parties must provide an Implementation Plan to the Regional Board outlining how each intends to cooperatively achieve compliance with the wet-weather WLAs. The report shall include implementation methods, an implementation schedule, and proposed milestones. The plan shall include a technically defensible quantitative linkage to the final wet-weather WLAs. The linkage should include target reductions in stormwater runoff and/or *E. coli*. The plan shall include quantitative estimates of the water quality benefits provided by the proposed structural and non-structural BMPs. Responsible parties may propose wet-weather load-based compliance at MS4 outfalls, which shall include an estimate of existing load and the allowable load from MS4 outfalls to attain the allowable number of exceedance days instream.<br><br>Twenty-five years after the effective date of the TMDL, final WLAs and LAs shall be achieved at all segments and tributaries for dry and wet weather.<br>Regional Board staff shall convene and oversee a workgroup, or shall participate in a stakeholder-led workgroup, to address technical and regulatory issues associated with the Los Angeles River Bacterial TMDL, which may include, where appropriate a re-evaluation of recreational uses in the Los Angeles River, re-evaluation of the high flow suspension on a site specific basis, prioritization of bacteria risk, re-evaluation of bacteria objectives for fresh water, re-evaluation of implementation provisions and compliance metrics. These re-evaluations support both this TMDL and also support many of the current triennial review priorities identified by the Board.<br><br>The workgroup shall provide technical input for stakeholder-led technical studies and may serve to provide technical input during the scoping and development of related Basin Plan Amendments that will be considered by the Regional Board.<br><br>Over the course of TMDL implementation, the TMDL shall be re-considered to incorporate new information from these stakeholder-led |

| Element | Findings and Regulatory Provisions |
|---|---|
| | technical studies, or other scientific studies, or to address revisions to water quality standards, such as adoption of revised water quality objectives based on recommendations of USEPA a revised implementation schedule, revised. The schedule in Table 7.39.4 includes several specific re-consideration opportunities. |
| **Margin of Safety** | An explicit margin of safety is included in the allocations. Cumulatively, the dry-weather and wet-weather WLAs and LAs allow exceedances of the single sample target no more than 5% of the time on an annual basis. The *Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List* concludes that there are water quality impairments using a binomial distribution method, which lists waterbodies as impaired when the exceedances are between approximately 8 and 10 percent.<br><br>An implicit margin of safety is incorporated in the interim allocations through the use of a conservative assumption of no (0) bacterial decay in discharges from storm drains to the receiving water when determining the assimilative capacity of the river segments and tributaries. |
| **Seasonal Variations and Critical Conditions** | Seasonal variations are addressed by developing separate allocations for dry weather and wet weather based on observed natural background levels of exceedance of bacteria indicators.<br><br>Historic monitoring data for the Los Angeles River Watershed indicate that the critical condition for bacteria loading is during wet weather due to greater exceedance probabilities of the single sample bacteria objective than during dry weather. The 90$^{th}$ percentile 'storm year'[5] in terms of wet days[6] is used as the reference year. Selecting the 90$^{th}$ percentile year is a conservative approach that will accommodate a 'worst-case' scenario resulting in fewer exceedance days than the maximum allowed in drier years. Conversely, in the 10% of wetter years, there may be more than the allowable number of exceedance days. |
| **Compliance Monitoring** | For MS4 Permittees, monitoring shall entail compliance monitoring to assess attainment of WLAs and monitoring in support of Load Reduction Strategies or alternative compliance strategy and wet-weather implementation plans.<br><br>An ambient water quality monitoring program shall be conducted by responsible parties as set forth in a Bacteria Coordinated Monitoring Plan (CMP), which shall be submitted for Executive Officer approval per the TMDL implementation schedule. The CMP shall detail: the number and location of sites, including at least one monitoring station per each river segment, reach and tributary addressed under this TMDL; |

| Element | Findings and Regulatory Provisions |
|---|---|
| | measurements and sample collection methods; and monitoring frequencies. Responsible parties may also include in the CMP, for Executive Officer consideration, other meteorological stations which may be more representative of the existing hydrology and climate.<br><br>Each segment, reach, and tributary addressed under this TMDL shall be monitored at least monthly until the subject segment, reach or tributary is at the end of the execution part of its first implementation phase (i.e. 7 years after beginning the segment or tributary-specific phase), to determine compliance with the interim WLA. Each segment, reach and tributary addressed under this TMDL shall be monitored at least weekly to determine compliance with the instream targets after the first implementation phase.<br><br>For parties pursuing an LRS, intensive outfall monitoring will be conducted before and after implementation of the LRS. Pre-LRS monitoring will be used to estimate the *E. coli* loading from MS4 outfalls to the segment or tributary, and identify the outfalls and types of implementation actions that are expected to be necessary to attain the WLAs. Post-LRS monitoring will be used to evaluate compliance with the interim WLA and to plan for additional implementation actions to meet the final WLAs, in a second implementation phase, if necessary.<br><br>When applicable, outfall monitoring shall including *E. coli* by USEPA-approved methods and flow rate at *all* MS4 outfalls ("snapshots") that are discharging to a segment or tributary or across jurisdictional boundaries during a given monitoring event. For each Load Reduction Strategy, at least six (6) snapshots shall be conducted for pre-LRS monitoring, and at least three (3) snapshots shall be conducted for post-LRS monitoring. For MS4s that choose to follow a non-LRS implementation approach, but choose to demonstrate compliance with Equivalent Conditions, at least six (6) snapshots shall be conducted.<br><br>Responsible parties pursuing an alternative compliance strategies shall propose monitoring to support the plan.<br><br>The Wet Weather Implementation Plans shall propose monitoring to support the Wet Weather Implementation Plans.<br><br>Monitoring for dischargers other than MS4 permittees to determine compliance with WLAs and LAs shall be established through monitoring and reporting programs conducted as part of the discharger's permit/waste discharge/waiver requirements and through implementation of the Nonpoint Source Implementation and Enforcement Policy, for nonpoint sources. |

**7-39.5. Los Angeles River Bacteria TMDL: Responsible Parties for Waste Load or Load Allocations**

| Responsible Entity | Los Angeles River Segment | | | | | Los Angeles River Tributary | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | Aliso Canyon Wash | Arroyo Seco | Bell Creek | Bull Creek | Burbank Western Channel | Compton Creek | Dry Canyon Creek | McCoy Canyon Creek | Rio Hondo | Tujunga Wash | Verdugo Wash |
| Alhambra | | √ | | | | | | | | | | | | √ | | |
| Arcadia | | | | | | | | | | | | | | √ | | |
| Bell | | √ | | | | | | | | | | | | | | |
| Bell | | √ | | | | | | | | | | | | √ | | |
| Bradbury | | | | | | | | | | | | | | √ | | |
| Burbank | | | √ | | | | | | | √ | | | | | | |
| Bureau of Land Management | | | | | √ | | | | | | | | | | | |
| Calabasas | | | | | | | | | | | | √ | √ | | | |
| CA Dept. of Parks and Recreation | | | | √ | √ | | | | | | | | | | | |
| Caltrans | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| Carson | | | | | | | | | | | √ | | | | | |
| Commerce | | √ | | | | | | | | | | | | √ | | |
| Compton | √ | √ | | | | | | | | | √ | | | | | |
| Cudahy | | √ | | | | | | | | | | | | | | |
| Downey | | √ | | | | | | | | | | | | √ | | |
| Duarte | | | | | | | | | | | | | | √ | | |
| El Monte | | | | | | | | | | | | | | √ | | |
| Glendale | | √ | √ | | | | √ | | | √ | | | | | √ | √ |
| Hidden Hills | | | | | | | | √ | | | | | √ | | | |

## Attachment A to Resolution No. R10-007

| Responsible Entity | Los Angeles River Segment | | | | | Los Angeles River Tributary | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | Aliso Canyon Wash | Arroyo Seco | Bell Creek | Bull Creek | Burbank Western Channel | Compton Creek | Dry Canyon Creek | McCoy Canyon Creek | Rio Hondo | Tujunga Wash | Verdugo Wash |
| Irwindale | | | | | | | | | | | | | | √ | | |
| La Cañada Flintridge | | | √ | | | | √ | | | | | | | | | √ |
| Lakewood | √ | | | | | | | | | | | | | | | |
| Long Beach | √ | | | | | | | | | | √ | | | | | |
| Los Angeles | | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | | √ | √ |
| Los Angeles County | √ | √ | √ | | √ | √ | √ | √ | √ | | √ | √ | √ | √ | √ | √ |
| LA County Flood Control | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| Lynwood | √ | √ | | | | | | | | | √ | | | | | |
| Maywood | | √ | | | | | | | | | | | | | | |
| Monrovia | | | | | | | | | | | | | | √ | | |
| Montebello | | √ | | | | | | | | | | | | √ | | |
| Monterey Park | | √ | | | | | | | | | | | | √ | | |
| National Park Service | | | | √ | √ | | | | | | | | | | | |
| Paramount | √ | √ | | | | | | | | | | | | | | |
| Pasadena | | √ | √ | | | | √ | | | | | | | √ | | √ |
| Pico Rivera | | | | | | | | | | | | | | √ | | |
| Rosemead | | | | | | | | | | | | | | √ | | |
| San Fernando | | | | | | | | | | | | | | | √ | |
| San Gabriel | | | | | | | | | | | | | | √ | | |

## Attachment A to Resolution No. R10-007

| Responsible Entity | Los Angeles River Segment | | | | | Los Angeles River Tributary | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | Aliso Canyon Wash | Arroyo Seco | Bell Creek | Bull Creek | Burbank Western Channel | Compton Creek | Dry Canyon Creek | McCoy Canyon Creek | Rio Hondo | Tujunga Wash | Verdugo Wash |
| San Marino | | | | | | | | | | | | | | √ | | |
| Santa Clarita | | | | | | | | | √ | | | | | | | |
| Sierra Madre | | | | | | | | | | | | | | √ | | |
| Signal Hill | √ | | | | | | | | | | | | | | | |
| South El Monte | | | | | | | | | | | | | | √ | | |
| South Gate | | √ | | | | | | | | | √ | | | √ | | |
| South Pasadena | | √ | | | | | √ | | | | | | | √ | | |
| State Land Commission | | | | | √ | | | | | | | | | | | |
| Temple City | | | | | | | | | | | | | | √ | | |
| U.S. Forest Service | | | | | | | √ | | √ | | | | | √ | √ | √ |
| Vernon | | √ | | | | | | | | | √ | | | | | |

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

*Italics in this Table refer to Permittees using an alternative compliance plan instead of an LRS.*

| Implementation Action | Responsible Parties | Deadline |
|---|---|---|
| **Segment by Segment Schedule Dry Weather (Schedule for all river and wet weather is at the end of the Table)** | | |
| **SEGMENT B (upper and middle Reach 2 – Figueroa Street to Rosecrans Avenue) Dry Weather** | | |
| **First phase – Segment B** | | |
| Submit a Load Reduction Strategy (LRS) for Segment B *(or submit an alternative compliance plan)* | 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 (or final) WLA and submit report to Regional Board | MS4 and Caltrans NPDES Permittees discharging to Segment B, if using LRS | 10 years after effective date of the TMDL |
| *Achieve final WLA or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Board* | *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 |
| Achieve final WLAs in Segment B or demonstrate that non-compliance is only due to upstream contributions and submit report to Regional Board | MS4 and Caltrans NPDES Permittees discharging to Segment B, if using LRS | 16.5 years after effective date of the TMDL |
| **SEGMENT B TRIBUTARIES (Rio Hondo and Arroyo Seco) Dry Weather** | | |
| **First phase – Segment B Tributaries (Rio Hondo and Arroyo Seco)** | | |
| Submit a Load Reduction Strategy (LRS) for Segment B tributaries *(or submit an alternative compliance plan)* | MS4 and Caltrans NPDES Permittees discharging to Segment B tributaries | 4 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 tributaries, if using LRS | 8.5 years after effective date of the TMDL |

# Attachment A to Resolution No. R10-007

| Implementation Action | Responsible Parties | Deadline |
|---|---|---|
| Achieve interim (or final) WLA and submit report to Regional Board | MS4 and Caltrans NPDES Permittees discharging to Segment B tributaries, if using LRS | 11.5 years after effective date of the TMDL |
| *Achieve final WLA or demonstrate that non-compliance is only due to upstream contributions and submit report to Regional Board* | *MS4 and Caltrans NPDES Permittees discharging to Segment B tributaries, if using alternative compliance plan* | *11.5 years after effective date of the TMDL* |
| **Second phase, if necessary – SEGMENT B TRIBUTARIES (Rio Hondo and Arroyo Seco) (LRS only)** | | |
| Submit a new LRS | MS4 and Caltrans NPDES Permittees discharging to Segment B tributaries | 12.5 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 tributaries, if using LRS | 16 years after effective date of the TMDL |
| Achieve final WLAs Segment B tributaries or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Board | MS4 and Caltrans NPDES Permittees discharging to Segment B tributaries, if using LRS | 18 years after effective date of the TMDL |
| **SEGMENT A (lower Reach 2 and Reach 1 – Rosecrans Avenue to Willow Street) Dry Weather** | | |
| **First phase – Segment A** | | |
| Submit a Load Reduction Strategy (LRS) for Segment A (or submit an alternative compliance plan) | MS4 and Caltrans NPDES Permittees discharging to Segment A | 4.5 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 A, if using LRS | 9 years after effective date of the TMDL |
| Achieve interim (or final) WLA and submit report to Regional Board | MS4 and Caltrans NPDES Permittees discharging to Segment A, if using LRS | 12 years after effective date of the TMDL |
| *Achieve final WLA or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Board* | *MS4 and Caltrans NPDES Permittees discharging to Segment A, if using alternative compliance plan* | *12 years after effective date of the TMDL* |
| **Second phase, if necessary – Segment A (LRS only)** | | |
| Submit a new LRS | MS4 and Caltrans NPDES Permittees discharging to Segment A | 13 years after effective date of the TMDL |
| Approve LRS | Regional Board, Executive Officer | 6 months after submittal of a second LRS |

| Implementation Action | Responsible Parties | Deadline |
|---|---|---|
| Complete implementation of LRS | MS4 and Caltrans NPDES Permittees discharging to Segment A, if using LRS | 17.5 years after effective date of the TMDL |
| Achieve final WLAs in Segment A or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Board | MS4 and Caltrans NPDES Permittees discharging to Segment A, if using LRS | 19.5 years after effective date of the TMDL |
| **SEGMENT A TRIBUTARY (Compton Creek) Dry Weather** | | |
| **First phase – Segment A Tributary** | | |
| Submit a Load Reduction Strategy (LRS) for Segment A tributary (or submit an alternative compliance plan) | MS4 and Caltrans NPDES Permittees discharging to Segment A tributary | 6 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 A tributary if using LRS | 10.5 years after effective date of the TMDL |
| Achieve interim (or final) WLA and submit report to Regional Board | MS4 and Caltrans NPDES Permittees discharging to Segment A tributary if using LRS | 13.5 years after effective date of the TMDL |
| *Achieve final WLA or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Board* | *MS4 and Caltrans NPDES Permittees discharging to Segment A tributary, if using alternative compliance plan* | *13.5 years after effective date of the TMDL* |
| **Second phase, if necessary – Segment A tributary (LRS only)** | | |
| Submit a new LRS | MS4 and Caltrans NPDES Permittees discharging to Segment A tributary | 14.5 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 A tributary, if using LRS | 18 years after effective date of the TMDL |
| Achieve final WLAs in Segment A tributary or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Board | MS4 and Caltrans NPDES Permittees discharging to Segment A tributary, if using LRS | 20 years after effective date of the TMDL |
| **SEGMENT E (Reach 6 – LA River headwaters [confluence with Bell Creek and Calabasas Creek] to Balboa Boulevard) Dry Weather** | | |
| **First phase – Segment E** | | |

| Implementation Action | Responsible Parties | Deadline |
|---|---|---|
| Submit a Load Reduction Strategy (LRS) for Segment E *(or submit an alternative compliance plan)* | MS4 and Caltrans NPDES Permittees discharging to Segment E | 5.5 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 E, if using LRS | 10 years after effective date of the TMDL |
| Achieve interim (or final) WLA and submit report to Regional Board | MS4 and Caltrans NPDES Permittees discharging to Segment E, if using LRS | 13 years after effective date of the TMDL |
| *Achieve final WLA or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Board* | *MS4 and Caltrans NPDES Permittees discharging to Segment E, if using alternative compliance plan* | *13 years after effective date of the TMDL* |
| **Second phase, if necessary –Segment E, (LRS only)** | | |
| Submit a new LRS | MS4 and Caltrans NPDES Permittees discharging to Segment E | 14 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 E, if using LRS | 17.5 years after effective date of the TMDL |
| Achieve final WLAs in Segment E or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Board | MS4 and Caltrans NPDES Permittees discharging to Segment E, if using LRS | 19.5 years after effective date of the TMDL |
| **SEGMENT E TRIBUTARIES (Dry Canyon Creek, McCoy Creek, Bell Creek, and Aliso Canyon Wash) Dry Weather** | | |
| **First phase – Segment E Tributaries** | | |
| Submit a Load Reduction Strategy (LRS) for Segment E tributaries (or submit an alternative compliance plan) | MS4 and Caltrans NPDES Permittees discharging to Segment E tributaries | 9.5 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 E tributaries if using LRS | 14 years after effective date of the TMDL |
| Achieve interim (or final) WLA and submit report to Regional Board | MS4 and Caltrans NPDES Permittees discharging to Segment E tributaries, if using LRS | 17 years after effective date of the TMDL |

| Implementation Action | Responsible Parties | Deadline |
|---|---|---|
| *Achieve final WLA or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Board* | *MS4 and Caltrans NPDES Permittees discharging to Segment E tributaries, if using alternative compliance plan* | *17 years after effective date of the TMDL* |
| **Second phase, if necessary – Segment E tributaries (LRS only)** | | |
| Submit a new LRS | MS4 and Caltrans NPDES Permittees discharging to Segment E tributaries | 18 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 E tributaries, if using LRS | 21.5 years after effective date of the TMDL |
| Achieve final WLAs in Segment E tributaries or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Board | MS4 and Caltrans NPDES Permittees discharging to Segment E tributaries, if using LRS | 23.5 years after effective date of the TMDL |
| **Segment C (lower Reach 4 and Reach 3 – Tujunga Avenue to Figueroa Street) Dry Weather**<br>**Segment C Tributaries (Tujunga Wash, Burbank Western Channel, and Verdugo Wash) Dry Weather**<br>**Segment D (Reach 5 and upper Reach 4 – Balboa Boulevard to Tujunga Avenue) Dry Weather**<br>**Segment D Tributaries (Bull Creek) Dry Weather** | | |
| **First phase – Segment C, Segment C Tributaries, Segment D, Segment D tributaries** | | |
| Submit a Load Reduction Strategies (LRS) for Segment C, Segment C tributaries, Segment D, Segment D tributaries *(or submit an alternative compliance plan)* | MS4 and Caltrans NPDES Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries | 11 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 C, Segment C tributaries, Segment D, Segment D tributaries, if using LRS | 15.5 years after effective date of the TMDL |
| Achieve interim (or final) WLA and submit report to Regional Board | MS4 and Caltrans NPDES Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries, if using LRS | 18.5 years after effective date of the TMDL |
| *Achieve final WLA or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Board* | *MS4 and Caltrans NPDES Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries, if using alternative compliance plan* | *18.5 years after effective date of the TMDL* |
| **Second phase, if necessary - Segment C, Segment C Tributaries, Segment D, Segment D Tributaries (LRS only)** | | |

# Attachment A to Resolution No. R10-007

| Implementation Action | Responsible Parties | Deadline |
|---|---|---|
| Submit a new LRS | MS4 and Caltrans NPDES Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries | 19.5 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 C, Segment C tributaries, Segment D, Segment D tributaries if using LRS | 23 years after effective date of the TMDL |
| Achieve final WLAs in Segment C, Segment C tributaries, Segment D, Segment D tributaries or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Board | MS4 and Caltrans NPDES Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries if using LRS | 25 years after effective date of the TMDL |
| **All Los Angeles River Segments and Tributaries** | | |
| Submit a Bacteria Coordinated Monitoring Plan (CMP) | All responsible parties | 1 year after the effective date of the TMDL |
| Conduct ambient water quality monitoring set forth in the CMP | All responsible parties | 6 months after approval of the CMP |
| Reconsider TMDL based upon technical studies or policy changes, including but not be limited to:<br>(1) Alterations to recreational beneficial use designations<br>(2) Revision of US EPA recommended bacteria criteria, Regional Board or State Board bacteria standards<br>(3) Expansion of the High Flow Suspension provisions of Chapter 2 (i.e. extension in duration or spatial extent). | Regional Board | 4 years after the effective date of the TMDL |

| Implementation Action | Responsible Parties | Deadline |
|---|---|---|
| Reconsider TMDL based upon technical studies or policy changes, including but not be limited to:<br>(1) Alterations to recreational beneficial use designations<br>(2) Revision of US EPA recommended bacteria criteria, Regional Board or State Board bacteria standards<br>(3) Expansion of the High Flow Suspension provisions of Chapter 2 (i.e. extension in duration or spatial extent).<br>(4) Technical evaluations of natural and anthropogenic sources of bacteria, including viable alternatives to defining natural or anthropogenic sources of bacteria<br>(5) Wet weather compliance options | Regional Board | 10 years after the effective date of the TMDL |
| Reconsider TMDL based upon technical studies or policy changes, including but not be limited to:<br>(1) Natural sources exclusion | Regional Board | Within one year of a demonstration that interim limits are met in a segment |
| Submit implementation plan for wet weather with interim milestones | All responsible parties | Within 10 years of the effective date of the TMDL |
| | | |
| Achieve final wet-weather WLAs and LAs and submit report to Regional Board demonstrating wet weather and dry weather compliance. | All responsible parties | 25 years after effective date of the TMDL |